

Grobon Kiskorical Cammissian 173 Main Sl. Grobon, MA 01450

January 18, 2012

Greetings:

The Groton Historical Commission is pleased to announce the satisfactory completion of our CPA funded project developing a comprehensive history of agriculture and farming in Groton and Groton Plantation. Conceived by the Historical Commission in collaboration with the Groton Planning Board, The Williams Barn Committee and the Groton Grange, the project was implemented by Oakfield Research of Concord MA to produce three products, with the goal to inform the citizens of Groton and the Commonwealth about the long tradition of agriculture and farming as well as its importance to the past, present and future of our community.

The first product "GROTON FARMS, Understanding the past and planning for the future of agriculture in Groton" traces farming and agriculture from the time of Native American farming of these lands over the past four centuries to establishing the context for thinking about farming today and into the future. Complete with images and maps the report leaves Groton readers with a clearer understanding of how farming and agriculture has been the backdrop against which the Town grew and responded to regional, national and international trends and other events not necessarily related to agriculture. The report also inspires the non-Groton reader to examine their own community and discover the hidden histories that shape their community's development. One important feature of this product is "Conversations with Groton Farmers".

The second product is an exhibit originally displayed at the Williams Barn presenting the history of farming and agriculture in Groton. The exhibit has been very well received and is currently available to be presented at various venues throughout the community.

The third product entitled "RESOURCE GUIDE FOR LOCAL FARMERS, Where to turn when you have more questions than answers" is designed to assist beginning and seasoned farmers alike when questions arise. Questions relating to – The Beginning Farmer, Land, Financial Sources and Resources, Organic Farming, Insurance and Risk Management, Energy, Newsletters, Reports, Periodicals and Agricultural Support Organizations. This document has hyperlinks to all organizations and sources identified. Report products will be placed on the town web site for the benefit of Groton Residents, Interested Others and to facilitate the use of the hyperlinks identified within the report.

Hard copies of the reports will be presented to town officials and others while a CD containing both reports will be made available to every farmer in Groton.

For more information contact Michael Roberts at 978-758-1999 email to redhawkma@gmail.com.

Vals: 12

A Collins

Al Collins - Chair Groton Historical Commission

GROTON FARMS

Understanding the past and planning for the future of agriculture in Groton

Final report of the Groton Agricultural Survey Project prepared by Oakfield Research 2011



prepared for the Town of Groton by Oakfield Research



Electa Kane Tritsch, Director Robert Brand Hanson, Research Associate mapping by Adam Kurowski, Mostly Maps LLC.

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Acknowledgments

The Groton Communitywide Agricultural Context, Inventory and Management Planning Project, more casually known as the Groton Agricultural Survey, has been a year-long investigation of Groton's past and present. It has been cosponsored by the town's Historical Commission, Agricultural Commission, and Williams Barn Committee, as well as the Groton Historical Society, and the Patrons of Husbandry Grange #7.

The project, consisting of historical documentation, agricultural inventory, photo-documentation, mapping, a public exhibit and this final report, has been carried out by the firm of Oakfield Research, including Director Electa Kane Tritsch and associates Robert Brand Hanson and Adam Kurowski. It would not have been possible without substantial contributions from Groton farmers, residents, town government personnel and interested volunteers, including the visionary Michael Roberts (Groton Historical Commission) who served as Local Project Coordinator, and Danielle Bryant, who donated her great talents as project photographer.

Oakfield Research would like to acknowledge the invaluable help, depth of knowledge and wise advice willingly given by the following people. We sincerely apologize if we have inadvertently left out any names of those whose input has, nevertheless, been essential to this project.

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Preface: A Look Back

There were many reasons Groton was a third-generation settlement in the Bay Colony. Its inland situation made it hard to access, despite the well-worn Indian trade route that led through it northwest to Iroquois country. Water transport was not likely, since the Merrimac route was effectively cut off by the Great Falls and other smaller falls on the Nashua itself. Then there were the Indians – more numerous the closer you got to the Falls, Nipmuc and Nashaway, not known for their friendliness to English or French either one.

There were attractions though. A good hilltop on which to center the village. Southeast facing slopes with glacial till just right for orcharding. Seeps and springs characteristic of glacial drumlins and great ponds with fishing and fowling for all. Along the Nashua in some spots, broad rich floodplain for planting, and elsewhere fresh meadow for hay.

The natives had known all this long before, even had a village of sorts along the river. Not many were left by the time settlement was talked of – attrition by disease perhaps? But even at its height, the Nipmuc Nation was not populous. They spread themselves thin along the interior valleys, making use of the sparser resources than might be found near the coast, adapting to the harsher winters and shorter growing seasons of the interior uplands.

The colonists had known it too, before they settled. No 17th century town was ever founded in Massachusetts that did not have excellent farming potential. And many of those same towns remained heavily dependent on agriculture well into the 20th century. Conditions changed. A few mill sites diversified the economic base with small water-powered industries. North central Massachusetts benefited from an influx of scholars and sojourners attracted more by the pastoral beauty of the landscape than by any economic benefit it had to offer. Towns like Brookfield and Princeton, Petersham and Groton developed a new persona defined by schools and chatauquas, summer colonies and inns.

The farmers adapted. Early fortunes made from timbering large holdings of northern hardwoods turned to first cattle, then sheep raising. Specialty crops like the apples for which central Massachusetts became famous; later, staple crops of potatoes and turnips and onions to feed mill town workers nearby, or dairy cows whose milk was shipped by rail to even more distant urban markets.

Every generation worked with less land, less family help, higher costs and more regulation than the one before it. Early settlements, like Groton, were more fortunate than many of the towns that developed in central Massachusetts, because its natural resources were better to start with. As late as World War II, one authority has commented, "agriculture predominated." Within the last two decades, however, demand for residential development has combined with a depressed farm market and rising land values to pressure farmers and threaten the continued existence of farm land in Groton and many other mid-state communities.

Today Groton, like many of its peers, is reevaluating the status of agriculture in the town and the region. It recognizes that farming as a way of life, and the products of farming – from landscapes, structures and environmental impact, to market produce and public education – are vital to the town's culture and its biodiversity. All of these are at risk. All demand attention and inclusion in every aspect of town planning. The process begins with a communitywide historical and contemporary survey of the state of agriculture in Groton. What follows is the result.

1. Setting the Stage: environment and the Nipmuk farmer

Groton's human history began to be defined some 14,000 years ago, as the last ice age was moving with glacial dignity towards its end, retreating past the gravelly drumlins and the moraines – glacial stone dumps - it had created. Briefly (by a geologic clock), it filled the center of Groton with Glacial Lake Nashua, depositing a delta of fine sandy gravel between the uplands before it vanished.



What followed was ten thousand years of slow warming and plant growth, sub-tundra environment evolving to dense wet forest, soil deposition, plant diversification, cutting and shaping by rivers and feeder streams. Early nomadic exploration, hunting and fighting and gathering, eventually brought a stable enough Native American presence to the Groton area for at least two seasonal habitation sites to be defined: one along the floodplain of the Nashua River; another farther east between today's Groton and Littleton.

Early encampments were seasonal at most. Possibly Groton's two habitation zones were both used by the same family groups. They were likely to live by the river in summer, between the time of the spring salmon or trout runs and the water's freezing after nut harvest in the fall. Then came a move into the deep woods to the east, following the game and birds that wintered over in that cold and snowbound place.

In recent times, Groton farmers plowing their fields have turned up small pieces of evidence of these early residents and their tools: arrowheads and a woodworking gouge from the Late Archaic period (6000 – 3000 years before present or BP) and, more relevant to the present story, two long stone pestles, looking more – and used more - like rolling pins than the bulbous headed apothecary's tool we associate with the word 'pestle' today.

The pestles are significant as indicators that the first settlers here, the Nipmuk, as they called themselves by the time they came in contact with English and French traders, were farming to supplement their diet of wild plants and animals. Like their contemporaries from Cape Cod to the Berkshire Hills, the Nipmuk grew grain, especially Indian corn. Corn was a winter staple, dried and stored in baskets inside their wigwams, or stashed in pits for protection from fourfooted gleaners.

What may or may not also be significant about the two Groton pestles are the general locations where they were found.¹ Given the distribution of other stone tools found around Groton, it might be expected that the pestles would be associated with locations along the Nashua River's fertile floodplain. In fact, neither pestle came from that vicinity. One can be associated with the known precontact habitation zone in eastern Groton. The other was found on the highlands of central Groton in the heart of the town's most historic Anglo-American agricultural area.²

Only one additional reference points to the significant Native American use of the Groton area, and that must be taken with some grains of salt. In 1908 the Reverend John Nutting wrote about an area in the vicinity of Common Street and Nod Road:

The low hill behind the old dwelling showed a depression which marked the location of an ancient Indian strong-hold, known as the "Indian Fort". Every plowing turned up evidence that this tradition was not without some foundation, in the shape of numerous arrow-heads and other Indian relics, including at least one stone axe.³

¹ Accepted archaeological practice does not disclose exact find spots of ancient artifacts, to protect site integrity and the cultural record of past peoples.

² Readers should bear in mind the distinction between "found" and "used" in this situation. The original Nipmuk tool owner may have carried a object with him to a new location, or a colonial period Anglo-American may have collected or disposed of Indian artifacts in a completely different location from the original camp site where they had been useful tools.

³ Rev. John Nutting, "Nutting Genealogy" quoted in May Houses, 158.

II. A Land of Milk and Honey? farming and survival on the frontier

...I send herewith a design for a Town Seal of Groton. The design is a simple one and is intended to typify the character of its inhabitants The Bible represents the faith of the early settlers of the town who went into the wilderness and suffered innumerable privations in their daily life as well as danger from savage foes. Throughout Christendom today it is the corner stone of religion and morality. The Plough is significant of the general occupation of the people; with it the early settlers broke up the land and earned their livelihood and ever since it has been an invaluable help in the tillage of the soil. Very respectfully, Samuel A Green Boston March 16, 1898



On the 29th of May, 1655, the Great and General Court of Massachusetts Bay granted to a group of well-connected petitioners

eight miles square in the place desired, to make a comfortable plantation, which henceforth shall be called Groaten, formerly knoune by the name of Petapawag, that Mr. Danforth of Cambridge, with such as he shall associate to him, shall...lay it out with all convenient speed...; provided that none shall enjoy any part or portion of that land by gift from the selectmen of that place but such who shall build howses on their lotts...within eighteen months from the time of the said tounes laying out, or towns grant to such persons....⁴

The Court appointed Groton's first seven selectmen, including Thomas Hinckley, William Martin, John White and Timothy Cooper, all men whose names appear in the town's early records as residents.

Groton's first English settlers were not going to an unknown place. There had been a trading post established somewhat earlier at a ford on the Nashua River, to handle the fur trade between the English and Nipmuk trappers and traders.⁵ The river itself was a well-known travel route, providing access inland from Cape Ann via the Merrimac and on upriver to its headwaters at the mountain held sacred by the Indians – Wachusett. A major east-west overland trail is thought to have approximated today's Route 119. The town of Concord, 25 miles closer to Boston, had been settled since 1635, and settlement of Lancaster had begun the previous year.

⁴ Shurtleff Records, p 235

⁵ John Tinker's "factory" was not officially licensed until 1657, but that may have been primarily a business defense on his part, insuring that new Groton settlers could not hone in on his established trading rights.

Concord, Lancaster, and now Groton, were pieces of a careful expansion plan developed over the years by Massachusetts Bay's colonial government. The plan was designed to populate a potentially dangerous alien countryside by increments, each successive ring of settlement serving as protection for the previous one. After the earliest coastal settlements such as Boston, Cambridge, Salem and Ipswich were solidly established, a ring of new towns was granted by the General Court: Concord, Sudbury, Dedham, Taunton fanned out inland. Ten to fifteen years later the cycle of expansion was repeated. To the north and west, Andover, Chelmsford, Lancaster and Groton, among other towns, were identified as useful sites for English settlement, both because they included suitable quantities of the natural resources required to sustain a colonial plantation and, probably more important, because they provided a buffer zone between seemingly friendly but unpredictable native tribes, and the well-established populous townships to the east.

For two brief decades expansion and protection coincided with proselytization in the English plan for a brave new world. The Reverend John Eliot, in his mission to bring Christianity to the Massachusetts Indians, was a savvy enough politician to develop a plan for missions that coincided with the needs of the civil authorities. Following Eliot's early success in Natick in 1650, he convinced the General Court that it was to their advantage as well as the glory of God to establish similar Christian Indian settlements among friendly Nipmuk groups at Hassanamisco (Grafton) and Nashoba, along the present Groton/ Littleton border, in 1654.⁶ According to English legal thinking, the four square miles set off to each Indian village separated its land rights from those of the adjoining eight-mile-square English settlement. It was anticipated that legal and spiritual guidance would encourage and, eventually, cement the friendly cooperation of these inland Native Americans as allies.

No primary records have been found to document early relations between Groton's English settlers and Nashoba's Indian inheritors. By the time the local Indians enter the written record they had already been cast as adversaries. Daniel Gookin, for instance, in his contemporary *History of the Christian Indians*, briefly dismissed them as some skulking Indians of the enemy, that formerly lived about Groton, the principal whereof was named Nathaniel....⁷

In Groton, the newly appointed selectmen established a traditional English landowning hierarchy based on a ranking system that took into consideration a man's social status, his economic potential, and his family size in order to determine each proprietor's "acre rights" or proportionate share of town land. Very little of Groton was divided up as private property at the start. A man might be granted as many as twenty acres or as few as five for his house lot, depending on his ranking. That house lot size was also his proportionate share in any other land that the town's proprietors voted to give out. Thus when a tract of hay meadow was to be privatized, the 20-acre homeowner would receive four times as much of it as the 5-acre homeowner did.

There were ways a landowner could increase his share in Groton, by proving that his worth to the town was greater than it had been originally. Often this happened when a young man came into money through a good marriage or inheritance. Another likely path to improvement was military service in defense of town and country. The wars that began in 1675 and stretched

⁶ There were a number of other "praying Indian" settlements in other areas of eastern Massachusetts, although the ones in (present) Middlesex County were the longest-lived and most populous.

⁷ Green, Indian Wars, p. 8.

painfully on for almost 50 years were accompanied by dramatic changes in land ownership, as well as dramatic stories of struggle, privation and survival.

Little evidence remains of the town's decisions on land use or the settlers' work at making it useful before Groton's progress was abruptly halted in March 1676. The first town book that still exists does include summaries of land parcels granted to many of its first settlers, although some of the most significant families in Groton's history do not appear on the pages that survive. William Longley, for instance, Richard Blood and his sons, John Prescott and Richard Sawtell are all on a list of first proprietors, but there is no indication where their lands were located⁸, or how much acreage they were granted.

In the first decades of settlement Groton followed traditional land distribution practices that had been used in most earlier Massachusetts Bay towns. A proprietor was given a substantial grant of upland on which to establish his home lot. He was also given a smaller number of acres fresh "meadow" as a natural source of hay for his livestock. The meadow, most often found along rivers or in the vicinity of wetlands, might be at some distance from the settler's home lot, as might other parcels that could provide him with additional plowland, pasturage, and timber stands, all of which fell under the general category of "upland". Thus a proprietor's holdings were dispersed throughout that part of town earmarked for settlement.

This did not mean a farmer had to travel eight miles, from one side of Groton to the other, to reach his holdings. The initial town settlement was concentrated within a much smaller area determined to be particularly appropriate for establishment of a nucleated, defensible, and eventually prosperous village. Groton's town fathers identified that central area which is, even today, the core of Groton's settlement. On it they began to build a well-watered, rich-soiled hill town that included wet meadow areas among the uplands, south-facing slopes for fruit trees, and at least two high hills to use as watch stations for the surrounding countryside.

Besides their individual homelots, proprietors could also have a share in what the town called the "general field", commonly owned cropland where farmers worked cooperatively to plant, tend and harvest field crops. General, or common, field agriculture was a medieval holdover that was passing out of favor in longer-established settlements by the 1650s. Green⁹ locates this field in the southwest part of town near the Nashua River and comments, *Perhaps it was land already cleared when the first settlers came* – suggesting it might have been Indian planting ground. It is likely that communal field use hung on in Groton because of the town's frontier status, since a common field simplified mutual protection, despite inevitable quibbles about portions and growing practices.

⁸ May locates the original Blood farm in the vicinity of Nod Road along the Nashua River.

⁹ Green, Natural History, v I p 62.

PROFILE: Whitney Farmstead

Groton proprietors' records identify Joshua Whitney among the town's original proprietors and state that by 1684 he owned 111 acres of land. By that time as well, he had moved into the stockaded farmhouse that had apparently been owned by Richard Sawtell at the time of King Philip's War. The holding was remarkably compact, with 40 acres including a homelot on the north side of Boston road (*ye high Way*), and 70 acres directly across the road on Indian



Hill. It is possible that this compact arrangement had been arranged to reduce the vulnerability of the farm's location outside the village in a period of unrest. Almost certainly Sawtell's original house was smaller than the one standing at 227 Boston Road today, with fewer windows and a palisade fence enclosing its yard.

Architectural historian Sanford Johnson dates the present house to circa 1706¹⁰ and certainly a construction – or total renovation – date after the worst of Groton's warfare was ended makes sense. In 1713 Joshua Whitney transferred this farm to his son William, including *all the Rights …I have in ye Township…of Groton.*¹¹

We can only speculate what the land looked like when the Whitneys first staked their claim in the 1680s but a deed from 1720 makes it clear that a lot of work and change had taken place in the succeeding 40 years. The 40 acres north of the *high Way*, including the present 17-acre Whitney Farmstead, was fenced on both sides and butted up against woods belonging to neighbor Samuel Fiske. The lot line there was carefully marked with notched trees. On the 40-acre parcel stood the present house, described as a *Mansion House* because of its size and quality construction, a *Corn House* (small barn or storage building specifically for grain), a *Mill house* – undoubtedly a personal cider mill, not uncommon on a property that included an *orchard thereon standing* – and of course, a *Barn*, to contain Whitney's livestock and at least some of his hay.

Across the road, on Indian Hill, were 70 acres of pasture, hayfields, and more orchard. Here the land was not quite so thoroughly marked. There was apparently a fence along the roadway and where Whitney's land ended, the universal marker *heap of stones* marked the boundary. More stone heaps identified corners of other neighbors' lands until the line reached that of Justice Prescott, whose legal training was perhaps a factor in his putting up a fence along the line until it reached the roadway *near the Clay Pitts (so-called).*¹²

Houselot, upland, pasture, orchard and meadow – five essential ingredients of a colonial subsistence farm. The family had managed to assemble nearly every land type within easy reach, except woodland for firewood and timber. That must have been located elsewhere since, unlike most early farms, the 1720 boundaries on the Whitney farmstead were marked by fence and road, not trees.

¹⁰ Groton Architectural Survey; MHC form GRO.64; June 2006. The reason for the 1706 date is not clear. The photo above was taken in 1941 as part of the Historic American Building Survey.

¹¹ MP 17:532; writ Apr 10 1713; ent Jan 6 1715

¹² deed transcribed in May Houses pp 123-125.

Conflict of Interest: the Indian wars

March 13, 1676 is well known as the date when a war party of as many as 400 Indians attacked Groton, burned the town's meetinghouse and some 40 houses, killed two people, and ended the hopeful first phase of town settlement.¹³

The attack was one of a dozen that took place between the summer of 1675 and the spring of 1676, as a federated group of Massachusett, Wampanoag, and Nipmuk Indians attempted to discourage further English settlement and reassert tribal authority in southeastern New England. The Indians, led by warrior sachem Metacomet, and the English under a number of leaders including Benjamin Church, waged a brief brutal campaign known as King Philip's War¹⁴. In the end, Indian settlements across the region were eradicated and thousands of Native American men, women and children killed or enslaved. English settlement was set back an estimated 30 – 50 years and John Eliot's missionary efforts were abandoned.

After the March attack on Groton, the town was apparently abandoned well beyond the end of "official" hostilities later that same year.¹⁵ For Groton's farmers, this essential threat to their livelihood and their lives had already been going on for months. On February 19, 1676, the verge of spring plowing season, the town sent a petition for aid to the Governor's Council, couched in the language of desperate husbandmen:

....The enemy (as we groundedly suppose) waiting an opportunity against us; the season of the yeere calling to employment & hasting to pass away from us; ...our provision neere consumed & soldiers quartered amongst us hastening the expense [use] of it; our wives and children, some removed [from town], others removing; our cattel lying open to dayly hazards of being seized – These things to us portend a famine, & poverty, coming upon us with as great fury on the one hand, as the enemy on the other....¹⁶

Their vision of famine and poverty was not far-fetched; a contemporary historian related that at one fortified house, when the men were pursuing attackers, the women and children ran to another fortification, *leaving their substance to the enemy, who made prey of it and spent the residue of the day in removing the corn and household stuff (in which loss five families were impoverished).*¹⁷ "Corn", despite traditional American associations with Squanto and the local crop shared with early settlers by the Indians, in colonial English referred to any type of cultivated grain crop.

¹³ Green, Indian Wars, 23 ff

¹⁴ after the name by which Metacomet was known to the English.

¹⁵ There are many resources for those who wish to learn more about King Philip's War than is pertinent to this report. Readers are referred first to Samuel Greene's *Groton in the Indian Wars* for a site specific, longer view of the hostilities that affected Groton's development; to *King Philip's War: The History and Legacy of America's Forgotten Conflict* by Eric B. Schultz and Michael J. Tougias (Dec 2000); the latter's bibliography provides further lines of exploration. Eventually, almost all accounts rely on the extensive collection of government papers at the Massachusetts Archives.

¹⁶ quoted in Green, Indian Wars, p 221.

¹⁷ lbid p. 31.

Lest it be thought that only the English suffered from martial plunder, they used the same tactic on their enemies that same spring, following the Great Swamp fight that killed or imprisoned a thousand men, women and children of the federated tribes.

The swamp fight itself was only the beginning of colonial retribution; troops continued to harass and hunt down survivors over the ensuing weeks. Captain James Oliver, documenting the colonists' persistent successes, identified the one action that was sure to harm the enemy. *We fetch in their corne daily*, he commented, *and that undoes them*.¹⁸



¹⁸ quoted in Hudson, Concord, p 408.

III. A Second Beginning

The capture and execution of Metacomet, leader of the federated tribes, together with the removal of nearly every Nipmuk from the region by the late 1670s,¹⁹ encouraged English proprietors to return to their frontier holdings and reestablish order in their lives and towns. The colony government was also eager for them to do so, to the extent of forbidding settlers to leave their towns without permission in later times of war.²⁰ At the same time the colonial government urged towns to draw up deeds confirming legal prewar land purchases from Indian proprietors.

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This was easier said than done, as those earlier land transactions – many carried out decades before – had been agreed to by Indian elders who were no longer alive and by sachems of local tribal groups that had been nearly obliterated during the war. There were few surviving Nipmuk leaders or local residents in a position to affirm whatever agreement the newly appointed Groton selectmen had reached in 1655 with the land's earlier inhabitants. An assortment of Native American representatives was found, however, and a confirmatory deed to Groton's eight square miles was duly recorded in 1684. The Indians who represented local Nipmuk interests included five Wamesit residents from the vicinity of Lowell, and Thomas Waban, sachem of the Natick Indians, who was a colonial justice of the peace and the only one to sign his name in English to the document. Their signature marks are shown above.

The deed language was more than usually redundant and legalistic, but the gist of it was to sell and confirm the tract of land *on both sides of Nashaway River* already granted by the Massachusetts General Court to the town of Groton in exchange for a payment of twenty-eight pounds and one shilling. The Indian signers swore that they were the *proper heirs of the above tract of land as to all manner of Indian title.* In one of the deed's most convoluted phrases, the Indians then swore:

that they the sd Inhabitants of the town of Grotton, their heyrs, Associates,

¹⁹ A small number of the estimated 3,000 Native Americans who had lived in the mid-state region before the war were eventually allowed to return to their region after internment, but only a handful of those may have come back to their places of origin. Their presence for the next century was documented only as they 'caused trouble' or looked to the Indian Commissioners for support. A majority apparently chose either to move northward, where tribal federations retained some power, or alternatively, to become "invisible" as they adopted English surnames and acculturated themselves to the dominant culture. Daniel Mandell's *Behind the Frontier* (1996) thoroughly examines the 18th century history of Indian survivors in Massachusetts.

& Assigns for ever shall & may at all times & from time to time for ever hereafter quietly & peassably have, hold, occupy, possess & enjoy the sd whole tract of land or plantation with all the priviledges, proffitts, & [com..] of the same without the lawful lett, hindrance, eviction, expulsion, sale, molestation or denyall of them....²¹

Groton had been undone by King Philip's War. Many substantial "first-comers" had moved out of town and chose not to return. Others were killed during the fighting, like original selectman Timothy Cooper who left his land holdings as inheritance to his wife and children. The town was largely depopulated. The Indian deed, written in January 1684, was the promise of peace that Groton had needed, and the settlers who were still in town determined to offer a valuable incentive to those old and new residents brave enough to return. For the first time newcomers were allowed to actually buy proprietary rights to town land. As a result, new and returning settlers alike purchased houselots, abandoned parcels, and town-owned acreage.

Groton's Landowners and Lands in the Late 17th Century

Groton's most significant land use decision came as their new deed and the substantial Indian withdrawal from the area made further threat of attack seem distant and unlikely. The proprietors decided to open the west side of Groton for development. By March 1684 substantial *lands West of the River* (between the Nashua and the Squannacook) had been granted or sold, with special value placed on the "Intervale" stretch of level floodplain along the river's edge. Intervale was so valuable, in fact, that it was granted in proportion of one acre to ten of other west side lands.

Following spring town meeting in 1684, Groton's selectmen drew up a new listing of each landowner's holdings. The table that follows is drawn from that listing, supplemented by information from an earlier tally. As was true on earlier lists, some of the town's longest lived and most influential families are documented only by the index listing that notes the number of a man's proprietary shares, so Bloods, Lawrences, Longleys and Lakins are underrepresented, while John Sheple(y) is present in name only. Fortunately, other documents fill in some of the gaps. The example of Richard Blood and his family is profiled at the end of this chapter.

²¹ Middlesex Deeds Bk 9; pp 27-29. Signed January11, 1683/4; entered March 17, 1684.

	proprietor			genl			
name	right	houselot	unland	field	meadow	swamn	date of record and notes
Allen, Timothy	20	40	50	neiu	24	Swamp	1671/ 1683
Barron, Ellis	15	[15]	25		17.5	10	thru 1666
Barron, John	7	23.5	102		9.5	10	1684
Blood, James	20		446		0.0		1686 - 180A W side + 18 intervale
Blood, Joseph	10		'	'	'	'	1678 1st grant list
Blood, Richard	60	''	'	'	'	'	1678 1st grant list
Blood, Robert	20	''	'	'	'	'	1678 1st grant list
Boyden, Thomas	7	'	'	'	'	'	by 1678 (see P. Lawrence)
Cady, Daniel		14			4		c. 1684 - "swamp and meadow"
Cady, Nicholas	15	52	124		22		1672/1683
Church, Cornelius	2.5	9	15		5	5	1684
Church, Samuel		1.75	37		8.5		1684
Clarey, John	15	'	'	'	'	'	1678 1st grant list
Collis, John			10				ca 1681
Cooper, Timothy		24	69		7		1684 - Cooper is deceased
Crisp, Benjamin		3	52		10.5	4	1683 - 42A W side
Crisp, Jonathan	8	28		3			1664
Davis, Samuel	20		258	11	33.75		1678 1st grant list/ 1684 [7]
Ellvee (Alby?), Wm.	5	25			7		thru 1669
Farnsworth, John			29			4	1680/ 1683 [3]
Farnsworth, Matthias	20	90	95.5		28		thru 1674
Fisk, James	20	32.5	237		31	1	1666/ 1684 -120A W side
Gar[field], Benjamin	10						1678 1st grant list
Gilson, Joseph	9	24	48		15		1684 - Gilson is deceased
Green, William	8	17	270	3	23		(14 portion on 1678 list)/ 1683
Hall, Christopher	10	30	67.5		63		1665?/ 1684
Hicks, Zachary		25	33		7		c 1684 - upland all W side
Holden, Justinian	7	20	77.5		8		1670 bot of John Longley/ 1683
Holden, Richard	18	15	107	15	21.5		1684
Holden, Samuel							1684 - listed but info missing
Hubbard, Mr.Gershom	15	1	328		15		1678 - new minister/ 1684
Hutchin, Nicholas		30	36		1	14	ca 1681/ 16784 [6]
Kemp, Samuel	20	20	36		47		bot from Joseph Parker by 1685
Knapp, James	15	10	40	5	20		thru 1669
Lakin, John	40	30	693		60	18	491A bot from town by 1683 [4]
Lakin, Lieut. William	20	50	281		29		c.1684 120A W side
Lakin, Sgt. []	20		'	'	'	'	1678 1st grant list
Lawrence, Enoch	3	19	35		3.5		1684 - "near the Silver mine"
Lawrence, Ens. Nath'l	10	5	322		31		by 1678/ 1684 - 120 W side
Lawrence, John	20	'	'	'		'	1678 1st grant list
Lawrence, Jonathan	10		41		2.5		1684
Lawrence, Joseph	5		21		3		thru 1670
Lawrence, Peleg	10		136		3		ca 1681/ 1683 hslot was Boyden's
Longley, John	10		'	'	'	'	1678 1st grant list
Longley, William Sr.	30						1678 1st grant list
Longley, William Jr.	10	25	126		14		1683
Martin, William	20	60			33		thru 1672
Metup, Daniel	none	20		4.75			thru 1665?
Morse, John	12	12	137	13			1670/ 1683
Morse, Jonathan	10	24	63		14		1673/ 1684
Morse, Joseph	5		36		2		thru 1673 uncertain land types
Nutting, John	17	21	228		23		1683 - 102A W side
Onge, Jacob [1]	6		32		4		[1674]/ 1684
Page, John	20		260		30		1670/ 1680 owns sawmill/ 1683
Parish, John	5	15	56		5		1684

Fig. 1: Seventeenth Century Groton Landowners ca. 1684

	proprietor			genl			
name	right	houselot	upland	field	meadow	swamp	date of record and notes
Parker, Capt. James	50	50	167 +	17	78.5	8	thru mid1670s
Parker, Joseph Sr.	20		526		18		1678 1st grant list/ c 1688 [9]
Parker, Josiah			107				1687
Pearse, Daniel	10	15	131		12		1666/ 1684 [2]
Prescott, Jonas	30	4	723		19		1683 "lying at the Old Mill"
Rand, Thomas			18.25		3.5		1683
Reed, Ralph	15	21	30	5	18		c 1665
Robeson, James	7	25	76	2.5	12.5		1683
Robin, Robert		10					1685
Rouse, Alexander			19		6	2	ca 1684
Russell, Mr. James	15		131		14		1687
Sanderson, William		20	58		7		1684
Sawtell, Jonathan	5						1678 1st grant list
Sawtell, Obadiah	20		54				1684 - bot from town
Sawtell, Richard	20						by 1678/ 1684 list, info missing
Sawtell, Zachary	10	50			11		thru 1670
Scripture, Samuel		18					1671/ 1686
Shattuck, John		20					1689 [8]
Sheple(y), John							1684 - listed but info missing
Skinner, Walter	9	28	3.5		11		thru 1666
Stone, Simon	18		56		25		1670/ ca. 1684
Tarbell, Thomas Jr.	6	24	18		11.25		1673/ 1683
Tarbell, Thomas Sr.	20	20	56	7	27	10	c 1664
Whitney, Joshua	8	1	101		9.75		1684 - includes some Tarbell land
Willard, Henry			100				ca 1684 - bot from town
Willard, Maj. []			70				ca 1684 [5]
Willard, Mr. Samuel	20	14	273		28		1680/ 120A W side 1684
Williams, Thomas	5	28	45		7		1684 - Williams is deceased
Woods, Samuel	11	9	55		20		1670s/ 1683
84	958.5	1197.5	7710.3	86.25	1052.5	85	

[1] "all the rest of his lands alienated in all his divisions...hitherto"(1684)

[2] 23 A upland due from town

[3] Farnsworth adds to his total by small incremental purchases

[4] 289A upland was 'Intervale' west of Richard & Robert Blood's land; 72A was the "lott of Wm Martin"

[5] "on Mr. Saml Willard's account"

[6] swamp is new acquisition, may be timber land near sawmill

[7] in 1684 104 acres is located "near his sawmill"; 100 acres is in general field with houselot adjoining

[8] acquired another 79 A during next decade

[9] 6A "near his sawmill on Sammon Brook"

A number of aspects of this list need explanation in order to be properly understood. First, it must be borne in mind that the 10,000 acres of land distributed according to the list were out of an area roughly twice the size of present-day Groton – approximately 44,000 acres. Thus by 1684 the Groton proprietors had privatized approximately one fourth of the town's area, expecting that its residents would "improve" their lands to the greatest extent possible.

These improvements would provide an increasingly cleared landscape that would deter surprise attacks by future enemies; they would increase the number and upgrade the quality of roads, paths and bridges to improve accessibility; and they would disperse the town's residents more thoroughly across the landscape – including lands west of the Nashua River – to create a network of social, economic, and defensive support that, in the long run, would do as much as anything to guarantee Groton's survival and successful development.

A second point to be noted about the proprietors' list is that, by 1684, it includes a number of second generation settlers, such as the Tarbells, the Longleys, and extended families of Bloods and Parkers.

Finally, even in the impersonal records of acreage, there are signs of change in Groton's economy and land use.

- The general field appears to be dispersable after the war, since immediate threats of attack were withdrawn.
- The later grants often refer to "swamp" land in addition to the "meadow" exclusively listed earlier. This cannot be explained as simple change in word usage, as swamp was permanent wet land, unlike the seasonally dry meadow that produced hay. More likely, the new distribution of swamp was due to a new interest in white cedar and swamp maple as marketable timber.
- A number of the parcel descriptions refer to their being near a sawmill, and Groton had at least two sawmills within its borders by the mid-1680s. The increase in sawmills suggests commercial as well as domestic use of timber, and a town economy that was already looking beyond subsistence farming to participation in a broader market economy.

"Our out edge & distant Living"

War did not leave Groton alone after the town's careful reorganization. It was attacked again in 1689, 1704 and 1723 and was not really safe until a peace treaty was signed far away in Europe at the end of Dummer's War in 1725²². Meanwhile the town's families and its farmers experienced a weight of challenges hard for a modern reader to imagine.

A petition drawn up by the selectmen in 1694, protesting the imposition of additional taxes to pay the government's war debts, offers rare insight into the turmoil of *our out edge & distant Living* on the Massachusetts frontier. Marshalling their arguments, the selectmen noted that Groton's damage far exceeded that of any towns closer to Boston. They recounted the impact of a *very grievous...and mortal sickness* that was so prevalent among the inhabitants during the previous year that they had been unable to carry out their normal farming activity or help their neighbors. The selectmen reminded the General Court that not only did they have to stand constant guard duty but also pay for and carry out repairs and rebuilding of the five fortified houses *for our owne and the countries safety*. Finally the Groton farmers put down their most vital argument:

This years soar and [severall] troubles ... by inevitable losse of corne, it is judged by many of our Towne that a third part at least of our Indian corne,

²² Even as late as 1748, when New England was again threatened by northern tribes sympathetic to the French, Groton found its livelihood under attack. An urgent July letter from Colonel Samuel Willard to the governor's council lists six towns *in distrest Condition by reason of the Indians*. Willard notes that there were only 81 scouts and soldiers assigned to protect the whole region between the Merrimac and Connecticut Rivers, a number insufficient to guard the town's farmers who *will not be able to do their Harvest & to get their hay.* [MA Archives v 53, p 375]

& hay harvest, beside the hand of God upon our husbandry, as to rye much rusted, not halfe a usual crop and by curly rot, Indian corne much hurt, & diminished, that severall families will be at a losse for corne, not having [enough] for halfe ye year through.²³

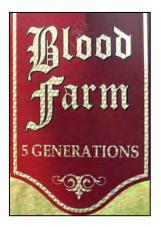
The 1694 petition gives a first inkling of outrage against unfair taxation and frustration at urban lawmakers' incomprehension of country affairs. These political threads would carry through and develop into life-changing protests before and during the Revolution, and after it in the region-specific Shays Rebellion.

Meanwhile, every generation of Groton farmers for the first hundred years of the town's existence experienced the need to work in their fields under threat of imminent attack.

²³ MA Archives 113; 89.

PROFILE: Blood Farm²⁴

Richard Blood is known as one of Groton's first settlers. He received proprietors' shares in the town's land, possibly as many as 20, which seems to have been the upper limit, making it clear that he was no poor, struggling pioneer. But the true evidence of the wealth he brought with him was the land purchase he made in 1661, six years after the town's incorporation. He paid £80 sterling to purchase 120 acres of land on both sides of the Nashua River, including 20 acres on the east bank that had been *the house lott of Mr. John Tinker with a dwelling house upon it, and fences.*²⁵



This was not generally a settled part of town. A house stood on it only because it had served as the original Indian trading post that Tinker owned.²⁶ Tinker's house lot and 40 additional acres had been purchased by Richard Smith, who later died, and Blood acquired the land, plus 10 acres of Smith's house lot, as an estate sale. Other unattached parcels were part of the deal: 20 acres in *the broad meadow* (James Brook along Broadmeadow Road); 10 acres in *halfe moone meadow* (north of Main Street at the foot of Gibbet Hill). Perhaps most important was the final clause in the deed: *with any after divisions of land of right thereunto belonging*. By buying a 20 acre house lot and 10 acres of another one, Blood had increased his proprietary shares from 20 to 50. By 1678 the total was 60 – more than any other landowner in Groton.

Town historians have stated that Richard Blood's farm was located in Nod, the vicinity of Tinker's trading post where Route 119 crosses the Nashua today. It is certain that Blood family members were living there by the time a town map was drawn in 1829. None of the writers, however, with the brief exception of May,²⁷ has identified how and when a member of the family moved downstream and across the river to set up housekeeping on West Main Street – the Blood Farm familiar to Groton today.

Richard Blood had two sons, and shortly before he died he made sure that at least James, the elder, received his landed inheritance by deed. Topping the list in that document was a 10-acre proprietor's right, followed by *Mr. Tinker's lot* and finally, *Sixty acres on ye other side ye River adjoining to my said son James Bloods own Six Score upland.*²⁸ Eight months before the Indian deed confirming Groton's right to land west of the Nashua, James Blood already owned 180 acres of developable land in the "new" part of town. Regrettably, there is no mention of the land's specific location.

²⁴ A transcribed interview with Elliot (Barney) Blood Jr., focusing on Blood Farm's more recent history, is in the Appendix to this report.

²⁵ MD 4:370 entered June 21, 1665.

²⁶ A fascinating unpublished study by Michael Roberts, "In Search of John Tinker – A Timeline" (2010) makes it clear that Tinker was also no struggling pioneer. In fact, his wealth was such that the 'trading post' was more likely a house for a hired factor (trader) than Tinker's own home. It is interesting that Groton's original apportionment of land apparently designated 20 acres, the maximum amount, to Tinker in place of what were essentially his squatter's rights established on previously unclaimed land.

²⁷ May, Houses, (p. 152) says that 3rd generation John Blood bought land in West Groton about 1724.

²⁸ MD 11:181 written Apr 2, 1683; apparently not entered until April 1693 (six months after his son's death).

Richard Blood died in December 1683, without writing a will. Possibly he felt one was unnecessary, since his estate's affairs were essentially settled. An inventory taken after his death shows what appears to have been a very modest lifestyle, with few household furnishings, less than a dozen livestock, linens for only three beds, and no silver, china or money worth reporting.²⁹ Appearances are almost surely deceiving since Richard, in his 60s, and his wife were sharing their house and their farm chores with son James and his wife Abigail, who therefore owned as much as half of the livestock, equipment and household goods that furnished the first Blood Farm.

War was not over for Groton. Only nine years later James Blood died at age 46, *Killed by ye French or Indian Enemy, on ye* 13th day of [September 1692], as his estate inventory states. In economic terms James was a young man, and he left a widow and five children of whom the eldest was barely 20, the youngest born a month after he died. James's inventory reads remarkably like his father's with one important difference. While Richard Blood had acquired and managed enough land to have set up his children handsomely and still have died with £100 of real estate remaining, James's real estate – also worth £100 – had to be divided among five children and support his widow until her death. This branch of the second generation was already land poor, living in a frontier town too dangerous to stay in.

More than one chapter of the Blood family story remains unclear. Widow Abigail left Groton with her children, waiting out the worst of the fighting in Andover. But:

- At least by 1712 her youngest son, John, returned to town, when he married Joanna Nutting.
- Between 1714 and 1720 he bought a number of small pieces of land, some described as *lying on the west side of Lancaster* [= Nashua] *River* but he was also buying parcels on the east bank and even at Massapoag meadow.³⁰
- We know that forty years later John's son Caleb buys up his four brothers' shares in their father's 80-acre farm in Groton...on the West Side Lancaster River so called...where the said Caleb now dwells which land was lately in the hands...of our honoured Father John Blood.³¹
- Further, we know that the Blood ownership can be traced from then to the present.
- The farm increases in size in 1820, about the same time that the present brick house is likely to have been built;³²
- And that more recently acreage decreases again, as Elliot Blood Jr. transfers 100 acres to the town for a well site.

Although many details are sketchy, the significance of the story is clear. Sometime between 1710 when John Blood came of age, and the early 1760s when he died, he moved himself and his family to the west side of the Nashua River, building a house alongside the old track leading to the falls on the Squannacook, clearing pine stands and planting crops along the

²⁹ MP 6:293; entered 7.8.1684.

³⁰ MD 23:447; all of the transactions were recorded together in 1724.

³¹ MD 75:498, written Mar 12, 1762; entered April 5, 1774.

³² Architectural historian Sanford Johnson dates this house to c. 1835 on stylistic and somewhat questionable documentary

grounds. Others, including Murray et al (2005, p. 24) date the building as early as 1780, which would be surprising given its Federal style and brick construction.

Squannacook floodplain. He was not alone on that side of the river – Ezra Graves lived nearby at least – but he was one of the first to push Groton's settlement west of the water.

Although two generations removed from the original settlers, his was the generation that began to transform Groton's peripheral "investment" land into working land, and define the town's appearance for the next two centuries.³³



Blood family's second house in West Groton, ca. 1800 photo ca. 1920 (Blood family archive)

³³ Another example of similar development is the Fitzpatrick/ Flowers farm in the north end of town. The land was actually granted to Ellis Barron in 1666, but it not until about 1720 did the property include a *mansion house lately erected by...Jerahmael Bowers* [MD 23:237, 1723]. It was likely Bowers who actually began using the land.

IV. Yankee Farming: prosperity and protest

18th century background

In the decades following the close of the Indian wars, Groton came into its own as a prosperous farming community. The community was sufficiently established by 1760 that its proprietors made a final division of common lands. From that time forward, every acre would need to be either purchased or inherited, as it is today. There would be no more free land in Groton.



Patch farm home lot, Old Dunstable Road (GHS photo)

By 1771, when a statewide tax valuation was done, Groton's economy, and the farms that drove it, was comparable with many of its neighbors to the east where towns were well-established. To the west and southwest of Groton was a band of much more recent towns on the Worcester plateau, incorporated and laid out primarily as investment acreage for non-resident proprietors during the first half of the 18th century. These later towns had poorer soils, more dense forest, rougher terrain and abundant waterpower for the small sawmills that catered to an economy that was essentially commercial from the beginning.

Groton and its older neighbors worked on a more internally-driven economy, however, in which everyone was at least a part-time farmer who practiced mixed husbandry. It was a system misleadingly labeled "subsistence farming," which students of history have interpreted as a society of independent small-scale farmers, working full-time to produce enough of enough varieties of crops and livestock to support themselves and their families – but little more.

While the "little more" may have been true in many cases, there were notable exceptions to that rule. Equally significant, it was the rule, *not* the exception that farmers dependably worked at other occupations in addition to cultivating their land and tending their stock. In this preindustrial economy, farming was not a discrete job by which the farmer harvested enough or earned enough to make a living. Rather, farming was a part of the whole business of feeding one's family and profiting from one's resources. The activities associated with it took on more or less prominence dependent on season and resource. Thus when the last harvest was in, every landowner looked to other sources of income and occupation. One might spend short winter days in his woodlot, cutting and hauling timber to be sold at a mill. Another would repair neighbors' tools in a small smithy. One would hire out as a skilled surveyor, or write up the deeds of land transactions. This was in addition to the daily and seasonal work rhythms that did not stop. Farmers were not solitary figures working alone on the landscape. A majority of them had farm help, either year round or part-time. The fortunate ones, financially, had a family large enough to share the work as unpaid laborers until they inherited a portion of their father's holdings. Others hired on seasonal laborers. Haying time happened twice a year, unless some climatic disaster or disease had ruined one of the crops, and hay was the most urgent of crops to mow, dry and stack between ripening and rainfall. Family, hired hands, neighbors whose mowing was done, itinerant workers all became potential employees until the hay was in the barn.



These early 20th century girls having followed in the footsteps of earlier women working on the farm (GHS photo)

Snapshot: 1771

A colony tax valuation prepared in 1771 provides more specific information about Groton and the agrarian society that existed there. Drawing on the columns of carefully entered statistics, it is possible to construct a generalized profile of the town's farms.³⁴

The Groton farmer who provided answers to the tax assessor in September 1771 lived with his family and perhaps another adult person on a farm that included a house and a barn. Twenty-five of the acres he owned were in active production as tillage and orchard (6 ³/₄ acres total), pasture (8 ¹/₂ acres), or hayfields (10 acres). He undoubtedly owned additional acres of woodland, as well as what assessors dismissed as "unimprovable" land.

His barn was apt to be a dual-purpose structure, providing housing for a yoke of oxen (two fullgrown work animals), three cattle, a half dozen sheep and perhaps a goat, and a horse if he

³⁴ MA Archives 133; 1-6.

was able to afford one. A pig sty by the barn sheltered his two swine, and uncounted chickens bobbed in and out of the henhouse.

Overhead or on the opposite side of his barn from the livestock, the farmer stored 49 bushels of grains in the course of a year, as well as 1 1/3 tons of hay. A separate corn crib would likely have stood nearby. He might well have had a small wooden cider press, perhaps in a lean-to addition off the barn, where he and his wife produced 11 ½ barrels of cider that would be their beverage of choice throughout the year.

As with any abstraction, the picture is not true to the life of any one family in town. A closer look adds some interesting detail to this picture.

Snapshot around town

- 297 tax payers lived in 206 houses (remember this does not include children or women whose entire wealth was under the control of their husbands)
- Only 6 people in town owned two houses.
- Groton had 9 waterpowered mills and 23 craft shops not requiring waterpower.
- Twenty-eight owners had more than one outbuilding, such as a barn; Colonel William Prescott had 5.
- The taxpayers estimated that the total worth of their real estate in Groton was £1175 an average of less than £4 per owner. Highest valuations were:

Benjamin Bancroft Jr £25 Colonel William Prescott £24 Josiah Sartill [Sawtell] £24 Oliver Prescott £24 John Tarbell £22 John Sawtell £18

- 4 men in town each owned one *servant for life* Josiah Sartill, Oliver Prescott, Joseph Moors and Jonas Cutler. Of these, Cutler had a sizeable craft shop operation, Prescott was a doctor, and the other two were among the wealthiest men in town.
- Jonathan Clark Lewis was the only man Groton who stocked merchandise valued at £300.
- In this era before banks, £1795 was being loaned at interest by 17 men, especially Josiah Sartill, whose £520 was almost three times as much as his closest competitor (Benjamin Bancroft Jr. with £200).

Snapshot of livestock

• 145 horses were owned by 128 people; most only owned one; Joseph Sheple had 4.

- 372 oxen were owned by 157 people –just over a yoke (working pair) per person; 26 men owned 4 apiece; James Blood owned 6. Blood's need for three yoke of oxen is not easily explained unless he rented them out for use by some of the farmers who did not own any he did have 2 adult males, likely sons, living with him to serve as a workforce.
- The presence of 145 horses and 157 ox teams suggests that use of one or the other as draft animals was basically a matter of personal choice by this period. It would have been unusual to find draft horses on New England farms a century earlier, while oxen almost disappeared from use in the next 100 years.
- 652 cattle were owned by 207 men, an average of 3 per person; a number of men owned 8 or 9; Elisha Rockwood had a herd of 18.
- 1144 goats and sheep primarily sheep were owned by 169 people. This is almost 7 per person with a number of herds in the low to mid-teens. Col. Prescott had a herd of 26 (as well as 9 cattle and 82 acres of pasture). These figures suggest that some farmers were raising sheep commercially or at least as "commercially" as was possible during this period when all textile manufacture still required hand spinning and home or shop weaving.
- 395 swine were owned by 192 people, a consistent average of 2 per person although a few men have as many as 4. Pigs were food animals, the staple meat soon to be butchered and smoked for overwintering.

Snapshot of acreage and products

- Groton farmers counted 2509 acres of pasture land an average of 8.4 acres per person. Except for Prescott's 82 acres and Jonathan Lawrence's 50 acres, even sizable landowners had no more than 35 acres.
- The valuation lists 1830 acres of *tillage*, which apparently included both plowland and orchard an average of 6.75 acres per person. It is hard to get at production per acre with the numbers given. For instance, Joseph Taylor's 23 acres produced 200 bushels of grain and 15 barrels of cider (barrels are a standard size). On the other hand, Isaac Farnsworth, on ten fewer acres produced 180 bushels grain and also produced 30 barrels of cider.
- Groton farmers grew a total of 13,176 bushels of grains, an average of 49 bushels per person, or 7.3 bushels per acre <u>if</u> all the acreage were cropland.
- Groton's orchards produced 3113 barrels of cider, averaging 11.5 barrels per farm.
- Meadow hay was measured separately from English or upland hay. They tallied1098 acres of English and upland mowing – an average 4 acres per person with 20 acres being a large holding.

There was almost half again as much meadow as upland in hay by Groton farmers: 1570 acres, or 6 per person. Surprisingly, the average yield from each was the same: 2/3 ton per acre, a total hay crop of 1,707 tons for the town. At the level of specifics, the

numbers are all over the board – some farmers declared their upland was producing a half ton per acre; a few listed over a ton per upland acre. Meadow hay production was more consistent (for this particular year): no one listed over a ton per acre.

It is possible the Massachusetts tax men were conducting a survey as to the relative productiveness of natural meadow versus planted hayfields. Nineteenth century debate over this essential crop argued that upland mowing was more productive than the meadow lands, but 1771 valuations from a number of Massachusetts towns suggests this was not so, at least until fertilizers came into general use.



21st century upland haying on Brooks Orchard fields

PROFILE: rebellion comes to Groton

The Revolutionary War, as wars before and after, tested the resources of Groton's farm families, whose husbands and often sons - left town on tours of duty during just those times of year when work was most urgent on the farm. One of those men was Job Shattuck, descendant of an early Groton settler.



1787 image of Daniel Shays and Job Shattuck

In 1771 Shattuck was a prosperous farmer on Longley Road, whose fifty-plus acres of land included above-average acreage in tillage and pasture, an average number of livestock (a horse, a yoke of oxen, eight sheep, six cows, two swine), two houses and barns and a family that included two sons of working age.

His reputation, however, was as a fighter, and he became a military leader. He had served in Nova Scotia during the mid-century French and Indian Wars and by 1775 was a member of Groton's minuteman company. During the Revolution he fought at Concord and Lexington, and at Bunker Hill, later raising a company in Groton that marched to support the American forces at the battle of Fort Ticonderoga. As Virginia May commented,

Job Shattuck was wholeheartedly in the war....He headed a committee to raise men and money for the war and spent much of his time and money for the cause, even sending his own two sons to war when they were much needed on the farm.³⁵

After the war's end Shattuck continued as Captain of the local militia for many years.

It was perhaps his familiarity with rank and file soldiers, as well as his knowledge of the narrow margin of survival experienced by most farmers, that led Shattuck to take up the cause of Daniel Shays' "Regulators", whose armed protests effectively shut down court proceedings in Worcester and western Massachusetts during the summer and fall of 1786.

The protests that became known as Shays' Rebellion had been developing since the end of the Revolution when war investors, especially in Europe, began to pressure their American borrowers to repay loans in gold and silver. Over the following decade the demand for repayment rippled out from urban merchant-bankers to rural landowners. At the same time, the Commonwealth had increased taxation of all landowners to repay its own war debt. The Massachusetts crisis of the 1780s was most intense in the rural and relatively newly settled areas of central and western Massachusetts. Many farmers in this area suffered from high debt as they tried to start new farms. Unlike legislatures in many other states, the Massachusetts government did not respond to the economic crisis by enacting pro-debtor statutes such as debt forgiveness or paper currency printing. As a result, the numbers of farm foreclosures increased, and many farmers ended up in debtors' prison.³⁶

35 May, Petapawag, 83

³⁶ www.USHistory.org

The Regulators' protests aimed to prevent court proceedings against cash-poor farmers at the same time they drew the attention of Massachusetts legislators to an economic issue that could not be resolved without government action.

Job Shattuck sympathized with the farmers' plight and agreed with Shays' tactics. *Fifty years old,* one commentator summarizes, *his age, experience, and the local respect he commanded made Captain Shattuck a formidable ally.*³⁷ Shattuck decided to move the action eastward in the fall of 1786. Organizing men and supplies, he set up a Regulator encampment on the town green in front of the Concord Courthouse, delivering an ultimatum to the magistrates in tried and true pre-Revolutionary fashion.

Perhaps the Regulators had not considered the lessons learned by a new government about the effect of armed insurrection on the old government. Perhaps they were determined to begin a new nation as they wished it to go on. In any case, by the end of 1786 the Massachusetts government, rather than ameliorating the economic crisis, had signed into law a Riot Act, a Militia Act, suspended the right of Habeas Corpus and placed Job Shattuck and a number of other men under arrest as ringleaders of an armed rebellion. Shattuck had been wounded resisting arrest. Daniel Shays fled to Canada. Organized resistance ended in early 1787.

An interesting and much more thorough examination of Groton's role in Shays' Rebellion may be found in Thomas Callahan's master's thesis: "The Voice of the People of This County:...Support for the Shaysite Insurrection in Groton Massachusetts". ³⁸ Callahan sets Shattuck within the historical context of other Groton farmers and compares Groton's economic and political situation with that of other Middlesex County communities which took part in the protest. He concludes that the "rebellion" was misnamed and misunderstood, asserting instead that in Groton at least, the protest was a moderate, essentially pre-Revolutionary response to difficult local conditions during a political period when organized channels for protest or restitution did not exist. Civil disobedience stepped in where political parties were ineffectual, to the immediate detriment of all involved.

Eventually, by 1788, some good came out of Shays Rebellion for those most impacted by its causes. John Hancock, the new, liberal governor of Massachusetts, pardoned those who had been leaders of the protest including Shattuck. A number of measures were passed by the legislature designed to improve the farmers' condition. Shattuck spent the remainder of his life in relative obscurity on his Groton farm, serving a term as selectman, outliving his wife, and according to May, developing his property into one of the largest land holdings in the town.

³⁷ http://shaysrebellion.stcc.edu]

³⁸ A copy of the 1991 thesis is located in the Groton Collection at the Groton Public Library.

IV. New Day Dawning: experiment and tradition in the 19th century

Change and Rising Demand

Life in any town in New England during the early Republic was full of new experiences. Between 1790 and 1840 the region, like the country, defined and redefined itself. It tested government styles, moving from backward-looking



republicanism to more democratic Federalism. It rearranged its population by sending large numbers of Revolutionary veterans westward toward the Ohio, thus taking some pressure off older towns whose stock of divisible land had petered out. It debated religious beliefs and permanently divided the once-monolithic Puritan church between Unitarians and Trinitarians.

Economically, although families suffered from lack of available imported goods from the time of the Revolution through the War of 1812, this same pressure encouraged businessmen and farmers alike to experiment with new technologies and new products including many products that had formerly come from European trading partners. The government encouraged manufacture of American-made goods as a patriotic duty, and every new industrial enterprise sent ripple effects of change across the countryside.

In the early years of the period, proto-industrial mills were located on streams or rivers no larger than the Squannacook, because of the engineering difficulties involved in damming broader waterways. Consequently, every new iron works or carding mill created issues for and generated protests from upstream farmers, whose low-lying fields and meadows were regularly flooded by manufacturers working to draw the most power from new millponds.

On the other hand, these early mills also provided new sources of income for the general farming population – not as mill workers but as piece workers accomplishing finishing tasks from their homes on their own schedules. Iron rolling and slitting mills, for instance, mass produced nail blanks, which were then distributed to local farmers for hand-heading, requiring for equipment only the brazier and small anvil that were already found among a farm's equipment. Early shoe manufactories prepared and pattern-cut leather for the thousands of boots and shoes that were vital to the coastal trade with southern states, but it was the farmer who most often pegged last to sole in his own barn or workshop. Women and girls were paid by the yard for fine and coarse braided straw, turned over to a middleman who delivered it by the cartload to one of the burgeoning hat factories that sprang up throughout central Massachusetts.

The ripple effect of new industry stretched beyond the home lot to a farmer's choice of crops as well. Rye, for instance, had always been a forgiving grain crop, but now it took on more importance as the source of rye straw, the commonest of straw hat materials. Irish potatoes, which had long been a family food staple, became newly significant as an easily grown, easily transported staple for the growing numbers of urban mill workers in regional centers such as

Waltham and Lowell. That same manufacturing population provided a ready market for butter as well, which required less processing and less storage room than the cheese that had long been the dairyman's market staple. And as the range and scale of American manufacturing grew, agricultural entrepreneurs looked to the future and invested in experiments that just might provide the next bumper crop or a new source of agrarian wealth.

Experiments

Groton was not behindhand in its experiments. Among the earliest in this period was large-scale sheep breeding following the introduction of merino sheep to America in 1813.³⁹ Groton, like any other New England town, had always had sheep. The Reverend William Bentley, passing through town in 1793, thought it worthwhile to comment in his diary: *We passed two droves of sheep as we entered, the last of which was very large & an honour to our country, going to the Market.*⁴⁰



merino sheep from Vermont

Merino sheep imported from Saxony, however, promised more fleece and finer wool than most of the sheep than had been available in America. Farmer Elkanah Watson, of Pittsfield, seems to have been among the first advocates of merino wool as superior in quality to that of other breeds. Apparently he was convincing, if the investments of William Bainbridge are any indication. Green's *History of Groton* recounts that Bainbridge, named Commodore during the War of 1812, owned a third share of a 220 acre farm in the vicinity of Jenkins Road. The daughter of Bainbridge's farm manager remembered him visiting from time to time, giving instructions on the running of the farm.

At certain seasons there were, according to her recollection, as many as 2000 sheep and lambs on the place, which were raised more for the fleece than the mutton. At that time...large mills were projected,...creating a demand for wool. It was thought that merino sheep-raising was to be a great industry, which the actual result did not bear out.⁴¹

Two thousand sheep were a long stretch from the average seven sheep per farm of the 1771 tax valuation. The importation of merino sheep reached a pinnacle in the mid-1820s, soon after their original introduction, as speculators bid up the prices on newly imported stock and the price of wool itself escalated. Inevitably, the rush to make this new wonder-sheep available led to a massive increase in imports which, in turn, ruined more than one initial investor. The value of merino wool became solidly established in the textile industry, however, and many northeastern farmers during the first half of the century profited from a flock of sheep raised *more for the fleece than the mutton*. Nevertheless, increased supply dropped the average price

³⁹ Much of the following information comes from Colman's *Agriculture of Massachusetts*, 1841. See his Appendix A, Sheep and Wool.

⁴⁰ Bentley Diary, p. 42.

⁴¹ Green Facts v I, p 150.

of wool from 57 cents per pound in 1835 to only 25 cents by the late 1840s.⁴² By 1850, the largest flock in Groton was 25 head and even Vermont, the center of New England sheep raising, could not withstand more efficient competition from the Western states.

Groton's next agricultural experiment, probably during the 1820s or early '30s, was growing mulberry trees. At the same time that New England manufacturers were developing wool and cotton textile machinery, they were also trying to establish silk manufacture in the United States. Jonathan Cobb of Dedham, an educator with millwright tendencies, invented machinery for spinning silk cocoons in 1832. Cobb had been growing mulberry trees on his own property to provide food for the silkworms, and apparently farmers in other areas adopted the idea. Historian Green observed that several Groton men participated in the experiment, including George Farnsworth on Farmers Row who planted "one or two fields" to the trees, and two other farms with a field each. Individual specimens were scattered around town as well. Green does not discuss the success or failure of mulberry cultivation except to call it a "craze", but he concluded that the late-19th century silk industry around Northampton might be a survival of this early attempt to encourage silk manufacture.

There are brief glimpses of other new agricultural ventures entering the town. One illustrates the trickle-down effect of rural industry on local agriculture. In 1832 a starch factory was built on the Squannacook River. Green notes:

It stood on the site of the present paper mill in that locality [Hollingsworth & Vose] and the place is shown on Mr. Butler's Map of Groton. It was expected that this new industry in the town would help the farmers of the neighborhood by encouraging the cultivation of potatoes which were to be used in making starch but the scheme was a failure.⁴³

As was true of sheep, potatoes were not new to Groton's farms in 1832. Virginia May comments that William Nutting born 1752, *a good farmer for his times*, was credited with introducing the cultivation of *murphies or Irish potatoes* into the town.⁴⁴ Potatoes, at least by the early 19th century and likely before, were a staple food supplement for livestock as well as for people. Agricultural experiments in the 1830s tested the benefits of various root crops added to winter fodder of cattle and sheep with evidence pointing to the superior nutritive value of potatoes over beets, carrots, and even oil and flaxseed cakes. The experiment even recommended cooked over raw potatoes.⁴⁵

The other glimpse of a new agricultural venture is associated with a shared interest among many estate owners in new and interesting flora and fauna. In 1840 the tomato came to Groton. Green relates:

The young plants, sent to Dr. Joshua Green by William Lawrence Esq., of Boston...were set out by Eliab Going Bolton, an experienced gardener, who watched them with great care during their growth. I remember distinctly with what curiosity they were regarded...the fruit, as it ripened, was carefully distributed in the neighborhood for trial and judgment.

⁴² http://en.wikipedia.org/wiki/Merino

⁴³ Green Facts... v II, p 186.

⁴⁴ May Houses, p. 159.

⁴⁵ Colman Agriculture, p. 460.

According to my recollection, the verdict at first was an unfavorable one... $^{\rm 46}$

<u>Hops</u>

The most widespread of Groton's early 19th century experiments was an effort to commercially grow hops, essential to every brewery. Green, in his research on the topic, consulted Groton farm owner and exgovernor George Boutwell, whose local knowledge and powers of observation were not to be doubted. Boutwell's response, written in an 1897 letter, gave a summary history of hop-growing in the county. Hops were developed as a commercial crop in the northwest part of Middlesex County possibly beginning in post-revolutionary times, but especially during the first half of the nineteenth century. The



hop growing region centered on Groton and included Pepperell, Townsend, Ashby, Dunstable, Tyngsborough, Westford, Littleton, Boxboro, Harvard, Shirley, Lunenburg.

Boutwell even outlined the growing and processing procedure.⁴⁷ Hop vines were grown in hills, about 1,000 per acre, with an average acre yielding a respectable 1000 pounds of hops. The vines climbed up 15' poles, and were harvested between the end of August and early September when farmers cut the vines and moved them, still on their poles, to a shed where boys and girls culled the hops from the vine.

In Groton the commercial future of the crop appeared promising enough that a group of farmerinvestors from the region formed the Massachusetts Hop Company in 1831. It would appear from the company's "constitution" that their intentions were to impose quality control and to effect some measure of price stabilization by selling cooperatively.

> We the Subscribers hop Growers in the State of Massachusetts thinking that the Picking Cureing and Baging of our hops can be done to greater perfection than it now is and being desirous to raise the standard of our hops in Market do agree to form our selves into a Company for the above purpose and for the disposal of our hops.

The company disappears from the records by 1833, possibly brought down by market prices that fluctuated wildly, ranging from \$100 to \$250 per acre. Perhaps in consequence of this unpredictability, Boutwell noted: *between the years 1840 and 1850 the growing of hops was transferred to the State of New York, where the crop could be produced at less cost; and more recently it has passed to the extreme northwest, largely to the state of Wisconsin.*

Boutwell estimated that in the heyday of Middlesex hop-growing, the total market produce of area may have been 50 tons (500 bales) but as a nostalgic final note he concluded: *It is very doubtful whether a bale of hops has been raised in the towns named since the year 1855.*

⁴⁶ Green Natural History, v I, p 103.

⁴⁷lbid., pp.55-56

Census data support his observation: while the 1850 Groton census tallied 11,380 pounds of hops grown in town, not a single farmer was growing the vine by 1880.

The Town Farm

Federal Period optimism and experimentation aside, many of Groton's farmers and other residents continued in the traditions with which they had been raised – or to which they had declined. Traditionally, people who were orphaned or senile, physically infirm or mentally incapacitated were tended by members of the extended families to which they belonged. Unmarried female relatives often became caretakers of disabled family members. But there were indigents – paupers, they were called - in Groton as elsewhere, and it was the legal responsibility of each town to see that resident paupers received at least minimal food, shelter and care. Since the 1600s New England towns had attempted a variety of more or less humane solutions to the problem of citizen welfare. It had not been a staggering burden – even large towns during the colonial period normally had only a handful of paupers on the public rolls – but the situation became increasingly severe during the 19th century as immigration, industrialization and economic depressions combined with western agricultural competition and declining agricultural productivity to challenge those at the bottom of the socio-economic scale.

By the early 19th century, Groton elected to house indigent and incapacitated residents on a farm in the vicinity of Jenkins Road – the same farm that at one point accommodated Commodore Bainbridge's 2000 sheep and lambs. Green's take on the situation was that David Lakin *took care of the paupers before the town had an alms-house*.⁴⁸

It would be a mistake to tar Groton's "alms-house" with the same brush as the great, dank holding tanks erected in desperation by overwhelmed, industrialized cities in either England or late 19th century New England. Groton's solution to poverty – like that of many other Massachusetts towns – was the town farm, small in scale and even, potentially, therapeutic. At least by 1829, when surveyor Caleb Butler drew a map of the town, the site had been established on what is now Town Farm Road, and was labeled *Work House*. An 1875 map identified the same location as *Poor Farm*.

Assuming Groton resembled other 19th century Massachusetts communities, the site of the town farm was dictated by what land was available. Some towns literally inherited property from landowners who died without heirs. Other towns became proprietors of small farms abandoned by or seized from delinquent tax payers. Whichever the situation was in Groton, the site chosen for the town's poor farm met two important requirements: it was isolated from the majority of the population, and it was situated on decent farmland.

The town farm was a family-based institution that provided shelter and care for people unable to be on their own for a variety of reasons. A look at Groton's work house in 1855 gives an example. The property, a working farm, was run by Charles Hapgood and his wife Elizabeth, both in their mid-30s. He was a farmer. The Hapgoods had three children ranging in age from 3 to 9. With them also lived 15 year old Joseph Bigelow, who was likely a hired farm laborer. Most of the eighteen other people who boarded at the town farm were classified as paupers, including six men and one woman over the age of 60 (Asa Wheeler was 88). Hannah Graves, age 84, was blind.

⁴⁸ Green Historical Series, vl, p 149.

Logically these older residents might not have been able to help much with the heavier tasks involved in maintaining a farm. One 32-year-old man and two women in their 30s, however, were likely to have been set tasks that contributed to the running of the farm and household, as well as producing household manufactures that could be taken to market. One man was classified as "idiot"; one woman was "insane".⁴⁹

An early crusader for social welfare, Dorothea Dix, affirmed Groton's situation as common small town practice of poor relief. In 1841-42 Dix made it her goal to visit every prison, almshouse and workhouse in Massachusetts that housed *Idiots and insane persons*. Her aim, presented to the state legislature in a shockingly graphic <u>Memorial to the Legislature of Massachusetts 1843</u>, was to convince the legislature that the state should take over funding and regulation of accommodation for the insane, separating them from *criminals and the general mass of paupers*.⁵⁰

Although Dix's own focus was directed toward mental health, her descriptions of the often inhuman conditions in which insane paupers were kept parenthetically sketched the more normal living conditions of the *general mass of paupers*. Her descriptions suggest that a majority of them lived in something comparable to private homes or boarding houses, sometimes housed in outbuildings, but provided with a minimal level of clothing, furnishings, heat and food, as well as some type of physical employment which, as Dix argued, was beneficial to both body and spirit.

The final group supported on the 1855 farm were four children. Three of them were siblings, children of one of the farm's residents. Mary Gilson, age 11, was an orphan. This profile did not change markedly over the next fifty years. The almshouse averaged 14 residents in 1870; 12 in 1899.

Whatever the reasons these people found themselves at the poor farm, the financial goal set by towns for their farms was consistent: be self-sufficient. Break even, so that the indigents are not a burden on the taxpaying citizens. Better yet, produce some crop that can be sold to cover the necessary expenses of clothing, medicine and eventual burial of these poor souls.

A good example of the town farm earning its keep is found in the 1899 accounting in Groton's town report.⁵¹

CASH RECEIVED BY HERBERT C. ROCKWOOD, SUPERINTER OF TOWN FARM	NDENT
Cash on hand March 15, 1900	\$310.52
From Superintendent of Streets for labor on	
highway by self and farm help and cash paid for	
labor and material	1403.09
For labor, haying, etc.	88.07
eggs	86.48
milk	552.25
poultry	20.70
COWS	172.50

⁴⁹ The census distinguished between "idiot" - completely insane - and "insane" - partially impaired.

⁵⁰ Dix Memorial.

^{51 1900} Groton Town Report, p 23.

calves and hogs	10.25
wood	23.40
potatoes	<u>7.50</u>
	\$2674.76

The farm's 10 cows, 5 calves, 73 fowls and 12 residents were paying at least part of their way.

By the end of the century, agricultural use of the poor farm land had declined enough that the town sold 53 acres to provide ongoing poor relief funding, including enlargement and improvement of the buildings, and installation of a separate "pest house" to accommodate residents who contracted contagious diseases.⁵²

The end of town farm poor relief in Groton came after World War I, and coincided with development of a new form of land use and protection, the Town Forest. The Forest and its supporters are looked at in Chapter 7.



Town Farm Road and hayfield circa 1960

⁵²Murray et al, Groton at 350, p. 118-119.

Tradition and Change

Entrepreneurs and paupers were the two extremes of Groton's 19th century farming population. Between them were 200 farmers whose properties in part reflected traditional practices and products, and in part gave evidence of how the town had changed since the Revolution. The 19th century saw first signs of concern for farm sustainability, including improvement of tillage and even reforestation, while farm size trended downward.

Two sources of information provide a sketch of Groton's farmers and their farms.

- A look at an 1830 map mandated by the state gives an overview of land clearing, population distribution and environmental conditions in the town.
- A review of the 1850 federal agricultural census provides a group portrait of the men who worked the land and what they accomplished.

The carefully delineated map reproduced here was drawn as part of a statewide survey of Massachusetts that was carried out between about 1828 and 1831. Each surveyor was directed to indicate a number of specific features in the town, including its churches, highways, houses and mills. But surveyors were also told to carefully define those areas of town that were wooded and those that were swampy, as distinct from cleared land. This 1830 map series was the first broad-scale look at the progress of settlement and farming in Massachusetts.

By 1830 Groton's settlement had been 170 years in the making. Thirty-four per cent of the town was still wooded, indicated by the meticulously drawn ranges of miniature trees. About five per cent of the land was water-covered. Sixty-one per cent – over 13,000 acres – was open land, of which essentially all but a small strip of land along Boston Road in the village center was used, in some way or other, for agriculture.⁵³

Butler's 1830 map contains more specific information than may be assumed at first glance.⁵⁴ The erratic and varied shapes of tree-covered areas are, in fact, conscientious delineations of actual field edges and woodlands. They provide a reliable picture of the extent of clearing and cultivation along every road in town.

- The heavy tree cover in eastern Groton confirms the 'badlands' image of today's Lost Lake area.
- The almost wholly open lands surrounding Old Ayer Road, Farmers Row and Chicopee Row reiterate the enduring value of these areas for agriculture.
- The selective clearings in the Groton Leg and at the north end of town point to a population bent on making the most of what land was available.
- Interestingly, a swath of woods still stood in what is now the Town Forest, and stretches across the Nashua to the Groton School's back yard.

⁵³ These figures do not include the acreage shown that is now part of Ayer. Information on acreage was abstracted from the Harvard Forest Massachusetts woodlands survey by Mostly Maps LLC.

⁵⁴ Regrettably, Butler's original map in the Massachusetts Archives is too fragile at this point to be copied. The less-than-sharp reproduction here is from an old photocopy, and many of the details are only legible at full size.



Fig. 2: 1830 Plan of the Town of Groton; Caleb Butler, Surveyor

1850 Agricultural Census

Another kind of historical evidence survives in the dry tables of numbers recorded for the Federal Census, Agricultural Schedule, in 1850.⁵⁵ Beginning in 1850, the federal government conducted a series of specialized agricultural and manufacturing surveys across the country. The government was primarily concerned about commercial production, rather than home consumption, but some of the results still echo the home farm needs of the previous century.

	total	total amount			ave. amt/
category	farms	in category	high [2]	low [2]	producer
owners	202	0	na	na	0
improved acres	202	12794	200	1	63
unimproved acres	172	6883	200	2	40
farm value	202	\$651,000	\$10,000	\$400	\$3,223
equipment value	194	\$18,855	\$400	\$10	\$97
horses	176	227	7	1	1
milk cows	197	733	14	1	4
working oxen (1)	124	292	6	2	2
other cattle	121	522	26	1	4
sheep	38	294	25	1	8
swine	185	441	10	1	2
livestock value	198	\$48,232	\$740	\$35	\$244
wheat (bu)	4	43	40	8	11
rye (bu)	113	2320	200	3	21
corn (bu)	196	13069	300	10	67
oats (bu)	107	5690	260	4	53
wool (lbs)	42	1039	100	2	25
peas/beans (bu)	134	593	20	1	4
irish potatoes (bu)	190	20783	350	10	109
barley (bu)	28	578	100	3	21
buckwheat (bu)	19	284	75	4	15
orchard product value	115	\$2,653	\$80	\$3	\$23
market garden value	23	\$90	\$50	\$14	\$4
butter (lbs)	188	46524	1200	25	247
cheese (lbs)	53	10850	600	50	205
hay (tons)	201	4016	70	2	20
hops (lbs)	12	11380	1200	150	948
honey/ beeswax (lbs)	11	360	75	10	33
home mfrs value	3	\$73	\$40	\$8	\$24
stock butchered value	194	\$13,507	\$4,000	\$12	\$70

[1] 4 years and older

[2] amount from farms with amounts more than zero

Fig. 3: Groton Agriculture - 1850

⁵⁵ The Agricultural Schedules for Massachusetts survive from 1850 through 1880. With enough time and study, they provide extremely detailed information on agricultural practices and variations statewide, and mark the changing tenor of the times during this period of significant change.

At mid-century, Groton could count 569 households in town, of which 202 were farms. If we can assume that the amount of cleared land in Groton was similar to the 61% mapped in 1830, then slightly more than one third of the town's families owned – or at least worked – two thirds of the town's land.

Groton was still a Yankee stronghold, despite clusters of Irish and Canadian immigrants around the center village and the manufacturing village of West Groton. If there were any Native Americans left in town they were not identified as such, although Simon Gigger, a laborer classified as "Negro" carried the same surname as a family living in central Massachusetts who were recorded a decade later as "Miscellaneous [i.e.: unidentified] Indian."⁵⁶ Both Gigger and the town's only black farmer, Rufus Hazzard, owned their own homes.

From the summary figures we can pick out the most popular crops: corn, potatoes and of course the omnipresent hay. Approximately half of the farms grew smaller quantities of rye and oats, as well as maintaining orchards. A farmer's 'improved' land (cleared, cultivated, seeded, possibly ditched or fenced) surpassed 'unimproved' land at a ratio of 3:2 on his 100 acre farm. All of his livestock was worth less than half the value of his equipment.

The real significance of the numbers on this chart, however, is that they paint a picture of a farming pattern that was still broadly traditional – individual experiments notwithstanding. The majority of Groton's farmers in 1850 appear to have still been largely subsistence farmers, maintaining a general agricultural operation that fed the household and provided a relatively small surplus for commercial sale or barter. Just about every farm had a few milk cows and a similar number of beef cattle, plus a couple of swine. Only 38 farmers owned any sheep at all, with just a handful still engaged in growing hops. The dearth of local industry may explain the fact that only three farms declared any household manufactures at all.

Is this image of traditionalism a fluke of timing? The craze for hops and mulberry cultivation, the fortunes in sheep raising had just waned in this part of the country. The railroads, heralded as the single biggest influence on mid-state farming in the 19th century, had only just arrived in Groton in 1848, and escalation of industrial expansion was still a decade in the future.

It is almost impossible to judge whether the farmers of Groton had experienced their own agricultural revolution earlier in the century or not. What is clear is that, at the moment of time when this census was taken, Groton's farms still substantially resembled those of their ancestors.

The change would be dramatic in the decades to come.

⁵⁶ Earle report transcribed by Doughton, p 31.

PROFILE: An Irish Catholic Groton farmer



Fitzpatrick family members and friends, ca. 1910. James Fitzpatrick Jr. bottom right with moustache. Photo courtesy of Frank Connors.

James Fitzpatrick's name appears in Groton as part of the 1850 agricultural census. He owned a 105 acre farm, of which 75 acres qualified as improved land. The land, located along the Dunstable border, was high, rocky and isolated, but the farm had been occupied for over 120 years by the time the Fitzpatrick family bought it in1843.⁵⁷

A 1666 ten-acre grant to Ellis Barron from the Groton proprietors is the first indication that this edge of town might be useful. There is no indication that the land was actually "improved", however, for at least the next fifty years. Its location on the town's northern border, and the continuing threat of French and Indian attack would not have encouraged habitation, so the acreage was kept by Barron as an undeveloped investment.

Eventually the Bowers family purchased the parcel and settled there in 1711, building a *mansion house* (a substantial structure, in other words) and a barn; enclosing part of their ten acres with fences.⁵⁸ Samuel Bowers was not primarily a farmer though; he was a tailor and in 1739 he sold the property. This was the first of a number of transactions that essentially

57 Much of the information concerning the three generations of Fitzpatricks was provided by Carl Flowers Jr., who generously shared his extensive research on the farm and its owners.

⁵⁸ Middlesex Deeds 23:237; 1723.

returned the farm to investment status. The new purchaser, often a neighbor, would increase the total acreage of the property, then turn over the land to another buyer in a matter of years, making a profit in the frenzy of land speculation that gripped the Commonwealth during the mid-18th century and nearly destroyed its economy.

In 1767 Grotonian John Woods purchased the farm – now up to 100 acres with *buildings and fences standing thereon.*⁵⁹ Woods and his son John Junior worked the land for the next six decades. From the start there was a determination to improve the property and provide for its continued farm use. The language of the 1767 deed describes all of the property's boundaries in terms of marked trees or natural features, but only a year later the same boundaries were delineated by *stone walls* and fences. Almost immediately after the purchase John Senior, in a common inheritance practice, conveyed half of the farm to John Junior, including all the buildings.⁶⁰ This practice served to give the younger generation an immediate economic stake in the property on which they labored so diligently while at the same time it guaranteed that the older generation would have the second pair of hands that was essential to running a farm.

Unfortunately for the property, John Junior believed in borrowing money. Beginning in 1809, he used the farm as collateral for at least four loans to cover various debts. He was unable to pay them back, and in 1831 the farm was foreclosed, to lie in financial limbo until its purchase by Nicholas Fitzpatrick of Lowell, in 1843.⁶¹

Nicholas Fitzpatrick had immigrated to America twenty years earlier, settling in Lowell with his wife and three children. He was a skilled craftsman, a dyer who presumably worked in or for one of the city's large textile mills. But by the time Nicholas bought the Groton land in 1843, he styled himself "gentleman" in the deed, owned at least one house in Lowell and ran a general store on Lowell's Market Street, where the family lived.

The Groton acreage was bought specifically for son James, a young man working in the mills, recently married with a new son. During the first three years after buying the Groton farm, Nicholas and James, with their wives, lived in the century-old farmhouse together and restored the farm to working condition.⁶² It is likely that James' brother Martin managed the business in Lowell until Nicholas returned in 1847.

By the time of the 1850 census, then, James and his young family were well settled on their isolated farm. The Fitzpatrick barn housed two horses, a yoke of oxen, eight cows and two pigs. James grew a small amount of rye, a large amount of Indian corn, plus hay, oats and nearly the largest crop of Irish potatoes in town. These figures alone set him ahead of the majority of Groton's farmers. Not to be left behind, he also harvested 20 pounds of hops that year, cashing in on the tail-end of Groton's great agricultural experiment.

Contrary to the tired image of Irish immigrants barely surviving at the bottom of the heap, the Fitzpatrick family was not dependent on Groton's farmers or the town's good will for sustenance. The potatoes, along with butter from his milk cows, were both products he could market nearby. Fitzpatrick's nationality and religion might have put him at a disadvantage in Groton, but he had

⁵⁹ MD 83:219; 1767.

⁶⁰ MD 163:245; 1768.

⁶¹ MD 430:446; 1834.

⁶² While the 'restoration' is conjectural, Nicholas and Ann Fitzpatrick's names appeared on the Groton tax rolls together with James and his wife, Elizabeth.

a trump card that made it likely he found a ready market. Virginia May, writing out of sympathy that the small Irish population of Groton had to travel so far to worship, commented:

A direct descendant of James Fitzpatrick recollects hearing that he and his family went by team to Mass in Lowell; in fact, provided flowers for the altar. This was a distance of about twelve miles from his home on the outskirts of Groton.⁶³

The family's destination was St. Patrick's Church on Suffolk Street in Lowell. What May did not know was that there, the Fitzpatricks found welcoming fellow parishioners – and James Fitzpatrick found customers as well as prayers. Providing country goods for his father's store, he benefited his own extended family and provided the Irish women of Lowell with the eggs, potatoes and fresh vegetables that were recorded each day in the Fitzpatrick ledger.⁶⁴

Soon James added two adjacent parcels to his holdings, which totaled 162 acres on the Groton-Dunstable border by the time the 1880 census was taken. By then he was not the only Irish farmer in town. Names such as Moran and Cleary, Dugan and Donahue are scattered throughout the census pages, but historians agree that Fitzpatrick came first.

In 1880 James Fitzpatrick – and probably by then his son as well – tilled a greater than average number of acres. They maintained over a hundred acres as meadow and pasture – more than four times the town average – and four acres were planted to apple trees although, as was also true elsewhere in town, the 500 trees were cooperatively maintained by eight neighbors.

Everything about the farm's products was above average in quantity or number, with certain glaring exceptions. The Fitzpatricks' only attempt to grow standard grain crops on their thin and stony soil, was four acres planted to Indian corn (of which they produced 1¼ times the average). But they did grow two and a half times as many beans as other farmers in town and twice the number of potatoes, while their dairy output, all in the form of butter, was triple that of other farms.

The picture that emerges at the end of all these numbers is of a small but substantial commercial farm operation. Getting goods to market was still a challenge for the Fitzpatricks; there was no direct rail communication between Groton and Lowell so everything traveled by cart. At one end of their process of farm planning they had to take into consideration the environmental challenge of stony and hilly land. At the other end was the economic challenge of providing low-cost basic food staples to a working class market.

Years later in 1915, the Groton Landmark ran a letter from James Fitzpatrick Junior that included a reminiscence about his family. James Junior reported that his father had *carried on a large dairy business composed of Jersey and Guernsey cows; also a market garden, going to Lowell with all kinds of farm produce.*⁶⁵

The market wagon that left for Lowell every week was stocked with fresh eggs and sweet butter. There were sacks of dried beans, potatoes and apples – all long-keeping foods. It is possible

⁶³ May Petapawag, 23.

⁶⁴ A wonderfully detailed journal/ ledger/ daybook from the 1830s through '50s is in Mr. Flowers' possession. It tracks the shop sales as well as the farm and stock end of this many-faceted commercial operation.

⁶⁵ Groton Landmark August 21, 1915.

that hay bales used as packing on the trip out were sold on Market Street as fodder for city horses. Bundles of small-caliper firewood were loaded over the wheels, to stoke kitchen stoves. And of course the *flowers for the altar* may have been supplemented in season by others for the shop. There is little evidence of the Fitzpatricks' market gardening, no cabbages, onions or greens to go with potatoes, but this was true of Groton farmers throughout town who, with the exception of a small cluster of neighbors (perhaps along the Nashua floodplain?) largely left gardening to their suburban counterparts.

If, as it appears, much of the farm's produce went to Nicholas Fitzpatrick's store, James and James Junior had found themselves a solid market niche, providing basic food staples to complement the dried fish and crackers, gin, rum, soap and starch that showed up regularly in the store ledger, selling to customers who would always want what they had to offer.

James Senior, especially, was a highly respected member of the Groton community. In his later years he served as registrar of voters. He was a founding member of the Groton Grange and became Master in 1887. Both his and his wife Elizabeth's contributions to Grange activities were recognized five years later, when they were presented with an engraved pitcher and cup on the occasion of their 50th wedding anniversary.



photo courtesy Carl Flowers

VI. The Heyday

My first visit to Boston was made from the town of Lunenburg in the year 1828-1829-1830....My father came to Boston with a one-horse wagon load of poultry, chiefly chickens and he gave me the opportunity to see the city when it contained about 40,000 inhabitants....



The next day we went to Boston to Quincy Hall Market, where my father stationed his wagon at the first stand, on the upper end, southerly side where the contents of the wagon were sold....

...the day following we went to the Brighton Cattle Market, where my father bought 24 head of cattle, 9 of them being oxen for which he paid \$250. I aided in driving them home where the cattle were deposited at the Almshouse farm, of which my father was then one of the overseers. 1905 reminiscence by George Boutwell⁶⁶

It is a truism of southern New England history that the Golden Age of farming took place between the late 18th and the late 19th century. This was the time when the greatest amount of land was worked with, one assumes, the greatest good for the greatest number. Farm labor had not yet been supplanted by equipment, although Massachusetts-made farm machinery was increasing crop yields and providing major time savings. Farm crops had not been priced out of the market by less expensive grains and meat from the western states. "Scientific" farming had introduced substantial improvements in soil fertility, dairy production, disease resistance and mechanization, while inexpensive rail transport allowed farmers to ship fresh milk twice a week to distant markets.

The winds of change were already blowing when George Boutwell addressed the Middlesex Society of Husbandmen and Manufacturers in 1850:

The old system of converting the entire surplus of the farm into cattle for the market, or even into hay and grain must, in this vicinity at least, soon disappear....The grazing and grain lands of sections once quite remote, are now too near to permit a successful competition on your part. Your reliance is more and more upon those fruits and vegetables which find a ready market in our cities and villages. The wealth which may be drawn from these sources...is as yet unknown....

Farming...is a very different pursuit from what it was twenty years ago....[more] skill, more enterprise, more science are now required than formerly.⁶⁷

⁶⁶ printed in Green, Facts...; II,91.

⁶⁷ Boutwell 1850, p. 15. Illustration of Welsh cattle drover from http://history.powys.org.uk

Got milk? The railroad and Groton's farmers

The railroad came through Groton in 1848 and for almost a century was the major mode of east-west transport between Maine and New York for goods and passengers. Virginia May noted that in 1905 the depot saw thirteen passenger trains a day pass through but, more important to the farmer, there were also many long freight trains including morning trains [that] took quantities of milk to Boston.⁶⁸



Greenville Branch Railroad engine from historical map (Groton Historical Society)

The significance of the railroad to the region's farmers was that it provided *high-speed* transportation of products such as milk, making it feasible for the Groton dairyman to specialize in milk production, rather than the butter than had been his major market commodity or, for an earlier generation, hard cheese. Both butter and cheese were relatively labor-intensive products. Butter had a relatively short shelf-life and was almost unsaleable during the hot summer months, while cheese required up to six months of aging before a farmer could see a return on his money. Milk, on the other hand, often delivered directly to a dairy cooperative and transported by rail to urban markets, required relatively little labor to produce and provided a speedy income. Furthermore, the Boston market was large and growing larger, promising to absorb all the product that farmers could supply.

There is little doubt that the development of the American rail system was designed primarily to facilitate movement of manufactured goods and raw materials during the period of explosive industrialization between the 1850s and the 1920s. As with most technological advances, however, the railroads benefited other sectors of society besides their primary target.

The combination of fast, reliable rail transport and expanding markets finally tipped the scale for Groton farmers and changed the way they did business. Between 1850 and 1930 they became "dairy and fruit" farmers, leading Virginia May to reminisce, *this was a popular combination in those days.* Freight service through Groton apparently actually continued until 1982.⁶⁹ By that time, however, the complexion of Groton farming had significantly changed again.

Rational Farming: science and cooperation

While rail transport may have been the means by which Groton products reached new markets, other factors including some close to home, were the stimuli that moved Groton farmers to develop those products in the first place.

⁶⁸ May quoted in Murray et al, *Groton at 350,* p 58. 69 Ibid.

By the mid-19th century Groton was anything but an isolated country town. Its respected schools led by some of the era's leading intellectuals, its pivotal location on a busy post road, its influential population of well-educated professionals and businessmen all encouraged a spirit of inquiry and – to borrow a current term – "best practices".

Farmers and the working men termed "mechanics" in the parlance of the day, had their own sources of information and news, and their own forums for discussion. Chief among these were the Brighton Cattle Market, the Middlesex Agricultural Society, the Farmers' and Mechanics' Club and the Groton Grange.

• Brighton Cattle Market

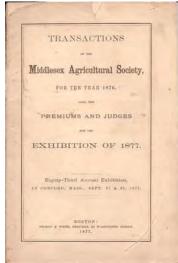
George Boutwell's reminiscence of the wonder in a young boy's first taste of big city marketing, quoted above, only hints at the significance of Quincy Market and the Brighton Cattle Market to 19th century New England farmers. The cattle market especially was a regional draw, regularly bringing together breeders, farmers, buyers and some of their best livestock for one to three days of bargaining, comparing notes and learning the market. Henry Colman's 1841 description of the event probably still held true through most of the century.

The great Cattle Fair of the State, and indeed of New England, is held at the beautiful village of Brighton, about six miles from Boston on the Monday of every week. Here capacious pens are erected for the reception of such livestock as may be brought in, and the drovers and butchers assemble from all directions.... Cattle, sheep and swine are brought here from the interior of the State, from Maine, New Hampshire, Vermont – from New York [and even farther away].⁷⁰

Colman noted that the livestock included sheep to be fattened for slaughter; only a few tableready hogs but lots of pigs and shoats to be sold for keeping, plus a few horses, though this was not a major venue for horse sales. The cattle principally consist of young stock for wintering, he went on, working oxen, milch cows with their calves, and fat cattle for barrelling and for the retail market in the city and vicinity.

Middlesex Agricultural Society

On a smaller and more sociable scale, the Middlesex Agricultural Society and its varied-named predecessors⁷¹ provided a formal social network for the county's farmers from the time of its founding in 1784 into the early 20th century. The Society's annual meeting in the fall also provided a forum for some of the state's leading thinkers to discuss various aspects of agriculture. Henry David Thoreau in 1860, and Ralph Waldo Emerson in 1861, were among them. Interestingly, the topic of Thoreau's address was the propagation of



⁷⁰ Colman, p 294

⁷¹ Founded 1784 as Western Society of Middlesex Husbandmen; renamed Society of Middlesex Husbandmen and Manufacturers

in 1820, and Middlesex Agricultural Society in 1852. (Concord Library Special Collections finding aid)

forest trees - already considered to be relevant to the field of agriculture.

Coincident with the Society's fall meeting for many years was a cattle show including the longstanding tradition of a plowing match. Here, unlike the all-business atmosphere of the Brighton Cattle Market, farmers could meet more casually to compare notes and engage in generally good-spirited competition. Thoreau had something to say about that as well.

> Every man is entitled to come to Cattleshow, even a transcendentalist; and for my part I am more interested in the men than in the cattle. I wish to see once more those old familiar faces, whose names I do not know, which for me represent the Middlesex country, and come as near being indigenous to the soil as a white man can; the men who are not above their business, whose coats are not too black, whose shoes do not shine very much, who never wear gloves to conceal their hands. It is true, there are some queer specimens of humanity attracted to our festival, but all are welcome.⁷²

Later in the century the cattle show evolved into a full-fledged "exhibition" similar to county fairs of the 20th century, with cash premiums awarded to outstanding entries in a wide range of categories. The pride involved in exhibiting was an important stimulus to improve products and maintain high standards. In 1876, for instance, the Society's secretary reported: *The exhibition of neat cattle was remarkably large and fine, and as was remarked by several gentlemen present, who had visited the Centennial Exhibition, was superior to the show of cattle there exhibited.*⁷³

More than pride was involved, however. The premiums awarded for best in class were actually funded by the Commonwealth in support of agricultural excellence. The highest premiums were reserved for those categories where the Agricultural Society felt financial encouragement would, in the long run, benefit the mass of Middlesex farmers. Thus in 1876, the judges set a premium of \$25 for the best of certain seedling fruits and vegetables including *the best new seedling apple which, after a sufficient trial, shall be considered equal to or better than existing varieties for general cultivation in Middlesex County.*⁷⁴ The same was true for pears, grapes, potatoes and strawberries.

Another high premium category – harking back to Thoreau's topic of 16 years earlier - was "forest trees" with a premium of \$50 offered for the best Forest of not less than one acre in extent, composed of White Oak Trees, raised from acorns, and not less than 10 years old. The theme of reforestation was by no means new to Massachusetts farmers. Colman's 1840 agriculture report had encouraged readers to consider forest products as much the concern of farmers as field crops were. The exhibition emphasis on white oak was likely pairing environmental appropriateness with market value of timber in this shipbuilding county.

⁷² H. D.Thoreau addressing Middlesex Agricultural Society, 1860; http://thoreau.eserver.org/foresttrees.html 73 MAS *Transactions* 1877, p. 3.

⁷⁴ The list of awards for apple species was two pages long, beginning with the market standard Baldwin and including Hubbardston Nonsuch, Rhode Island Greening, Gravenstein, Porter, Williams Favorite, Roxbury Russet, Holden Pippin, Garden Royal, King of Tompkins County, Hunt Russet, Mother Apple, Ladies' Sweet, Foundling, American Beauty, Ramshorn, Fletcher Russet, Maiden's Blush, Northern Spy and Crab Apples. Twenty-two varieties of pears were also included in the judging.

• Farmers' and Mechanics' Club

Although Groton was undoubtedly part of Middlesex, and a local farmer regularly served as a Middlesex Agricultural Society trustee, the town's location at the western edge of the county put it at a distance from the events and concerns of eastern Middlesex. This may have been part of the impetus for forming the Groton Farmers' and Mechanics' Club in 1855, although similar local clubs were forming across the state.

A short time after its founding the Club established a private library for members, whose contents were eventually turned over to the Groton Public Library *with the stipulation that six dollars yearly be spent from the General Fund for books concerned with agriculture.*⁷⁵ One can only assume that the club library included a significant collection of farming periodicals, which had proliferated over the century.

Predating the club's formation, the most famous of these journals was *The New England Farmer,* founded in 1822.⁷⁶ Its subtitle characterizes both the intention and eventual impact of the journal: *containing a compendious account of the ways and methods in which the important art of husbandry in all its various branches is, or may be, practiced to the greatest advantage in this country.*

Journals such as these were a major educational tool for farmers in an era before formal agricultural education. They published debates and field tests concerning soil improvement and manuring; ditching and draining bogs and wet meadows; proper animal husbandry. They printed plans for new and improved farm buildings such as piggeries and henhouses, and reported on

new and promising crops and varieties. The Farmer was succeeded by a growing array of periodicals aimed at the rural and agrarian population, including The Massachusetts *Ploughman*, official organ of the New England Agricultural Society, printed in Boston from 1841 to 1915 under three different titles, and The Boston Cultivator, a popular magazine after the Civil War. About one-fourth of The *Cultivator's* space was devoted to farming interests and the mechanical arts, including articles on livestock, labor-saving machines, and the best methods of cultivation. But The Cultivator also aimed for a broader audience, publishing news, prices, serialized tales, poetry and an editor's column as well.77

The new Farmers Club sponsored its first local fair that fall. *The New England Farmer* reviewed Groton's second fair in its November

FARMERS' FESTIVAL AT GROTON.

The enterprising people of Groton have held an agricultural fair for two or three years past. On Friday, Sept. 26, it took place for the present year, and resulted, we believe, in giving great gratification to themselves, and a large collection of people who had comp in from other towns. The day was pleasant. Recent rains had sufficiently moistened the earth to prevent any inconvenience from dust; the sun was bright, and the air elastic, and they imparted their cheering influences to the multitudes that thronged the highways and halls.

There was a plowing match, a trial of working oxen, a show of cattle, horses, sheep, swine and poultry; in the hall were many samples of butter, some of it remarkably fine, domestic manufactures, a handsome collection of herbs neatly put up in boxes, sieves, brooms, &c., presented by the Shakers at Harvard, and the usual fruits of the season.

75 May 1976, p 4.

⁷⁶ The original New England Farmer was discontinued in 1846. Another publication of the same name but very different style ran from 1848 to 1910. Both were published in Boston. [Stuntz, Conrad, *List of the Agricultural Periodicals Published....1810-1910.* USDA Misc. Publication 398, 1941] Thanks to John Ott for providing this information.

⁷⁷ http://chroniclingamerica.loc.gov/lccn/sf89091683/

1856 issue and concluded: *The Farmers' Club at Groton holds meetings in the winter and these, with their annual exhibitions, will soon work a wonderful change in the condition of agriculture about them. We wish them great success.*⁷⁸ It is left to the reader to speculate as to what the exact condition of Groton's agriculture was, that required wonderful changes.

The Groton Fair became an institution in the town for almost eighty years. It was a source of great local pride, a draw for participants and spectators from nearby towns, and an apparent money-maker. By the 20th century it was a three day affair chronicled by Virginia May, who remembered it being an event of great importance to the school children she taught in 1932. Writing sixty years later, she could reconstruct this important community celebration thanks to a 1925 news article she had located.⁷⁹

The first day, according to the article, included a parade, traditional plowing and pulling contests and livestock judging. During the afternoon spectators enjoyed horse races and an automobile parade. Day two was the highlight of the Fair: a horse show – *there was tremendous interest in that* – followed by multiple band concerts, foot races and a regional Boy Scout exhibition. More horse races with significant purses (\$300 and \$400) followed in the afternoon. Day three included wrap-up activities, and products in the Exhibition Hall were auctioned to the highest bidders.

The Groton Fair offered something for everyone – kids, housewives, gamblers, equestrians and farmers. But threat of Ku Klux Klan intimidation, combined with a depressed economy after 1929, spelled an end in Groton for this iconic rural event. In the early 20th century Hazel Grove Park had developed a secondary reputation as a harness racing course. In May 1935 the Groton Town Diarist noted:

The Fitchburg Riding and Driving Club Wednesday was authorized by the state racing commission to stage two days of harness racing under the parimutual *[sic]* system of betting, [the first to be held in Fitchburg] and the second at Hazel Grove Park, Groton, on June 8. The two meetings are to be Happy Hour harness circuit affairs and will be continuations of meeting at the two spots for the past several years....

By contrast, in August of the same year the Diarist recorded that *the Groton Fair this year will be* a junior fair with exhibits in the junior department only.⁸⁰



78 New England Farmer, November 1856, p. 491.

79 May 1976, p 51.

80 Groton Town Diaries, Vol III p 144; May 11, 1935 - quoting from The Landmark.

early 20th century harness racing (in North Carolina)

It is probable that Hazel Grove Park continued as a trotting track after the Groton Fair essentially ceased to exist, but further research is needed to establish the exact chronology. In October 1950 the Diarist noted: "We are glad to see our old Groton Fairgrounds once more in use. See clipping." But the undated clipping describes a day in the country for Boston Girl Scouts, with the Groton 4-H horse club providing a riding lesson. The clipping concludes, *Groton Girl Scouts were invited to attend*. Reading between the lines, there was little community involvement in this outreach-to-urban-youth event.

• Grange #7

While the Farmers and Mechanics Club was very much a local organization whose broader geographic ties were limited to its annual fair, the town's farmers did affiliate with a much broader-based organization after the Civil War. In 1873 Groton established the seventh Patrons of Husbandry Grange in Massachusetts, only six years after the national organization had been founded.

The grange movement was founded in response to America's increasing urbanization and industrialization, to speak on behalf of farmers, agriculture, and rural values. A recent grange historian noted that the grange's 'voice' had a significant purpose:

With an increasingly urbanized population, the rural areas of the country where farmers and agriculture had carried the economy for more than a century became threatened with a loss of political power in Washington D.C. It was in this environment that a national Grange was organized....⁸¹

The grange movement waned after World War II, especially in the eastern states, leaving Groton's Grange #7 one of only a handful of Massachusetts units remaining. Ironically, this loss of agrarian voice would become a major driving factor in the late 1990s movement to establish local agricultural commissions across the state, providing for the 21st century a rural agricultural voice not unlike the grange movement of 125 years earlier.



81 Robert Stewart 1998 quoted in Murray et al, Groton at 350, p 116.

Groton's Heyday Farms: an 1880 Snapshot

An ever-growing urban population in Massachusetts, including residents of neighboring Ayer, Leominster, Lunenburg, Fitchburg and Lowell, seemingly bought everything rural farmers could produce. Especially fortuitous for farmers from the interior uplands, some of the products in greatest demand were those to which their land was best suited: hay by the ton to supply the draft animals and carriage horses of the city; potatoes, corn and apples, poultry, eggs and milk to feed the workforce, and cordwood to keep those homefires burning that were not adapted to coal.

An 1880 census of agricultural products provides another in the series of Groton's agrarian snapshots. The categories were more numerous and slightly different than those in 1850, and are given here for general reference.

category	totals	category	totals
farms owned	192	sheep	139
farms rented	6	swine	402
acres tilled	5495.5	barnyard poultry	3820
acres mead/past/orch	5391	other poultry	550
unimproved woods	4592	doz. eggs	25032
unimproved other	247	bu barley	590
farm value	\$894,090	bu oats	588
machinery value	\$39,935	bu rye	323
livestock value	\$66,870	bu beans	413.5
\$ paid labor	\$23,907	bu buckwheat	122.75
weeks hired labor	5222	acres indian corn	349.3
total product value	\$134,245	bu indian corn	11814
mown grassland	3923.5	acres irish potatoes	117.41
tons hay	4452	bu irish potatoes	13314
horses	311	acres apple orchard	291
working oxen	32	no bearing trees	14374
milk cows	980	bu apples	17684
other cattle	315	acres peaches	24.5
calves dropped	817	no bearing trees	958
milk sold - gals	367065	bu peaches	242
butter farm-made lbs	44830	value of orchard prods	\$8,403
cheese farm-made lbs	600	value mkt gdn produce	\$1,334
		cords wood cut	3071
		value all wood prods	\$11,055

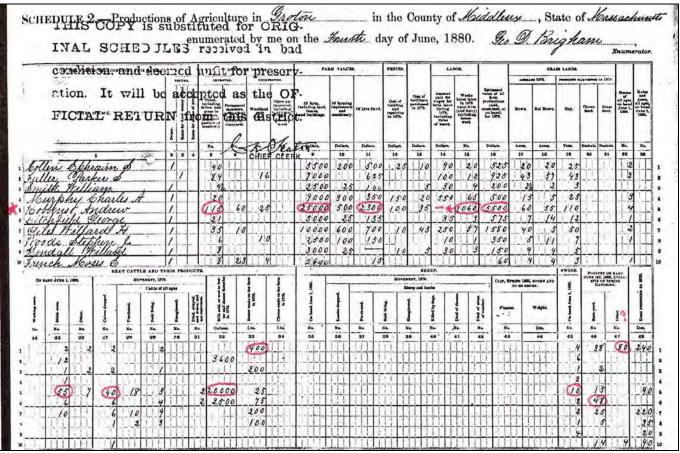
Fig. 4: Groton Agriculture - 1880

A few general observations can be made from this summary chart, which represent the changes in Groton's agriculture during the second half of the century. While the total number of farms remained nearly constant between 1850 and 1880 (202; 198), the relative amount of land classified as improved (tillage, pasture, orchard) increased noticeably during the period, from a ratio of 2:1 to 2.5:1.

Farm machinery was coming into its own. For the average 1850 farmer, only \$100 of his \$3300 farm value was in equipment. The 1880 farmer, in contrast, worked with equipment worth 20% of his farm's total value. Oxen had given way to horses as work animals.

Many of the farmers who maintained fruit orchards did so as a shared activity with one or more neighbors, their joint acreage bracketed with one number on the census form. Clearly this cooperation did not extend to harvest, however, as each man's crop of apples was carefully broken down into bushels per individual.

By 1880 field crops had become minor products, with the predictable exception of hay and an economic shift to potatoes. The large townwide milk production and minimal cheese production, the inclusion of poultry as a market commodity and increased market gardening also mirrored shifting market trends across the state.



A portion of an 1880 census page shows Andrew Robberest's holdings in comparison with neighbors Charles Murphy, George Litchfield and others.

Specialization

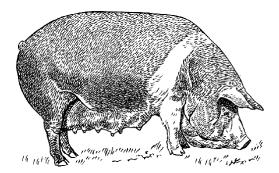
A closer study of the 1880 census, paying attention to individual listings rather than townwide trends, shows that other practices had also changed in Groton since 1850. The biggest change was a significant increase in specialization among Groton's farmers. As Boutwell observed, hop culture had disappeared completely. But Boutwell was also one of the experimenters on the 350-acre farm he owned out Chicopee Row. In 1879 he had planted an acre of land to grapes, although there is no indication that his vines had matured yet. (William Smith actually produced 15 gallons of wine during the preceding year.) Six of Boutwell's acres were planted to peaches,

as well as apples and the omnipresent Indian corn, but a large part of his farm's value derived from the 42 milk cows and other cattle, and the 70 laying hens that occupied his barnyards.

Elsewhere in the listings, a few farmers stand out as specialists in one or another of the government's selected categories, unique among the more generalized farming found on most properties.

- James Woodward and John Hall planted 6 acres total to flax.
- Neighbors John Farnum and George Woodward between them harvested 3 bushels of grass seed.
- Charles Geniah, whose entire 80-acre farm was either tillage or pasture with no unimproved land recorded, produced 50 pounds of honey.
- Gilman Barrows declared the value of his nursery products sold to be \$210.

Other men in town specialized as well, concentrating their resources on animal husbandry. A substantial herd of livestock required substantial outlay of capital, initially for stock and also for shelter and feed. While the town average for dairy and other cattle was seven per farm, Andrew Robberest had a milking herd of 55, and a few others had herds of more than two dozen. Robberest is among the few farmers who sold all of their product specifically as fresh milk, rather than processing some as the more traditional and labor-intensive butter. Robberest, as well as Solomon Achorn, also had sizable droves of a dozen or so swine on their farms.



For a final overview of the heyday century, the three censuses already examined can be put side by side.⁸²

category	1771 total [1]	1850 total	1880 total	1771 prod	amt/ lucer	1850 amt/ producer	1880 amt/ producer
farmers	297	202	198	n	а	na	na
improved acres	7007	12794	10887		25	63	55
unimproved acres	na [2]	6883	4839	n	а	40	24
farm value	£1175	\$651,000	\$894,090		£4	\$3,223	\$4,516
horses	145	227	311		1	1	2
milk cows & cattle	652	1255	1295		3	8	7
working oxen	372	292	32		2	2	3
sheep	1144	294	139		6	8	20
swine	395	441	402		2	2	3
wheat (bu)	{	43	0			11	0
rye (bu)	{	2320	323			21	25
corn (bu)	13176	13069	11814		49	67	85
oats (bu)	{	5690	588			53	29
wool (lbs)	na	1039	na			25	na
peas/beans (bu)	na	593	414			4	5
irish potatoes (bu)	na	20783	13314			109	74
barley (bu)	{	578	590			21	84
buckwheat (bu)	{	284	123			15	18
orchard product value	(3113 barrels)	\$2,653	\$8,403	(11 ba	rrels)	\$23	\$72
market garden value	na	\$90	\$1,334	Ì	,	\$4	\$95
butter (lbs)	na	46524	44830			247	350
cheese (lbs)	na	10850	600			205	200
hay (tons)	1807	4016	4452		1.3	20	23
hops (lbs)		11380	0			948	0
cheese (lbs) hay (tons)	na 1807 are considered	10850 4016 11380 to be farmers	600 4452		1.3		205 20

Fig. 5: Groton Agriculture Changes 1771 - 1880

[2] na indicates not available or not applicable

{ all included under single "grain" category

Over the century the number of milk cows and neat cattle on Groton farms doubled, while sheep raising dropped by 75%. A major expansion of hay production also took place, paralleling the increase in numbers of horses and cattle. Some changes cannot be easily measured back to 1771, but it is clear that between 1850 and 1880 grain production declined almost across the board, while orchard produce increased. The only exception to grain production figures was the increase in barley, suggesting a new, late 19th century specialization perhaps geared to increasing numbers of breweries in Massachusetts. In another example of late century specialization, while the total number of farmers raising sheep declined, a few farms concentrated in this area of animal husbandry, likely providing lamb and mutton for the Boston market, rather than the merino wool prized earlier in the century.

Over the decades census takers were concerned about different products and issues, but what emerges is at least a suggestion of the gradual transformation of farming in Groton over this dramatically changing century.

⁸² Values shown in pounds have not been converted to dollars since comparison is misleading. Current research suggests an equivalence of 5 shillings to \$1 – which results in a total Groton farm value in 1771 of \$4700. It requires a leap of faith to go from that to \$651,000 in less than 80 years. Clearly there are other, unidentified economic considerations involved.

PROFILE: James Lawrence, gentleman farmer

Large-scale farmers, with properties of 150 acres or more and sizable livestock holdings, were not new to Groton. We have seen the vast acreage amassed by some of the town's earliest settlers, and read of the joint-investment sheep farm whose owners included Commodore Bainbridge in the early years of the 19th century. But as the century progressed the number of country estates grew in Groton. Some of the owners, like Andrew Robberest, were relative newcomers.

Others, including members of the Lawrence family, had been in town since the beginning and in fact, based their estates on original grants awarded by the proprietors. First-generation John Lawrence settled in Groton in 1662 and was granted a 20-acre home lot and right in the common lands. By 1684 Nathaniel Lawrence, the second generation, has acquired a 10-acre right, part of which was inherited from his father, part being recognition or compensation by the town for his services as Ensign during King Philip's War. In that year he owned over 360 acres of land in Groton including 120 of the newly-distributed acres on the west side of the Nashua River.

In the early 1690s Nathaniel must have been running his farm with the help of third-generation son John, who had married a Groton girl (Hannah Tarbell) in 1687. John and Hannah had a young family; the Indian harassment of Groton had not ended; the Lawrences, including Nathaniel, decided to move at least temporarily to Lexington where the family could be safe. Both second and third generation remained in Lexington but that was not the end of Lawrences in Groton.

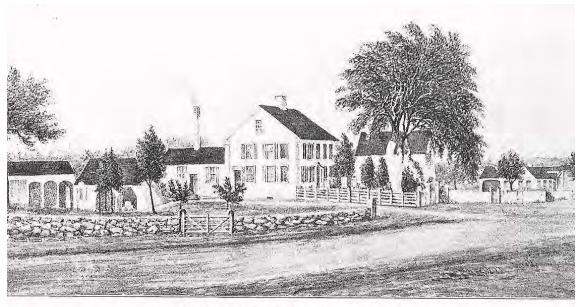
1742: the Indian troubles were winding down; fourth-generation Amos Lawrence, youngest of John and Hannah's ten children, returned to Groton to live on the family homestead on Farmer's Row. Amos's move was a pre-Revolutionary version of "Go west, young man." The homestead lands, which may have been maintained by a tenant farmer in the intervening years, were more than sufficient to provide a good living, and seven years later, when Amos was already in his thirties, he married Abigail Abbott of Lexington and brought her back to the finally peaceful town of Groton to live. Amos and Abigail raised a family and ran the farm for thirty-four years – biographers have little to say about this generation.

In fact, the 1771 tax valuation confirms the averageness of their farm. It was better-thanmiddling in value, worth £16 on a scale where average was £4, but it was also supporting five adult males as well as an unknown number of female family members. The homestead farm included two barns and a *cornhouse* or grain barn, a yoke of oxen, 5 cattle and 12 sheep and the requisite two swine. There were only 58 acres counted in the valuation because woodland was not noted. Even so, this was a long way from the 360 acres attributed to Nathaniel Lawrence a century earlier. This discrepancy may be due to the fact that Amos's family was only one of seven Lawrence establishments in Groton by 1771, almost all located in the same general area of town. Each generation's inheritance, parceled out among sons and sons-in-law, reduced the size of the next generation's farm.

From a family biographer's viewpoint, the most interesting fact of Amos and Abigail's generation was the birth of their son Samuel in 1754. Major Samuel Lawrence, as he became known, was the first publicly notable member of the family, leading Groton minutemen to Lexington at the age of 21, taking brief leave from his duties two years later to come home to Groton to marry

Susanna Parker. Following three years' active service during the Revolution, Major Lawrence returned to spend the rest of his life in Groton, serving in a number of highly respected public positions including as selectman and church deacon. In 1793 he donated a piece of his land in the village to provide a site for Groton (later Lawrence) Academy, which he helped to found.

Clearly this was a man with a highly developed sense of civic responsibility, who made the most of somewhat limited means to advance his chosen causes. One document further brings this respectable farmer to life: a mortgage deed for his farm, drawn up in 1807. In 1807 this Lawrence family included Samuel and Susanna and, in the sixth generation, eldest son Luther, William, Amos, Abbott and Samuel – all of whom might be expected to inherit the farm – plus their sisters Susan, Mary and Eliza, who needed dowering. The value of one fifty-acre farm was hardly enough to fund all of these needs.



THE LAWRENCE FARM, GROTON, MASS., 1837

By 1807, fourth son Amos Lawrence had already served an apprenticeship with a local merchant and served a similar term with a firm in Boston. *Not having a robust physique*, writes the biographer, *he did not work on the farm*.⁸³ Amos had decided that mercantile business was his chosen profession. Father Samuel supported his son's decision by a taking out a loan for \$1,000 secured by a mortgage on the Groton farm. In the years that followed Amos repaid his father, preserving the farm intact.

Meanwhile, in 1809, Amos's older brother William *had overworked himself on the farm and his health was so far impaired* that he was considering taking a desk job. This must have been just at the end of harvest when William, with an aging father and two brothers having already left home, undoubtedly shouldered much of the burden for bringing in the final crops of the year. Instead of taking the desk job, however, he became one of Amos's partners, and continued in the business for over thirty years – still successfully distancing himself from farm labor. Finally younger brother Abbott Lawrence joined them and over the years the firm of A & A Lawrence

⁸³ Lawrence Descendants, p 274.

became one of New England's most successful mercantile firms, trading around the world, but *largely interested in domestic manufactures and especially in the cotton mills of Lowell and Lawrence.*⁸⁴

The men were world travelers, entrepreneurs; Abbott was a diplomat of high standing. Luther, the oldest son, remained in Groton until 1831, but worked as a lawyer. He eventually moved to Lowell and represented the family's interests there. Thus during the first half of the 19th century the Lawrence family's homestead farm became a country retreat for wealthy family members whose primary residences were in Boston. It is clear they did not forget their birthplace: in 1845 the trustees of Groton Academy voted to change the name of the school to Lawrence Academy in honor of the three brothers, who were the school's greatest benefactors.

This state of affairs continued through the seventh generation as Abbott's eldest son James was taken in to A & A Lawrence as a partner in the firm. James and wife Elizabeth, also Boston residents, had three children, the eldest of whom was James Junior, born in 1853. By the time James graduated with the Harvard class of 1874, the Lawrence family's world had permanently changed from that of their rural, subsistence-farming forebears. James did not throw himself into the family business as his father had. He followed a new tradition of the wealthy classes, taking an extended grand tour of Europe, but he returned shortly before his father's death and married Caroline Mudge, a dry goods merchant's daughter from a venerable New England family.

Two terms at Harvard Law followed and then he took up his residence in Groton, incorporating the adjacent 280 acres that had belonged to Asa S. Lawrence with the original family homestead. *A valuable addition to the beautiful Lawrence estate, which it adjoins*, <u>Turner's Public Spirit</u> laconically observed.⁸⁵

James and Caroline had three children in quick succession: Elizabeth in 1876; James in 1878; Richard in 1879. The younger James promised to adjust easily to the Brahmin mold, including graduation from the Groton School and Harvard Class of 1901 as class president and member of the football team, followed immediately by a responsible position at the office of a Boston banker. A 1904 biographer had little to say of the other two children, still young enough to have plans ahead of them.

But James Lawrence Sr. had found his profession. The biographer writes that James engaged in *farming and stock-raising on an extensive scale*.⁸⁶

Mr. Lawrence has been vice-president of the American Shropshire Sheep Association, a trustee of the Middlesex Agricultural Society, of Lawrence Academy since 1876, and of Groton School since its foundation. He is also a life member of the Massachusetts Horticultural Society, of the Guernsey and Ayrshire societies, and of the English Shropshire Association besides which he has served as a director of several manufacturing companies, of the Bowker Fertilizer Company, and of the Worcester and Nashua Railroad.

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⁸⁴ lbid. p. 28.

⁸⁵ quoted in May Houses, p. 17.

⁸⁶ Lawrence Descendants, pp. 235-236.

Mr. Lawrence has been in every State and Territory, and in every capital city of the Union, and has travelled throughout Mexico and in British Columbia, to the northernmost point accessible by railroad.

Twenty years before that description was written however, the 1880 agricultural census had already pinned Lawrence as the farm owner against whom to measure all of Groton's other farmers. To begin with, the farm now formally named the Lawrence Homestead had expanded to surpass even ancestor Nathaniel Lawrence's 360 acres: James Lawrence's 500-acre spread was the largest in Groton and, by the numbers at least, his was the epitome of a grand Victorian estate farm. There could be no question that this was a working farm, with an emphasis on livestock, rather than field crops.

The census-taker recorded an impressive tally.

- Lawrence's farm was valued at \$50,000 (Groton average: \$4500)
- The quantity of his forest land (250 acres) equaled that of his tillage, pasture and meadow. (average proportion 2:1)
- Lawrence paid \$3,500 wages in one year to his farm help. This would not have included the house and personal staff that would also have been necessary to maintain a large estate.
- There were 20 horses in his stable.
- 38 milk cows and 40 other cattle filled his barns and grazed on 80 acres of grassland.
- 91 sheep produced 700 pounds of wool and 60 chickens laid 525 dozen eggs.
- He was the man who really skewed the traditional 2-pigs-per-family numbers, with a piggery of 100 swine.
- If Lawrence took part in the era's experimentation it was primarily in livestock rather than plant varieties. Hay, barley, Indian corn, potatoes and apples were the only crops reported.
- Some, at least, of his woodlands were being actively managed, producing 25 cords of wood. The census category of wood products was a new introduction in 1880, allowing economists to speculate on the relative use of wood versus coal, and on its importance to the nation's rural economy. In Lawrence's case at least, economic gain does not appear to have been a major factor: 25 cords of wood were worth a grand total of \$75.

Four years after this impressive agricultural snapshot, James and his brother Prescott followed in the family tradition, mirroring the action of their famous great-great-grandfather Samuel by donating part of their land as a site for Groton's third preparatory school: the Groton School. The school's founding supporters read like a who's who of New England's first families: the Reverend Endicott Peabody was its founder and first headmaster; the Rt. Rev. Phillips Brooks, the Rev. William Lawrence, William Crowninshield Endicott, Samuel Endicott Peabody and financial magnate J.P. Morgan were among its first supporters. This was a charitable land use of which James Lawrence, the elder, could be proud.

Lawrence died before 1920, having maintained the family's reputation for civic involvement and philanthropy in Groton, and also having set a new standard for estate farming in the region.

VII. "Agriculture predominated": changes in land, changes in farmers⁸⁷

Farmers Row experienced little growth after the middle of the 19th century, leaving the area with the appearance of a neighborhood of Federal Period agricultural and summer estates. Introduction to MHC Area Form GRO.X Farmers Row, 2006

Favored by nature as are but few towns in all New England, the citizens of Groton have not felt the importance of providing parks....With our grand old hill and beautiful drives, we have been provided at our very doors with scenery such as charms the eye of the casual visitor to the town, and which, seen daily, we are indifferent to, or possibly little appreciate.

Report of the study committee on the Lawrence Playground, 1903

Despite the reduction of improved acreage and the abandonment, especially of small farms, noted in other towns of the mid-state region by the turn of the 19th century, a number of countervailing influences helped sustain farming activity in Groton. On the eve of World War I, Virginia May estimated that 60% of Groton's residents still lived on farms.⁸⁸ Some of the influences also began a redirection that, over the next half-century, would redefine farms as "working lands".

Estates and 'Gentlemen's Farms'

The Lawrence family was not alone in transforming its heritage landscape into an estate setting. Other men whose money could be traced to industry rather than land, especially between the 1880s and the end of the 1920s, were drawn to Groton as a rural town with bucolic charms moderated by a level of sophistication provided by two highly-regarded preparatory schools. Here they established estates and summer places, thanks in part to easy access to and from the city via frequent train service. Turn of the century Groton felt an infusion of capital generated from sources other than farming, but invested in farming in the community. The investment created some jobs in construction and farm management but more important, it was a significant element in the preservation of large tracts of old farmland as open space, although not necessarily for the purely practical reasons it had been so in early times.

General William Bancroft, born in Groton after the Civil War, left town and made himself both a reputation and a fortune. At the turn of the century he put his income to use in a major construction effort, not only building the stone castle whose ruins still dominate Gibbet Hill, but re-engineering the spongy land between there and the town center. Part of the land had been

⁸⁷ Quote from Massachusetts Historical Commission Reconnaissance Survey Report on Groton, 1980: *Economic base: No further industrial development identified. Paper mill at Nashua River burned 1930s{?}. Agriculture predominated.* 88 May *Petapawag*, p. 6.

called Half Moon Meadow since Groton was founded, and even today it is known to be difficult to work, an upland bog that has existed since the time of glaciers. Bancroft's workmen ditched, drained, imported gravel and recontoured the landscape, building a cobblestone bridge across the stream they had channeled. Bancroft's intention seems to have been to create a long drive between Main Street and his house site atop Gibbet Hill. Visitors would pass through a fieldstone gateway in the village and approach the estate house along a poplar-lined carriage road flanked by green fields. Whether the fields were to be pastures or hayfields is unknown, as Bancroft changed his plans and left Groton, The castle-cum-guest house served as a sanatorium for lung patients after World War I, and burned in 1930.⁸⁹

Farmers Row saw a transformation during the same period as, one after another, old farm holdings were transformed into gentlemen's estates. A few were occupied year-round but more often they became the summer and vacation homes of wealthy families who maintained urban residences in the Boston area, while a resident manager provided year-round oversight for the farm and estate. A few of the farms grew with the times, incorporating state-of-the-art commercial operations.

Beginning in 1875 until at least 1915, James Lawrence established a creamery, known as the Lawrence Creamery, in the building behind the brick house. One of the big products of the Creamery was butter. Myron Swallow was superintendent...for 40 years (1875-1915)....⁹⁰ This model was followed, at least briefly, by William Peabody who founded the Groton Co-operative Creamery in 1898 on Old Ayer Road, as part of Puritan Hill Farm. Apparently Peabody's success was short-lived, but the fact that he began a *cooperative* milk processing operation looks as much to the future of dairy production as to the earlier, 19th century model of local cheese cooperatives in Massachusetts' rural areas.

Boston lawyer William F. Wharton and his wife Susan were among the newcomers to Groton. They purchased a farm adjacent to James Lawrence's, at 108 Pleasant Street, and proceeded to double the size of the house and upgrade its appearance; install formal gardens and estate walls; and name their estate "The Elms". Son William P. Wharton followed suit some years later, buying property around the corner on Broadmeadow Road and enhancing its gardens, lawns

and yard while leasing out most of its working lands.⁹¹ Significantly, the younger Wharton generation held onto the estate's agricultural character, naming it Five Oaks Farm. Both William P. and his second wife Elizabeth were deeply committed to the landscape around them, although in very different ways. In 1929 William, despite numerous business and professional interests, listed himself first of all as "Farmer". Betty founded the Groton Garden Club in 1923 and designed the formal planting beds for which Five Oaks was famous, after training at the Lowthorpe School on Main Street. Billy first invested in, then conserved large tracts of Groton's forest lands. His legacy is discussed below.



⁸⁹ Further information on Bancroft's biography and his estate plans may be found in May, *Petapawag*, p 189; Murray et al *Groton at 350*, p. 130 ff.; and in William Conley's interview in the Appendix to this report.

⁹⁰ May Houses.

⁹¹ Gibbet Hill Farm leased one area that had been apple orchard during the 1960s, at which time the trees were past bearing; the land was converted to hayfield.

Among other well-known names in Farmer's Row history, Clara Endicott Sears, a cousin of James Lawrence, built one of the few new houses along the "Lawrence stretch" of Farmers Row in 1894, across Long Hill Road from the Homestead. The site had been farmed since a garrison house stood there during King Philip's War. Sears moved the extant house south on the property in order to construct a new dwelling, and hired Charles Eliot to lay out the site for her. One of her primary goals was to take advantage of a long western view sloping down to the Nashua River. Sears, best known for the multiple museum complex of Fruitlands, moved to Harvard in 1910 and transferred 146 acres on Farmers Row to Mary Lawrence Sabine and husband Stephen Sabine. They occupied the older house that had been moved, and continued to farm the property until 1971. The impressive new house built by Clara Sears became the home of Frederick Dumaine and his family from 1927 to 1946 and in due course, both the Dumaine and Sabine family donated part of their land to the New England Forestry Foundation, among whose founders was neighbor William P. Wharton.

The special social glue that drew all of these people together went beyond their common family trees and educations, their shared industrial interests and professional associations. The glue was introduced by Richard Ely Danielson and his wife, Barbara Deering Danielson shortly after they moved to Groton about 1920. Danielson had come to take a job as an English teacher at The Groton School and predictably, the family bought a home nearby. Less predictably, the home they purchased was a 42-room mansion on Joy Lane⁹² surrounded by upwards of 200 acres of prime Farmers Row farm land.

Danielson was scion of a founding family of Danielson Connecticut and had inherited money as well as blue blood. Mrs. Danielson was the third generation of a family that made its money in farm equipment – Deering Harvesters were an essential part of the development of Midwestern agriculture and by the time she moved to Groton their expanded International Harvester Corporation was the largest producer of agricultural machinery in the nation. The Danielsons' choice of land on Farmers Row was partly determined by its suitability for cross-country riding, for both of them were passionate horsemen.



The Groton Hunt Club: changing the use of land

In 1922 Richard Danielson founded the Groton Hunt and with that, the social organization that drew together many of the biggest landowners in Groton. Other hunt clubs had been in existence for upward of two decades by the time the hunt came to Groton – the Myopia Club in Winchester was founded in the 1870s; the Norfolk Hunt in the 1890s. Circumstances conspired to make Richard Danielson the right man in the right place to bring formal hunting to Groton three decades later. Establishing a successful club required a critical mass of enthusiastic horse

⁹² The "Joy Mansion" derived its name from a much less esoteric source than might be expected. Walker's 1889 atlas map of Groton identifies a building in the same location as belonging to "J. C. Joy", while "C. H. Joy" occupies another house nearby.

owners; it required either ownership or permission to ride over sufficient land to make for an interesting hunt; and it required an infrastructure of trails and buildings to support the whole.

The Danielsons and their neighbors, including Sabines, Dumaines and Lawrences, began to develop a network of bridle paths that connected their properties. The Hunt stables were on Shirley Lane. Barbara Danielson established a kennel of 100 foxhounds down the road. When the Danielsons decided to replace the sprawling Joy Mansion with a more reasonable-sized house, they salvaged one of the mansion's flanking wings, moving it elsewhere on their property and refurbishing it as the Hunt's official club house.

The Hunt affected more of Groton than just the select group who rode with the hounds. By 1929 the town's Directory listed other places and people whose lives were connected with the hunt, horses and hounds.⁹³

- The Club was on Farmers Row, managed by Matthew O'Connor from Lunenburg. Oscar Sawyer was an employee there.
- The Groton Hunt Stable was listed on Hollis Street at this point and overseen by Peter Roche from Leominster
- A business on Elm Street run by Maude Trayne was called the Groton Kennels;
- One of the town's inhabitants was a veterinary surgeon;
- Two men were blacksmiths.

The 1930 federal census also identified five men in town specifically as "stable hands" with one being a "kennelman" – likely working for the Danielsons.

Richard Danielson was Master of Foxhounds until 1936, when Barbara Danielson took over the mastership and served until the outbreak of World War II effectively shut down this hunt like

many others, since most of its members were in the armed forces. After the war the club was reactivated but finally disbanded in 1964, to be reincarnated later that same year as today's geographically broader Nashoba Valley Hunt.⁹⁴

Virginia May recalled the grand impression made by the Hunt's annual Thanksgiving Day outing, a celebration of tradition and a country way of life.⁹⁵

Mr. Dumaine...is remembered by older Grotonians as a key figure on Thanksgiving morning when the group gathered at the Groton Inn in pink coats, hunting regalia, beautiful horses, and hounds straining at the leash. This was a gala affair and many townspeople turned out to see the picturesque sight.



⁹³ *Dunhams' Directory...,* 1929; p 99 ff.

⁹⁴ www.nashobavalleyhunt.org

⁹⁵ May quoted in Murray et al, *Groton at 350*, p. 89.

From a broader perspective, the presence of the Hunt in Groton raised the town's stature as an appropriate residential location for horse fanciers – a reputation that would continue to influence land use, residential sales, and agriculture to the present day.

The Lowthorpe School

The Lowthorpe School of Landscape Architecture, Gardening and Horticulture for Women opened in 1901, the brainchild of Mrs. Edward Gilchrist Low. It was incorporated on December 17, 1909.



Illustration from Lowthorpe catalogue, ca. 1910

This was no ladies' finishing school, nor was it the first specialized-content higher educational opportunity founded by women. In 1877, for instance, the Rhode Island Women's Centennial Commission voted to invest their group's surplus funding of \$1,675 in founding Rhode Island School of Design.

On the other hand, while the Massachusetts Agricultural College had been in operation – and receiving state funding - since 1867, no institution included agricultural or horticultural training for women until the Lowthorpe School was established.

An early school catalogue emphasized *learning from practical experience* and offered a 2-year course of study that included courses ranging from botany to surveying, landscape design to *greenhouse work*. Students were encouraged to consider avenues of work including supervision

of country estates and greenhouses, plant hybridization and garden design. The school was named for Mrs. Low's estate on Boston Road, Lowthorpe.

During World War I the school designed an extraordinary new program in general agriculture to train "mature women" as farm managers. According to the Town Diarist⁹⁶, the new Agriculture program was designed to train students to grow food for home use and feed for farm animals along with experimental cultivation of grains, corn, beans, potatoes, and other crops. "No textbooks will be required." Despite extensive planning, the program may have existed for only one year, since the war's end returned male farm laborers to their pre-war roles doing the heavy lifting.

The school maintained its hands-on curriculum for two more decades but by 1945, when the school had limped through a number of deficit years and the country was at war again, its curriculum was incorporated into the Rhode Island School of Design. The school closed and its buildings were sold shortly thereafter.⁹⁷ Nevertheless, the school was a pioneer in women's post-secondary education. It raised the standard for domestic and estate gardening and design and it set a pioneering example of professionalism for women engaged in what had always been considered a male preserve.

"Food Will Win the War"

A very different change in Groton's land uses and attitudes came as a result of the First World War. America's combat involvement with World War I was a brief, horrifying episode in military history. The country did not officially enter the war until April 1917 and the armistice was signed a year and a half later. Where the war's impact was felt over a longer term was in the changing availability and cost of basic food supplies.

In March 1917, Charles Lathrop Pack organized the National War Garden Commission and launched the war garden campaign. Pack, a wealthy timberman from Ohio who collected stamps, was not the obvious person to conceive of this idea but the need was acute. Food production had fallen dramatically, especially in Europe, where agricultural labor had been recruited into military service and remaining farms devastated by the conflict. Pack conceived the idea that the supply of food could be greatly



poster by James Montgomery Flagg, 191898

increased without the use of land and manpower already engaged in agriculture, and without the significant use of transportation facilities needed for the war effort. The campaign promoted

⁹⁶ Groton Town Diary 1918, pp 25, 35.

⁹⁷ May Petapawag, 29-31; also May quoted in 350, p 45; Lowthorpe School catalogue (GHS).

⁹⁸ http://www.archives.gov/digital_classroom/lessons/sow_the_seeds/sow_the_seeds.html

the cultivation of available private and public lands, resulting in over five million gardens and foodstuff production exceeding \$1.2 billion by the end of the war.⁹⁹ Groton's Town Diarist provided a startling statistic: by 1918, 65% of the British food supply came from the United States and Canada. President Hoover had recently sent a ship to Britain containing 25,000,000 pounds of frozen beef and 150,000,000 pounds of bacon. *These supplies are essential to maintain the British war effort*, she wrote.¹⁰⁰

The Diarist went on to record the pronouncement of the Middlesex County Food Administrator: *Food will win the war. To produce and save food and to control its sale and distribution wisely and justly, is now a vital duty of all our people.* Administrator Howell went on to warn "food slackers" that penalties would be bestowed upon them if they continued to be selfish rather than patriotic.

Groton became at least briefly involved in what were called "war gardens", organized by section of town, with one woman appointed to coordinate each section's activities and a silver cup bestowed to the section showing the greatest increase in production. Government subsidized fertilizer and seeds were provided for the effort.

It was a bad year to be a new home gardener. On May 22 the Diarist recorded: A drought has come upon us almost unnoticed. Rain is much needed for the welfare of the war gardens. Although rain came later in the season it was still a dry summer, with bad growing conditions exacerbated by heavy frost on June 21 and Sept 11.¹⁰¹

The signing of the Armistice before the end of the year ended the urgency of home food production. The administrative structure set in place during the war proved useful again two decades later, however, when war gardens became Victory Gardens across the country.

Managing Trees

The establishment of Groton's Memorial Town Forest has been well documented by Virginia May and by the writers of <u>Groton at 350</u>.¹⁰² May wrote:

At the annual town meeting in 1922 there was an article in the warrant to establish a town forest from a woodland and pasture at the Town Farm, [58 acres woodland and 67 acres town land]Thus was the Groton Town Forest established...as a living memorial to the Groton men who lost their lives in World War I. From time to time other woodland has been added to the original piece and at present [1960] the forest is about 420 acres in area.¹⁰³

While this was clearly designated as a memorial space, including at least one area planted to native woodland flowers, there was also a utilitarian dimension to the woodland. May's comment

⁹⁹ Pack, Charles Lathrop. War Gardens Victorious (Philadelphia: J. B. Lippincott, 1919) p. 15, quoted in Wikipedia..

¹⁰⁰ Groton Town Diary 1918, p. 20.

¹⁰¹ Groton Town Diary 1918, p 49.

¹⁰² May, Tercentenary (1955); Murray et al, Groton at 350...(2005)

¹⁰³ May, Petapawag, p. 95-96.

that pasture land was included along with the woods, places Groton within a much broader agricultural context.

The advent of town forests in many Massachusetts communities was a direct consequence of the changing farming environment in New England during the early 20th century. A recent article describes the process by which less desirable farm fields, once abandoned, were seeded in by windblown white pine:

Several large pines left as shade trees in a pasture or along a fencerow could colonize many acres with dense stands of young pine....These new forests grew quickly, and by the late 1800s supported renewed harvesting for lumber and especially shipping containers. The old road system and the new portable steam sawmill, in common use by the turn of the century, permitted logging throughout the backwoods areas. Tremendous amounts of "old-field" white pine were harvested, the volume peaking in 1910-11....[resulting] in the creation of large tracts of even-aged, young, low-value stands. Many of these cut-over stands, considered nearly worthless at the time, were acquired by the state for overdue taxes and formed the basis of our state forest system.¹⁰⁴

Other cut-over stands, like Groton's Town Farm land, became town forests. Map evidence from as far back as 1830 indicates that much of Groton's original town forest tract may have always been wooded by one or another species but there is no documentation of its timbering history. By 1939 most of the area's tree cover was designated as "dense coniferous", while adjacent parcels were "thin mixed" species, suggesting just such historical progress as described above.

From the outset portions of the woodland were logged, to provide the town with merchantable timber and firewood.

Elsewhere in town, the movement toward managing sizable tracts of newly forested land, was epitomized by William P. Wharton and what became known as the Wharton Plantation. Murray, Johnson and Kulesz have painted a warm and thorough portrait of this wealthy, bird-loving conservationist who bought a piece of land by Baddacook Pond because he *wanted a place where he could go to 'fish, think, and loaf'*.¹⁰⁵ Wharton was neither a



hermit nor a simple tree-hugger. He had studied long-range forest management practices in Germany's Black Forest region; he was instrumental in establishing Groton's Town Forest; he was President of the Massachusetts Forest and Park Association for 24 years. Over the years Wharton expanded his Baddacook Pond property by incorporating adjacent abandoned farm fields – land already reverting to pine forest.

Wharton's forest preserve was not without problems. The '38 hurricane downed a third of his trees, in a domino–effect chain reaction that was mirrored in woods across Massachusetts and New Hampshire. Shallow-rooted pines, standing on ground saturated by two weeks of heavy

¹⁰⁴ O'Keefe and Foster, Stepping Back, pp 42-43.

¹⁰⁵ See Murray et al, Groton at 350, "Groton's Tree Man", pp. 120-121.

rains, were hit by gale-force winds as the hurricane came through. Some snapped in the wind, falling on others that were uprooted by the impact, in a wave of destruction exacerbated by the pines' close proximity.

The loss of trees was serious, but government agencies warned that the storm's greatest longterm effect was creation of dense areas of tinder-dry brush, broken limbs, and pine needles. Across the state citizens were asked to help clear the dangerous underbrush to reduce fire hazard. State and federal agencies submerged millions of downed tree trunks in local ponds, both to preserve as much timber as possible and to reduce fire risk. But three years later much of the slash still lay on Wharton's property. An April fire that started on Chicopee Row burned out of control for five days. When it was done only 110 acres of Wharton's 717 acre plantation still had trees standing.

Despite his initial devastation, it seems clear that ultimately, Wharton's commitment to forest management and conservation were only strengthened by his loss. He replanted his forest almost geometrically, thereby providing equal access to sun and rain for the trees, and providing equal access to the trees for his forester. In 1944 he became one of the founders of the New England Forestry Foundation, whose mission and purpose clearly echoed his own philosophy of woodland management. The foundation's website summarizes its goals:

NEFF was established in 1944 to care for and make more prudent use of the forests of New England.... the Foundation attempted to do what no other organization had done before — to offer active, continuous, and complete forest management services to landowners across the region. They believed that controlled cutting and planned forest management would produce a continuous yield of high-quality timber as well as enhance wildlife habitats and protect the productivity of the land.¹⁰⁶

NEFF's subsequent success in achieving these goals was confirmed by Wharton's decision in 1968 to donate his 717-acre East Groton parcel to the Foundation. Today the Wharton Plantation is commonly considered an area for passive recreation in the town. Less apparent, but equally important, it is part of Groton's working lands, being "actively, aggressively managed for good cause," as one NEFF employee described their hands-on style of forestry.

Snapshot: Groton Farms and Farmers in the 1930s

Summer estates and gentlemen's farms, the Groton Hunt, Lowthorpe School, and protected managed woodland all impacted the way Groton looked and the jobs Grotonians did during the years preceding World War II.

For a broader, more egalitarian look at the situation, the 1930 federal census and an extraordinary set of maps from 1939 combine to provide an overview of pre-war agriculture. The nine years separating the two documents undoubtedly had an impact on the town, especially the aftermath of the Great Depression whose economic effects would not have been immediately visible by the time of the census record. Nevertheless these documents provide us with a rare glimpse of the farms and farm workers who still constituted a significant portion of Groton's population and economic base.

¹⁰⁶ http://newenglandforestry.org/about/

There were already changes in the agrarian economy by 1930. The census reflected this in more specific descriptive job titles, more managerial positions, a few new specialties, and a noticeable sprinkling of ethnic family names. Groton north of Main Street was still predominantly traditional Yankee farming territory, while the areas south and west of town were characterized by larger and more complex estate farms. Many of the estate workers were Irish-born, the estate farmers Swedish or Polish.

In total there were 62 farmers, farm managers and foremen working in Groton – those with managerial titles all living south of Main. At first glance, this total is surprising, less than a third as many as the farms in Groton in 1880.¹⁰⁷ But in addition to the farm owner/ managers, there were also 68 men who were working in agricultural occupations with designations ranging from simple farm laborer to herdsman, dairy man, orchard hand, stable hand and kennel man. Again, a majority of the more specialized occupations were associated with properties south of Main. These numbers suggest that by 1930, the many smaller farms of 18th- and 19th-century Groton were either out of business, or incorporated into larger agricultural operations.

The census gives evidence of 20th century agricultural specialties as well. There was work for 9 full-time gardeners in town, two florists, and four teamsters or "farm truckers" to move Groton's

products from farm to market.¹⁰⁸ Agricultural specialties included only four dairy farms and six "fruit farms". Poultry farming seems to have provided the best return, as eight of these were operating. The predominance of poultry raising over apple growing or milk production may have had as much to do with capital costs as any market factor: thousands of hens and turkeys could be raised on acreage a tenth the size of a small orchard.¹⁰⁹

Among the familiar names of farm families in town, James Fitzpatrick's farm was noted by the census taker as "Idle". Fitzpatrick was 77 at the time. [Charles] Edward E Blood, age 65, was recorded as living on a farm – occupation: butcher – while his son Elliot L., age 33, rented the house next door and had the (unexpected) occupation of machine tender at the paper mill. Grandson Elliot Jr., Blood Farm's current owner, was seven at the time.



The prolonged depression of the American economy during the 1930s combined with the natural disaster of the '38 hurricane to seriously impact Groton's working lands and, consequently, its population. The devastation of William Wharton's 700-acre woodland has been discussed. While there is evidence that the hurricane force winds wreaked havoc

¹⁰⁷ Perhaps more remarkable, this number is actually lower than the number of farm and forest owners in Groton today – 71 as of May 2011.

¹⁰⁸ These are only the truckers who lived in Groton; there were undoubtedly many more who came into town from Ayer, for instance, to cart goods to the Newell's Crossing railroad depot.

¹⁰⁹ Writing in 1960, however, Virginia May recalled, For many years there were large...peach orchards but more recently these have been given up....Apple orchards have thrived in this locality as well, and the farms which had peach orchards usually planted apples too. [May, Petapawag; 97-98]

throughout the town¹¹⁰, the specific impact on Groton's orchards is less well-known, but undoubtedly had a greater impact on the local economy. A reminiscence by the son of a Grafton orchardist gives some idea of the tremendous effort involved in salvaging the apple orchards of mid-state Massachusetts, all of which were in mid-harvest when the hurricane struck.

The 1938 hurricane dealt a heavy blow to the orchards. Local residents recall that huge numbers of fruit trees were knocked down – 6,000 altogether, one third of the entire orchard – according to family records. Apple trees, unlike other species such as the white pine that carpeted much of southern New England, do not uproot easily. They tend to split, especially, one would guess, those weighted down with a full crop of nearly-ripe fruit. In later years Daniel Fiske Jr. recounted his unforgettable hurricane experience for the publishers of *Yankee* magazine.

Dan Fiske was helping his father pick McIntosh apples...when news of the hurricane's approach came over a car radio. The crew retreated to the safety of the storage packinghouse.

"At a 1,000 foot elevation, we were exposed to the full screaming fury of the hurricane. A perpetual staccato broadside of everything loose tried to beat our shelter into the ground. At 100 miles per hour, apples filled the air like buckshot. Branches, trees, apple boxes, shingles, windows, and bricks all hammered at our building.

The next day, realization of the tremendous task that confronted us began to sink in. Our entire crop was on the ground, in some places knee-deep. Apple trees with a 30 foot spread were out of the ground, their massive roots exposed in the drying air. Younger trees were found half a mile from their original locations. When we finished our tally, 6,000 trees had been uprooted, about one-third of our plantings. Faced with such heartbreaking devastation, one neighbor went quietly into his cellar and hanged himself. Quite a number of New England orchards were abandoned forever after that disastrous day."

Bill Fiske recalled what happened next. "All it took was for someone to say it couldn't be done," he commented, "for my grandfather to go out and do it." Daniel Fiske (and presumably everyone who worked for him) rerooted and wired together every tree that could be salvaged after the blow. "Would you believe it?" Bill Fiske continued, "Five thousand of those 6,000 trees were producing again the next year!"¹¹¹

¹¹⁰ Murray et al [*Groton at 350*, p. 127] note a number of town meeting votes, local government actions and Middlesex County Extension Service activities made to aid the recovery effort.

¹¹¹ Tritsch, *Documenting Hassanamesit Woods*, report to the Town of Grafton Hassanamesit Woods Management Committee, 2006, pp. 62-63; includes quote from Watson, Benjamin, ed., *New England's Disastrous Weather*. Camden ME: Yankee Books, 1990: 24.

Buildings and Land Use, 1939

A rare map set from 1939 gives a broader picture of Groton's lands and people. Ironically, the maps were a direct result of the Depression, conceived as a WPA project to document the entire state of Massachusetts town by town. The set includes topography, soil classification, roads and buildings, and land use, with the latter two providing a second 20th century snapshot of Groton.

The WPA maps show a town that many people living in Groton today would find hard to recognize. The rocky and unforgiving environment of the east side, for instance, is echoed in the number of buildings marked as abandoned – six cellarholes, four vacant houses, an unoccupied farm and an empty district schoolhouse reflected the loss of livelihood in the area, either from economic downturn or natural disaster. Lost Lake, flooded and laid out for development in 1924, still showed only a handful of cottages built, even fifteen years later. A large part of West Groton was empty as well, although this seems to have been the historic state of affairs in that steep-sloped area, for only one or two buildings are marked as abandoned, including the old Town Farm. Looking at this map, one would never guess that there had ever been a fairground or trotting park east of the river.¹¹²

By contrast, Groton's historic farming area – the prime soils and flat fields surrounding Old Ayer Road and Farmers Row – still showed as a continuous swath of farms, interspersed with what the WPA called "semi-agricultural" properties, a description suggesting gentrified land management without the size involved in estates such as the Danielsons' on Joy Lane or the Brooks estate on Martins Pond Road.

Given Groton's 250 year history, its settlement had remained remarkably compact, following the lines of the town's most historic roadways: Boston or Lowell Road to Main and North along an east-west axis; Chicopee to Farmers Row or Old Ayer Road north to south, with a spur southwest across the Nashua on Long Hill Road to Townsend Road. Elsewhere there were still large patches of nearly vacant land including most of West Groton, especially Throne Hill, and much of the town's northern and eastern quadrants. There was a network of active secondary roads throughout town, but few of them were paved, appearing on the map as either dirt or gravel surfaced. Ten years later, when Bill Conley first came to Groton, the situation had not changed much. He commented that in 1950, *it was just a sleepy town, with many roads still gravel. Nobody wanted to buy here then.*¹¹³

<u>Figure 6</u>, the Land Utilization map, tells another part of the story. A simplified color-coding done for this report confirms and highlights an agricultural situation that was even more compact than residential land use.

All of the *green* colored land was woodland of one sort or another in 1939. Not surprisingly, coming so soon after the '38 hurricane, some of this was still "brush land", while a majority of the wooded acreage – shaded *darker green* – was categorized as "potentially merchantable timber". The *lighter green* "merchantable timber" stands are concentrated east of town in the

¹¹² At some point, as with any map of this scope, one has to wonder how thorough the surveyor was in his investigation of out-ofthe-way sites. If, as has been suggested by some historians, Hazel Grove had developed an association with the Ku Klux Klan by the 1920s, the surveyor may have erred on the side of caution, his field investigation limited to a glance in passing the end of Jenkins Road.

¹¹³ See William Conley interview in report Appendix.

insert Figure 6, 11x17 Groton Land Use 1939 map here

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vicinity of Lost Lake, with the exception of good-sized plots south of Blood Farm and behind the home lot of the Sabine estate on Farmers Row.

The multi-colored patchwork of other land uses clearly illustrates the concentration of agrarian activity in the south-central core of Groton. Starting toward the north on Chicopee Row the area of mixed pasture and cropland bulges around the town center and extends in a broad swath to the Ayer line (and beyond). This is not to say there was no farming in the rest of town. The strip of fields and pasture along West Main Street and Townsend Road are still being used for farm activity today. Scattered colorful patches around the east and northern perimeter of town represent the hayfields, pasture, cropland and orchards of individual farmers continuing to work small land holdings. Orchards are small, reminiscent of the handful of acres shared by three or four small farmers in the 19th century. They also appear to be separated in many cases by hay fields. Was this result of intentional arboricultural practice, separating stands to reduce likelihood of disease transmission? Or did it simply illustrate a moment in the orchard cycle, where older trees had been cleared out and the ground repurposed? Further research would be needed to address these questions.

The larger single-color areas through the center of the town indicate the locations of Groton's large landholders, the owners of gentlemen's farms and commercial agricultural operations. Pink colored patches include the orchards of Lawrence Brooks on Martins Pond Road, William Wharton on Farmers Row across from Long Hill Road, and another owner further south in what had been the colonial General Field. The orange drift from Long Hill Road down past The Groton School indicates fields in use as cropland or pasture, specifically designated as "plowable pasture" by the surveyor. The Danielsons and the Groton Hunt are located in a large (yellow) area of hayfields.

A similar pattern of intensive land use is seen running the length of Old Ayer Road as well, although in almost every case the individual parcels are smaller. A notable exception is the Priest orchard – later Rosenberger¹¹⁴ – stretching around the corner onto Indian Hill Road.

A few land uses stand out as notable in this colorful display. Groton was no more a market garden town in 1939 than it had been sixty years earlier in 1880: nine moderate parcels (shown in purple) were used to grow garden vegetables, and only one extensive one located on both sides of Long Hill Road.

Like the orchards and hayfields, the garden enterprises were concentrated along roadways near the village. Surprisingly, little use was made of the land along the Nashua. On the east side, where alluvial deposits have been primarily heavy, clayey soil, the vicinity of Hazel Grove was all mapped as mixed dense forest, with the sole exception of a cluster of hayfields and gardens at the river bend by Fitch's Bridge, still worked today by the Wilkins family. On the west side, with characteristically sandy and dry soils, only the Town Farm area shows evidence of agriculture, with an orchard, sizable pasture, and a small piece of cropland across the road.

If one were to summarize Groton's agricultural profile in 1939, it would be as a well-watered, gently sloped village characterized by orchards and hayfields surrounded by a rough landscape of thin-soiled woodlands. How much different was this from Groton two hundred, or even a hundred, years earlier? Any attempt to generate a land use picture of Groton in the 1730s would be sheer speculation. It is possible, however, to make a very close comparison between Groton of the 1830s and the 1930s, thanks to Groton surveyor and historian Caleb Butler, and the

¹¹⁴ currently leased by John Crow Farm

magic of computer software. Overlaying Butler's 1831 map of Groton with the color-coded 1939 WPA map results in a visual document of what had changed in the town's land use over 100 years.

Surveyor Butler was charged only with distinguishing *wooded* from *unwooded* terrain. Thus the areas indicated as *dark green* in Figure 7 were woodlands in 1831. By contrast, *all green areas* on the map were wooded by 1939. This leads to a number of conclusions:

- light green areas were less useful/ desirable as tillage and grazing land and therefore reverted to woods sooner;
- timber and thus timber harvesting was less in demand;
- the town fathers who chose Groton's original village site, and later ones who defined its borders through a series of subsequent break-offs, kept hold of a core of the best agricultural and residential land, ceding to other towns (with the possible exception of Pepperell) less desirable lands around the outskirts.

Finally, and most significant, Groton as a town was much less reliant on agriculture in 1939 than it had been in 1830 or, we may assume, any time before that.

insert Figure 7, 11x17 Groton's Historic Land Use map here

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VIII. The Past Fifty Years

The town of Groton has surely changed in the past 50 years. It used to have a decidedly rural flavor. The gentleman farmer of that era has completely disappeared from this area, men such as Stephen Sabine (Westfield Farm), William P. Wharton (Five Oaks Farm), Richard E. Danielson (the Danielson Farm), and Charles Raddin (Raddin Farm). Even the small farmer who depended on farming for his livelihood has almost gone out of existence. However, Groton does have one beefraising farm whereby the others were dairy and fruit farms. This was a popular combination in those days.

Helen McCarthy Sawyer, People and Places of Groton, 1986

Although Helen Sawyer referred to the 'past fifty years' as an era of change in Groton farming, the more dramatic changes were not visible until after World War II. As happened during the first World War, experimentation slowed and the demand for locally produced foods increased. Nationwide, there was a call to produce more food, included the apples, butter and potatoes found on Groton farms, for American troops serving overseas.

The introduction of ration cards in 1942 encouraged even novice gardeners to supplement the tinned fruits and vegetables that were becoming scarce on grocery store shelves, and take advantage of home-grown fruit and produce that did not require processing with large amounts of sugar, which was hard to come by. "Blue Stamp" rationing covered canned, bottled, frozen fruits and vegetables, plus juices and dry beans, and such processed foods as soups, baby food and ketchup.



World War II Victory Garden poster emphasizing economy. Many government posters stressed the patriotic aspect of home farming.

The earlier "war gardens" were reincarnated as "Victory Gardens" although the message remained the same: food will win the war, at least on the home front. By 1945, it was estimated that 20 million victory gardens in the United States produced 40% of all the vegetables eaten in America.

Food rationing ended in 1946, and the post-war decade saw a transformation of the American economy and lifestyle. Modern refrigerators with separate freezer sections were mass produced for the first time and frozen foods, first distributed out of Springfield Massachusetts in 1930, became the norm in home cooking together with some of the wartime substitutes such as margarine and powdered milk, now seen as 'convenience foods'. Low oil and gasoline prices encouraged the expansion of interstate trucking and this, combined with lower labor costs and longer growing seasons in other parts of the country, put the squeeze on local commercial farmers.

It is likely that many of Groton's orchards felt the effect of lack of manpower – and thus, of maintenance – during the wartime labor shortage. Certainly the orchards that came under the management of Gibbet Hill Farm in the following decades were beyond productive age. Even more important to the future of Groton's farms was a dramatic change in the dynamics of farm inheritance. The old ditty from World War I was perhaps even more apropos to the New England farmer's dilemma in the decades following World War II:

How ya gonna keep 'em down on the farm After they've seen Paree'? How ya gonna keep 'em away from Broadway Jazzin around and paintin' the town? How ya gonna keep 'em away from harm, that's a mystery. They'll never want to see a rake or plow And who the deuce can parleyvous a cow? How ya gonna keep 'em down on the farm After they've seen Paree'?¹¹⁵

Sons of farmers who, twenty years earlier, would not think twice about stepping into their father's and grandfather's shoes and assuming responsibility for the family farm, were finding different options for employment and residence. America in the '50s and '60s was experiencing a boom-time economy. There were new jobs in manufacturing and commerce; there were new opportunities through higher education provided by the GI bill; and there were new subdivisions of modern, low-cost homes affordable through low-interest home loans. Following in the family tradition of farming was no longer a given. It was a choice, and many chose not to accept it.

Of course subdivisions and office jobs did not appeal to everyone, then any more than now. But the post-war shifts that were changing the entire region's economy laid the basis for changes in the region's farming profile as well. A dramatic example of this is the transformation of Gibbet Hill Farm brought about by Marion Campbell and her farm manager Bill Conley.

¹¹⁵ Sing written 1918 by Joe Young and Sam Lewis, music by Walter Donaldson. Text version from http://www.firstworldwar.com/audio/howyagonna.htm.

PROFILE: the "beef raising farm" – Marion Campbell and Bill Conley¹¹⁶

Two people, 600 cows and a thousand acres

This is a two-part story, involving both a landowner – Marion Danielson Strachan Campbell – and a farm manager – Bill Conley – who together built one of Groton's first modern farms: Gibbet Hill. Marion Campbell died in 1998. The story is told primarily by Bill.

Marion Danielson grew up in Groton, on her parents' estate on Farmer's Row. The estate had gardeners, greenhouses, a flock of chickens, pigs, cross-bred Hereford/Angus beef cattle, a stable of thoroughbred horses and a hunting pack of purebred fox hounds. Her father and mother were passionate riders who had founded the Groton Hunt Club in 1922. When Marion turned 16, however, she informed her mother she had no intention of ever riding again.

Marion, Vassar '43, was a psychology major who worked with returning soldiers in a psychiatric hospital in Washington D.C. during World War II. She came back to Groton before the war's end when meat rationing was in effect and bought a few head of Angus. It did not take long for the herd to multiply enough that her mother suggested Marion find another property to house and graze the cattle. Joseph Connolly had just put the 200-acre Gibbet Hill farm on the market for \$20,000, but "Groton was just a sleepy town, many roads still gravel. Nobody wanted to buy here then," as Bill tells the story. Marion bought the farm in 1947 for \$18,500. The farm was neglected; Connolly had done no liming of the soil. A small apple orchard was made up of old trees, past their usefulness, but "Mrs. Campbell has a thing about old apple trees; she always made me keep some just to look at."

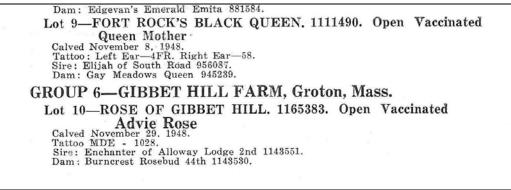
Bill Conley and his wife Norma both grew up in Connecticut Valley farm families where dairying and tobacco were a way of life. Bill joined the Navy during World War II right out of high school, serving two years in the South Pacific. At age 22 he enrolled at University of Connecticut on the GI bill, majoring in genetics and animal physiology. He was beginning work on his Master's degree while finishing his B.S. in 1949. Norma was a math major at UConn, and specialized in jet engine design after graduation.

By 1949 Marion had decided she was going to raise Angus. The original herd she bought came from Ontario, including a female named Belle. In October she sponsored a field day – a professional education event – for the 250 New England Angus breeders, and contacted UConn to get some students to help out for the day. Bill Conley was one of them. Six months later she invited him to come to Groton to interview for a job as her farm manager. After much convincing, he signed on for two years. Bill says he never thought twice about leaving in the fifty years that followed. Bill had choices, a farmer a bit ahead of his time, who came to



¹¹⁶ A more complete interview with William Conley is found in the Appendix to this report.

Gibbet Hill by choice and stayed because he wanted to. "I came the 13th of June, one week after graduation. I barely had time to get a moving van and get our stuff up there...."



page from 1949 New England Aberdeen Angus sale catalogue (Conley collection)

Together they started with 25 cattle and the 200 acre Gibbet Hill property. "When the herd reached 600 we said we needed more space." The continuing need for expansion is documented by Marion's purchases. In 1952 she bought the Town Farm (96 acres), a working farm then, with a dairy operation run by Elmer Woods.

Late in 1954, 82-year-old Charles Raddin offered to sell his 136 acre farm that lay adjacent to Gibbet Hill on Lowell Road. Raddin asked \$54,000 for the property with business and herd of 20 dairy cattle. At the closing Mr. Raddin said, "You know, I just thought of something – I own 12 acres off Main Street too. Why don't you throw that in to the deal." After Marion bought the property she sold the stock of hay, livestock and machinery – net cost to buy 148 acres was \$28,000.

The Raddin farm, known thereafter as <u>Farm #2</u>, had a huge dairy barn - 150 feet long with two 75' ells. It stored 25,000 bales of hay. It was known as the biggest barn in Middlesex County, but it was getting old and wasn't up to modern standards for housing livestock. It was torn down in 1960 and replaced by 2 smaller modern barns.



Raddin barn complex, ca. 1954.

Not all of the Gibbet Hill needs were met by land purchases. "All our crop stuff was grown at Mrs. Bates' property (later named Puritan Hill Farm)," Bill recalls. "We leased that for 30 years; grew corn for silage, some oats for grain. We grew alfalfa mostly; chopped it and added corn meal or gluten for a carbo-boost. We could get two crops of alfalfa cut early, then a third crop cut for hay. In

the early years there were one or two hands besides me; eventually it got up to five or six employees tops. A couple of them focused on crops, but they all helped with the cattle, and they were all long-time employees, staying for 15 -30 years."

Gibbet Hill constantly aimed to be a self-sufficient operation, but with an average 400 head of cattle to feed, "most of our hay came from Canada; we bought peanut shells from Virginia to use as bedding for the exhibition cattle." There were more land purchases in 1956 (35 acres by Gibbet Hill), 1972 (72 acres on Farmers Row including an orchard that they replanted), 1974 and 1976 (240 acres of fields and orchard). They leased acreage in the '60s from William Wharton, converting an old orchard on Broadmeadow Road to hayfields, and eventually buying his whole 70 acre property in 1971.

The largest physical expansion of the Gibbet Hill enterprise came in 1980 when Marion's mother died. Marion Campbell chose the Danielson Groton estate as part of her inheritance: 300 acres or so, a majority of which was held in trusts. The property included an expansive 9-room brick cape built in 1964, and the Groton Hunt stables and barns, by then no longer in use.

Looking back on the 50-year span of Gibbet Hill operations, from 1949 to 1998, Bill does not remember Groton as a heavily agricultural town. "There weren't that many farms in Groton during that period – Skyfields (Walter Weiwell); Westfield (Farmers Row); the Raddin farm. They were mostly dairy farms, and all Guernseys. Robert Shattuck sold his dairy farm on Chicopee Row to Malcolm Stone; then moved across the river to the Hayes Farm [now Shattuck Farm]. There was the Watson Farm on Chicopee Row.

"The Grange was almost defunct during my career. The Farm Bureau was important though, representing farmers' interests to the legislature; running farm bureau stores – you could buy retail grain, bailer twine, just about anything a farmer would need."

An operation the size of Gibbet Hill could look beyond Groton for its connections. The New England Angus Breeders Association, of which Marion Campbell served as president for a period, connected a very specific interest group on a professional level. Socially, Marion also moved in the same experimental farming circles as Louise Doyle in Leominster, a dairy farmer, and Amelia Peabody in Dover. Miss Peabody raised a different breed of cattle – Herefords – but as Bill reminisced, "We beef cattle people used to visit around a lot."

Bill Conley's position gave him international opportunities he could not have dreamed of as a boy. In 1965 he was part of a CIA-sponsored group that spent a month touring the USSR, from Moscow to Khazakstan, to study Soviet farming practices. He was on the Board of the National Angus Breeders Association from 1977 and as president he traveled to Australia and chatted with the Queen Mother in Canada.

It is an indication of Groton's ongoing recognition of the importance of agriculture that Bill was also a member of the town's first conservation commission, serving with estate owners and forest managers including Stephen Sabine and Harrison Ripley.

Innovation and Reputation

Marion Campbell and Bill Conley together developed and maintained a "closed herd" on their farm for 50 years, breeding all their own females. The "Belle family," 350 female descendants of Marion Danielson's original Belle, were born at Gibbet Hill. "That's some kind of record," Bill explains. "You see, in this business the average life of a herd was maybe five years. Investors who decided to get into this business were always surprised at how complicated it was. They'd try it and then sell out after five years or so."

From the first, Marion was considered an innovator. A *Boston Post* feature article written in 1953 ran under the headline:

Wife of Clergyman Has 120 Animals on Groton Farm – Loves It More Than Former Social Work

"No Easy Job", the article continued, "for a girl who majored in abnormal psychology [and] spent her time doing social and editorial work" but, the writer acknowledged, "she has turned out to be a top-notch farmer."

People are forever asking Mrs. Strachan how she got interested in raising prize Angus cattle. She usually shrugs, smiles and answers, "Some people raise horses, others dogs. I find cattle fascinating....There's quite a challenge in a producing farm. It takes work and worry, luck and prayer to raise either crops or livestock."¹¹⁷

They farmed through a period of dramatic changes in breed and desirability of Angus, as well as through a revolution in genetic manipulation. But primarily they aimed to breed the best bulls from the best cows in the business. They sold beeves to customers from Kansas, Nebraska, Montana, who wanted to buy their bulls.

Clearly Marion Campbell didn't need to make money to survive, but she was thoroughly invested in the business. Why? Bill Conley thinks of three reasons. First was her determination to prove herself useful. "This was not a hobby," Bill commented. "She was very active in the national Angus association, and became a director, then president of the New England Aberdeen Angus Association."

Second, she was determined to make this a freestanding business – to show a profit though small. "More like break even," Bill remembered. "But she was very businesslike; always examined the receipts. 'How can you make a profit,' she said, 'if you're operating in the red?' The things she spent money on were practical. She operated it as close to the vest as possible."

They didn't make money at first, when they were building the herd and the business. "But once we had sufficient numbers of cattle, and enough markets – we had a national reputation – it was profitable."

Third, "to keep the land open. She loved conservation. In many ways she replicated what her mother did.¹¹⁸ It was part of the family tradition in which she grew up."



Although Marion Campbell had little difficulty accessing the family funds need to purchase the sizable properties that made up Gibbet Hill over thirty years, she did have one limitation. The Deering/ Danielson family money managers – "those guys in Chicago" as Bill remembers her

¹¹⁷ Boston Post, February 1, 1953 article by Eleanor Roberts; Bill Conley collection

¹¹⁸ in the area now Surrenden Farm.

calling them – were not convinced that holding on to a handful of relatively small farms in a rural New England town was good business, especially in the midst of the greatest building boom the country had ever seen.

"Some time in 1995, 1996 she said to me, 'We're both getting older – what do we do with all this land I bought? I think I know – the kids have been urging me to do something like give it to the town.' But she felt the need to develop her land at Town Farm; that was the only property she was going to develop. 'I just want to show those guys in Chicago I'm not a dumbbell,' she said. There were lots of meetings. I went to the meetings with her lawyers, and people were ranting and raving – even got up on a table at one point. Then Mrs. C. picked up the paper and read the headline *A Tale of Two Developers* – she was the bad guy; the other one was golden. 'To hell with those bastards,' she said, 'they're not going to get a thing.' After that she swore she'd sell every last acre."

It was a drastic decision for someone who had already given 32 acres, for four different projects, to the Town and to Groton School.¹¹⁹ A recent Groton history describes what happened next:

In October 1997, Groton residents were stunned when the Campbell Trust submitted development plans for 174 conventional lots on more than 500 acres of agricultural land at Gibbet Hill, Angus Hill, and Brooks Orchard. The proposal was a wake-up call for Groton as it faced the possible loss of its most familiar natural landmark.¹²⁰

Marion Campbell died in 1998, before anything was resolved. Her executors asked Bill Conley to liquidate her Groton real estate holdings. "It was the easiest thing I ever did – land in Groton was in big demand - despite floods of vitriol from abutters and other townspeople. One woman came into the office, sat on the floor and said she would not leave until Mrs. Campbell promised not to develop her properties. We had many discussions with The Trustees of Reservations about the land here. Mrs. Campbell had been interested in selling to them. In the end though, it was a decision for the trustees-of-Mrs.-Campbell, not the Trustees of Reservations."

The preservation of Marion Campbell's properties, with minimal development and permanent conservation restrictions, belongs to another story. The fact that over a thousand acres still existed in Groton in 2000 as large parcels of valuable farm land, available to be preserved and to carry on the town's agricultural tradition, is a direct result of the story of Gibbet Hill Farm.

More than any other single farm operation in Groton, Gibbet Hill transformed the face of Groton farming during the second half of the 20th century. First by accumulating farm parcels and keeping them in production; later by essentially forcing the hand of both public and private land conservation forces, Gibbet Hill Farm determined the fate of some of the town's most visible and fertile agricultural land. Mrs. Campbell's financial advisors may not have been impressed by the income from her investments, but her decisions and long-term stewardship set an example for Groton today.

¹¹⁹ 1.8 acres for the police station; 10 acres adjacent to what is now Surrenden to the water department; a long strip on the riverbank west of the Nashua adjacent to the Town Forest, 7-8 acres; 13 acres on Farmers Row, now faculty housing, to the Groton School. She intended to donate close to a mile of land east of Shirley Road, between the Ayer line and the Groton School, to the State for a riverwalk, but the State never finalized the deal. 120 Murray et al, *Groton at 350*, p. 235.

Groton Tackles the Baby Boom

Groton may have been a sleepy town when Bill Conley first moved to it in 1950, but the next decade saw its population increase dramatically, from 2889 residents in 1950, to 5025 in 1971 – a 74% increase in just twenty years. Groton's citizens faced a whole new series of challenges. While many of the town's corporate decisions still centered on the traditional topics of schools, roads and taxes, increasingly the town felt its familiar features and landscapes threatened by development and changing land uses. Certainly there must have been eyebrows raised as the famous Raddin barn on Lowell Road was taken down, or William Wharton's orchard became a hayfield. Arguments concerning practicality and production could not completely make up for loss of heritage and aesthetic appeal.

Thus, despite the fact that Marion Campbell and other large landowners were maintaining large tracts of Groton's open space as working land for their own purposes, Groton's citizens looked for communal forms of protection and control that could limit the power of individual landowners to do whatever they pleased, whether what they pleased was in the public interest or not. Groton was not alone in doing this, and the chronology of new governance steps echoes that of many towns throughout the Commonwealth.

1962 – Conservation Commission established.

1963 – First Master Plan prepared, with landscape architect and preservationist Charles W. Eliot as consultant.

As a direct result, a newly formed planning board determined that 93% of Groton's area would henceforth be characterized as "residential/ agricultural", where agricultural activity was allowed without special permit or restriction.

1964 – Town meeting votes to establish a Historical Commission.

Two Local Historic Districts were promptly designated, focused on Groton Center, in July and September 1964, supervised by a Historic District Commission.

1964 – Groton Conservation Trust formed "to acquire, preserve and provide public access to lands with significant conservation value."

Significant parcels were donated to the Trust beginning in the late 1960s. Since then the Trust has partnered with a number of other conservation agencies to protect open space including farmland throughout Groton.

1968 – Wm P. Wharton donates 700 acres in vicinity of Baddacook Pond, the "Wharton Plantation" to the New England Forestry Foundation to be preserved as a managed woodland.

late 1960s- J. Harry Rich dies; his 500-acre tree farm on the Nashua River becomes part of the Massachusetts State Forest system. Less well-known locally than Wharton, Rich was a professor at the University of Massachusetts who originally acquired his land during World War I, to be used as a natural laboratory for his forestry students. His grandson wrote:

They would employ different techniques for pruning, brush clearance and the like, to assess the impact of these on growth rates and the quality of the lumber produced. There has never been a man so in love with the forest. $^{\rm 121}$

1975 – Groton Place, 54 acres of the Dumaine estate on Long Hill Road along the Nashua River, given to NEFF in the name of the Dumaine children. Virginia May commented,

It is a peaceful spot enjoyed by many people who walk through it....A sign states: *The Groton Place, Wild Life Sanctuary, for the Benefit and Pleasure of the People of Groton.*¹²²

1977 – 146 acres of managed forest land, adjacent to Groton Place, was donated to NEFF by the heirs of Mary Lawrence and Stephen Sabine.

By the end of the decade, Groton had almost 2,000 acres of protected, managed wood lands within its borders. The acreage made a new and powerful statement: not only the open fields and rolling hill pastures of Groton were worth preserving, but the regrown forests as well.

Today numerous towns in Massachusetts manage community-owned forest land, with the intention of providing easily accessible recreation opportunities to residents but also with further goals. Forest management is a valuable example of the intersection of conservation and preservation concerns, where "tending" woods growth and habitat provides varied benefits to humans, secures important ecological niches for wildlife, and significantly improves the environment.

Forest management has expanded the scope of agriculture in New England as elsewhere and, perhaps most significantly, it has contributed to the process of thinking for the long term. While a market gardener must plan by the season, or perhaps in 3- or 5-year increments, a forester's 'crop' may be decades away. *Most Recent Harvest,* reads the sign at Wharton Plantation, *2008.*



Niche Farming

The other major agricultural change in Groton over the past 50 years, besides the impact of the conservation movement, has been an increasing tendency for local farmers and those moving to the area to practice "niche farming". One recent agricultural writer sets niche farming within a national context. Writing in 2010, Rebekah Cowell noted:

Every day in the United States, close to 3,000 acres of productive farmland are lost to development. Adapting to survive, many farmers have embraced a new paradigm that focuses on agricultural models

¹²¹ posted by Peter Rich January 11, 2010, on http://www.stateparks.com/j_harry_rich.html 122 May, *Houses*, p. 90.

custom-fit to changing markets and filling local niche markets with specialty produce and value-added products. The movement seems to be working.

Nearly 300,000 new farms have begun operations since 2002, according to recent Agricultural Census data. Compared with all farms nationwide, these new arrivals tend to have more diversified production, fewer acres, lower total-dollar sales and operators who also work off-farm. Interestingly, many of these operations are located in decidedly urban and suburban areas.¹²³

The USDA Economic Research Service concluded that between 1992 and 2005 the number of organic farms in the U.S. more than doubled.¹²⁴ In 2010 it was estimated that 60 percent of all farms in the U.S. were small, reporting less than \$10,000 in sales of agricultural products.¹²⁵

Paralleling these trends has been an increase in consumer demand for locally grown fresh foods (including flash-frozen meats), and the renaissance of farmers' markets as retail outlets for small producers.

In Groton, approximately a third of the town's farmers fall into the category of niche producers, some working spreads as small as 2 ½ acres, some working entirely in greenhouses, many supplementing agricultural income with incomes from other sources. A full listing of the town's agricultural enterprises, from small private landowner to regional land trust, is included in the following chapter. One of the conclusions to be drawn from that listing is that, in Groton at least, niche farming is not a new trend. John and Laurie Smigelski are two examples of farmers who found their niche forty years ago.

¹²³ http://www.grit.com article by Rebekah L. Cowell, March/April 2010.

¹²⁴ USDA Economic Research Service quoted in *NYTime*s article by Brent Bowers, Aug 6, 2008. 125 Cowell, op.cit.

<u>PROFILE: Farming Other</u> <u>Lands</u>

John Smigelski grew up next door to John Eliades' Top o' the Hill Farm just across the Groton border in Ayer. Eliades had bought his farm in the late 1930s; it included apple orchards, market gardens and he and his sons also worked as truckers moving fruit and produce from other farms. Primarily though, Top o' the Hill was a dairy farm. Smigelski started his career there when he was a kid, making hay, and continued



through high school, although the dairy herd was sold in 1964. He majored in dairy science at Delaware Valley College of Science and Agriculture.

Then, when he was a senior, John Eliades died. They had talked some, before then, about Smigelski coming into the family business but nothing had been firmed up. Eliades' son wanted to keep the farm and made a proposal: he and John would go into partnership, with John buying half of all the farm equipment over time, no money down. "The whole cost was maybe \$5,500 – a lot of money in those days. It was a great offer." John and his wife Laurie, also a Delaware Valley graduate in animal husbandry, returned to Groton and began the career they are still expanding: hay making, on a commercial scale.

The hay becomes fodder for thousands of pleasure and competition horses throughout the northeast, a market "huge" now in comparison to what it was when he started out 40 years ago. Current statistics point to the region surrounding Groton as having more riding horses per square mile than anywhere else in the United States, and customers find their way to him. "If you can grow the best product possible, people beat a path to your door. We're not talking bedding hay here."

John and Laurie's niche presented them with an unusual challenge and an unusual opportunity in Groton. To make a go of it, they had to work more land than was possibly affordable to buy. But they provided a form of agricultural activity that was invaluable to numerous large landowners in the town. In return for a land lease – "it used to be just a word and a hand shake" – they would clear a wooded parcel or restore a field to agricultural use.

Preparing a new hay field is a labor intensive process: cutting back invasive hedgerows of multiflora rose, bittersweet and viburnum, removing the weed trees that choke out a field in reversion, rooting out stumps and boulders. Once the space is clear, some of the field may need to be bulldozed to even it out, to accommodate massive haying machinery and compensate for drainage problems. It is plowed; the soil is tested; fertilizer and lime added to sweeten the soil. A mix of orchard grass, timothy and brome is seeded in. Finally, if the weather cooperates and the grasses stay healthy, the new hay field will produce 2 to 3 crops a year for 6 to 8 years, before it has to be plowed again. Some years it's not so easy. In 2010, for instance, the summer drought

was so severe that their second mowing was down 65% from a normal second crop. As with other kinds of field crops, proper nutrition makes all the difference. In most cases, John explains, the phosphorus level is already high, but potassium and nitrogen need to be added. Potash to provide potassium currently goes for \$600 a ton, and that is only enough to sweeten 10 acres. John is looking into acquiring potash from a biomass plant in Portsmouth NH, as a less expensive option. Nitrogen is the hardest element to control, since it atomizes quickly if not watered into the soil. Biosolids would be a good alternative, John comments, noting that an arrangement with a nearby sewage treatment plant would be ideal.

The Smigelskis' field leases didn't all come at once. Their first rental was an 11-acre Lawrence Homestead field on Farmers Row. Next door to the Lawrences, the Stone family contracted with them to hay 30 more acres. Then the Gundersons nearby. "It's pretty much all word of mouth – somebody knows somebody...."

Our discussion of the Gunderson property raised what the Smigelskis see as a major issue in their business: "An absentee landlord looks at the rent check and thinks the land is worth more than he gets; what he doesn't see is the work involved in pushing back hedgerows for 20 years. He doesn't see the ton of time and equipment needed to get a property up and running."

After that the Groton Conservation Commission leased out 4.5 acre Walnut Run to haying; Jim Western asked them to work his 1.5 acres, and they took on 3.5 acres of the Alcott property. At one point, in one of their few farming deviations, they experimented with growing pumpkins on between 20 and 50 acres in a number of parcels. A major shift in operations took place when they contracted with the Groton Conservation Trust to work over 100 acres of fields at Surrenden Farms, a 340-acre parcel of protected land that runs between Farmers Row and the Nashua River. The westerly portion of the property is managed by the town's Conservation Commission; further east is the General Field, and today they hay 145 acres in that location. Originally they had thought to bid on the Commission acreage as well, but found their dealings with that board so convoluted that "we walked away from that; we just lost our enthusiasm."

Laurie decries some of DEP's protective measures not, she hastens to add, because she is against conservation, but because they were designed by people who "apparently have never been out in a hay field." One example was the guideline that required mowing from the center of the field outward. Its intention was clearly to allow grassland creatures to avoid the cutter blades but John notes that no turtle is going to move fast enough to outwalk the mower. Furthermore, "the equipment is not designed to go the way they want it to go." According to the Smigelskis, the recommended pattern would crush the hay before it was cut, defeating the whole process before it begins. "The real answer," says Laurie, "is to go slow and pay attention. You see a doe out ahead of you, you can be pretty sure there's a fawn somewhere near. So you're careful."

Altogether John, Laurie, and one seasonal hired hand hay about 250 acres of Groton land. In a normal year the fields produce two crops, and about half are likely to produce a third crop as well if the weather is right. The summer of 2010 had little right to its weather. Following spring flooding the first crop was late. Then there were weeks of drought, and the second mowing brought in 65% less hay than the first one. Each crop is at its peak for 2-3 days, the "pre-bloom" stage, when the head is formed but the grains have not yet ripened. That is when it needs to be cut, and for the next 48 hours it dries in the field if the weather is kind, turned over by a massive tedder that can work three rows at a time. Then the crew comes in with two balers and a state-of-the-art "stack wagon". The tedder alone significantly improved production, so that the Smigelskis can now hay up to 20 acres a day, double their earlier limit. It was buying the stack wagon though, John says, that made the biggest difference: instead of 1000 to 1200 35-pound

bales made and picked up per day, the new equipment can process 2000 50-pound bales per day, with the whole operation requiring two less crew members than had formerly been needed.

There is more demand for hay than they can deliver from what they grow. When their own supply is depleted they truck in loads from upstate New York to feed the livestock of their 140 or so customers. Those livestock run the gamut, from one horse to 40; a herd of dairy goats; even a single milk cow kept by a family whose 12 children drink the milk. Some of the client relationships go back as far as thirty years.

The Smigelskis' home farm is a 13.4 acre property given over to pasture, a large garden and a farm pond where Laurie's two riding horses can drink. Wooded wetlands cover one end of the property, which backs up to the B&M Rail Trail running north-south through town. The narrow, two-story house dates from at least the early 20th century, possibly as early as 1889 when Dennis Coughlin owned the property. A small wooden stable was added about 1950, which still houses hens and horses. A man named Blodgett occupied the land after Coughlin, and the place was bought in 1961 by Dan Sherwin, from whom the Smigelskis bought in 1991. "Here," says John, "we've got the buildings to support the land we work around us." Of the buildings, most vital to their business are the massive pole barn built in 1992 to house over \$200,000 worth of old and new, traditional and highly sophisticated equipment including the 18-wheeler that John uses to haul the New York hay; and the 2000 building called, somewhat misleadingly, the "shop".

"We do everything ourselves," Laurie explains. "We don't contract anything out." And that includes almost all the mechanical work needed to maintain their fleet of equipment. The shop, a two-story pitched-roof barn, has radiant heat in its concrete floor and is completely paneled on the interior with wide pine boards. The boards came almost free, thanks to the Smigelskis' broad network of friends. John let it be known among local arborists that he was looking for logs. Eventually there were enough tall, cut pines in his yard to haul them to the sawmill in Dunstable where they were milled and planed, to find new life as an insulating layer of warm yellow paneling in the otherwise all-business shop. "When I started out, Cliff Sherman was my truck mechanic. He knew everything. I just watched....You see how much equipment we've got. At \$85 an hour you can't afford to send this stuff out to be fixed. That's the reason behind building this shop."

While John and Laurie may do everything themselves, they don't *both* do everything, at least under normal conditions. "We work as a team, though," Laurie says. "The two of us run this business." Over the years they have developed a highly efficient working relationship. Laurie tries to explain the sequence. "Let's start from the hay we grow.

- Both of us do field work during the growing season.
- He rakes, I bale.
- I schedule all the deliveries, with several weeks' notice. Usually we don't deliver a whole winter's feed at once; it depends on the customer's finances and the amount of storage they have.
- Both of us do deliveries and sometimes we have a high school kid who helps out in the summer.
- I do the books; John tends to the machines."

John cuts in. "But Laurie runs all the trucks. I think of it as her insurance policy; if something happened to me, she knows all the equipment and all the suppliers. She wouldn't have to lose this place in a fire sale just to make it through."

Laurie's ability to run the equipment is useful for more than emergencies. She and John tackle the big jobs like reclaiming fields, together, and they share the maintenance work on the 13-acre home farm. They also share what free time they have. John is a member of Groton's Agricultural Commission. Laurie is newly elected to a seat on the Groton Park Commission, believing that the commission could use a farmer's perspective on land use.

Do they have any advice for younger farmers?

Laurie is spokesperson. "As a starting farmer, find a mentor to connect with and trust." "That's what Eliades was for me," John adds. "And there's Dan Lenthall from the Natural Resource Conservation Service – he's a wealth of knowledge. Every time a new piece of land comes up I give him a call. 'Hey Dan, we need to do a farm walk....'"

There's a pause, and it seems the interview is over but Laurie is collecting her thoughts. "This is what I want to do," she says. "It's a lifestyle choice."



IX. 2011: STATUS REPORT

Preserved open landscapes, protected agricultural land, good schools and responsive town services make Groton a good place to live. Murray et al, Groton at 350

Before it is possible to plan for the future, it is necessary to assess the present. So far, this report has surveyed the history of Groton's farms and the development of managed forests. Now it is time to look at the present. This chapter will first examine the current state of Groton agriculture in comparison with other communities, to provide a context for evaluation of the town's policies and achievements. Second, the chapter will look at Groton's planning documents, bylaws, and community activities as they support agricultural activity and preservation of working lands. Together, regional context and local response provide a benchmark for Groton's future commitment to her agricultural heritage and health. Finally, the men and women who work Groton's lands and who own Groton's farms will be accounted for and heard from.

Groton and the Region

In 2007 (the latest year for which comprehensive figures are available)¹²⁶ there were 7,691 farms in the Commonwealth of Massachusetts, occupying 517,879 acres, and generating some \$489,000,000 in cash receipts. The average farm occupied 67 acres.

Middlesex County included 9% of them – 700 farms – occupying only 6.5% of the area – 33.893 acres – but generating \$81,708,000, or 17% of the state's total farm revenue. The average farm occupied 48 acres, just two-thirds of the statewide average.

Such are the statistics, but as is often true, the statistics are not as comprehensive as might be desired. By 2007, the old concept of "agriculture" had evolved well beyond plants in the ground and livestock upon it, to include greenhouses, nurseries, horticulture, and aquaculture. Yet even in the past four years the definition has broadened further to include forest management, a new enough inclusion that it is hard to find reliable quantitative data.

More recent figures are available for specific categories of information.¹²⁷ In 2008, cash receipts of Massachusetts farms (all commodities) increased, but then fell below the 2007 level in 2009. Based on cash receipts, the largest portion of the Massachusetts agricultural industry has consistently been in greenhouse/nursery products (35.5%), followed by livestock/poultry (20.1%), cranberries (17.9%), and vegetables (11.6%).

¹²⁶ See www.mass.gov/agr/facts, the state website for the Department of Agricultural Resources.

A subsection of this site (www.nass.usda.gov/Statistics_by_State/Ag_Overview/agoverview_MA.pdf) also provides some 2010 information on general trends, noting 7,700 farms in Massachusetts, occupying 520,000 acres, with an average size of 68 acres; the slight increases from the 2007 numbers may be merely a rounding effect. There is no 2010 breakdown specifically for Middlesex County.

particularly through the USDA New England Agricultural Statistics Service, www.nass.usda.gov/nh

There is another mode of comparison between Groton and its peers in the region and the state. This involves taking a look at how towns have responded to various agriculturally beneficial opportunities derived from recent laws and initiatives. Five criteria were chosen for this comparison:

- 1. how towns have responded to portions of the State's "Smart Growth" policy initiative that relate to agriculture including:
 - establishment of a local agricultural commission
 - adoption of the Community Preservation Act
- **2.** response to agricultural aspects of the "Commonwealth Capital" rating system including:
 - establishment of a local agricultural commission
 - local adoption of a right-to-farm bylaw
- **3.** development of zoning regulation that could be advantageous to agriculture including:
 - specific definition of agriculture within the zoning bylaws;
 - permitting of agricultural activity in all districts;
 - flexible development options;
 - cluster development option;
 - transfer of development rights
- 4. community support of locally grown food and agricultural products including:
 - farm-to-school programs
 - farmers' markets;
 - Community Supported Agriculture programs (CSAs)
- 5. use of open space protection mechanisms including:
 - Conservation Restrictions
 - Agricultural Preservation Restrictions

While only three of the criteria exist by official statutory authorization,¹²⁸ *all* of them reflect conscious choices made and actions taken by individual communities and their citizens. The significance of each criterion and Groton's involvement with it are discussed below.

Criterion 1: creation of an agricultural commission

This is part of the Commonwealth's "Smart Growth" policy, and is strongly supported by the Massachusetts Department of Agricultural Resources (MDAR). Formation of such a group is an option open to all cities and towns without necessity of special legislation, state regulation, or capital outlay.

¹²⁸ Zoning is governed by MGL Ch. 40A; the Community Preservation Act ("CPA") is established as MGL Ch. 44B; Conservation Restrictions and Agricultural Preservation Restrictions are governed by MGL, Ch. 184.

While MDAR offers a suggested structure for local commissions, no municipality is obligated to follow that format in detail. The commission's function harks back to the 19th century Grange movement in which local granges represented farmers' interests within a municipality and – more important at the time – in the broader context of regional and national issues and legislation. The granges were private organizations however, whereas their 20th century counterparts are municipally appointed boards.

At full utilization, an Agricultural Commission can be a strong positive force:

- for promoting and sustaining agriculture;
- for providing outreach and education to the public and to the local agricultural community;
- for assisting in the resolution of citizen-farm and town-farm issues;
- for service as advisors to other town boards and committees regarding agriculturerelated activities.

The existence of an Agricultural Commission generates points for the town on the annual "Commonwealth Capital" assessment, and enhances the town's position in competing for many state grants.¹²⁹

As of March, 2011, only 148 of the 351 cities and towns in Massachusetts (42%) had created an Agricultural Commission or its equivalent.

* Groton established an Agricultural Commission in late 2006.

Criterion 2: adoption of a right-to-farm by-law

This action is also encouraged by the Commonwealth, with the intended goal of protecting farmers and agricultural enterprises from frivolous complaints and other, similar nuisances relative to farming activities. Generally, such a by-law contains a provision for formal notice to new property owners (or even to the town as a whole) that the community is "farm-friendly," and that agriculture is an integral part of the local economy. Each such by-law should contain a "Declaration of Right To Farm" section, clearly specifying the Town's pro-agriculture stance. Adoption of a Right-to-Farm by-law generates points for the town on the annual "Commonwealth Capital" assessment, and enhances the town's position in competing for state grants in multiple categories.

As of March, 2011, of the 351 cities and towns in Massachusetts, only 114 (33%) had adopted a Right-to-Farm by-law.

** Groton adopted a Right-to-Farm by-law at its 2007 Annual Town Meeting.

Below is a comparison between the actions of Groton and nineteen other communities concerning establishment and use of local agricultural commissions and a Right-to-Farm by-law.¹³⁰

¹²⁹ State-sponsored grants and other sources of funding are discussed in a later section of this report.

¹³⁰ Criteria for selecting communities included Middlesex County area, comparable size and accessibility of relevant information.

Town	Ag. Comm.	Ag. Comm.	Declared	How public is	By-law on
	exists?	dispute	right to	informed?	town
		resolution?	farm?		website?
GROTON	yes	yes	yes	townwide mailing;	yes
				seller to buyer	
Dunstable	yes	yes (optional)	yes	townwide mailing;	yes
				seller to buyer	
Littleton	(prospective)	(prospective)	yes	"available media"	yes
		limited scope			
Stow	yes	yes	yes	townwide mailing;	partially
<u> </u>				seller to buyer	
Sudbury	yes	yes	yes	posting	yes
Westford	yes	yes (optional)	yes	"available media"	yes
Weston	yes	yes	yes	townwide mailing;	yes
				seller to buyer	
Falmouth	yes	yes (optional)	yes	posting, website	yes
Townsend	(prospective)	yes (optional)	yes	multiple options	yes
Carver	yes	yes	yes	posting	yes
Hadley	yes	yes (optional)	no	no	not found
Hatfield	yes	yes	yes	posting	not found
Hubbardston	yes	yes (optional)	yes	posting	not found
Rehoboth	yes	yes (optional)	yes	posting	not found
Templeton	(prospective)	yes	yes	townwide mailing	yes
Monson	yes	yes (optional)	yes	seller to buyer	not found
Westport	1/05	yes (optional)	VOC	posting none	not found
•	yes	,	yes		
Northfield	yes	yes	yes	townwide mailing; posting	not found
Harvard	yes	yes (optional)	yes	townwide mailing;	not found
				seller to buyer	
Lancaster	yes	yes (optional)	yes	posting, website	yes

Fig. 8: Groton and the Region – Agricultural Commissions

The "dispute resolution" column above addresses one of the more important roles for agricultural commissions: arbitrating, resolving, or advising on complaints or disputes relating to agricultural issues, particularly through request from other town boards or committees facing issues initiated either procedurally, or as a complaint. Groton and eighteen other towns in the sample have assigned this function to the local agricultural commission, although nine of those towns have undermined the effectiveness of the process by making the referral permissive ("may") rather than obligatory ("shall"). Three towns (Littleton, Townsend, Templeton) have left the concept rather vague, making the whole thing only a future consideration if an agricultural commission is ever established; one (Littleton) has even limited such potential referrals to matters involving the Board of Health.

It does little good to pass a municipal policy regulation if no one is aware of it. The "how public is informed" column relates to methods for spreading the message of the Right-to-Farm by-law to inhabitants. Groton has taken a proactive position, specifying not only that the notice shall be incorporated in writing as part of every real estate transaction, but also that the notice be direct-mailed annually to every property owner in town. Only four other towns in the group adopted similarly stringent requirements, while three more chose the direct-mail option and Monson took the real estate transaction route only. Six towns simply posted a notice on the Town Hall bulletin board; two provided vague options, while two towns (Hadley and Westport) provided no mechanism at all.

The "town website" column surveys yet another form of public notice, addressing the question of whether the by-law text is easily accessible. There are many benefits to doing this, including immediate public access to the by-law when needed. Groton and nine other towns in the sample have done this. Stow only posts the town's "Declaration of Right to Farm", and it is not clear that any of the remaining eight towns have done any such posting.

Criterion 3: acceptance of the Community Preservation Act (CPA)

The Community Preservation Act is a cornerstone of "Smart Growth," and is intended to provide financial resources for the traditionally underfunded categories of open space, recreation, community housing and historic resources. The statutory provisions of the CPA (MGL Ch. 44B) effectively dictate the terms that accepting communities adopt to put the law into local effect. What is important for this survey is the acceptance itself – a process in which a community has been persuaded to voluntarily vote itself a tax increase. Such a decision indicates that the community has sufficient belief in itself and sufficient belief in the importance of the target program areas to make that extra sacrifice in support of them.

The CPA also provides a matching fund program, supported by surcharges on transactions at county Registries of Deeds. In the early days of the CPA, communities were effectively assured of receiving a dollar-for-dollar match on what they had raised through their tax levies.¹³¹ More recently, however, with more municipalities participating in the program and reduced Registry revenues due to a floundering real estate market, the match has been progressively reduced. Matching funds from the CPA Trust Fund in 2010 ran at about 28% of the town contribution¹³².

The CPA has the potential to assist agriculture through land acquisition and other activities under the "open space" category, as well as underwriting farm preservation efforts under "historical resources." Acceptance of the CPA gives a town credit points on the annual "Commonwealth Capital" assessment, and enhances the town's position in competing for many state-sponsored grants. While the program no longer promises a double-your-money return on community investment, it still offers one of the only substantial supplemental income sources for important local quality-of-life projects, a supplement especially important in a period of budget cuts, deficits and communal belt tightening. As of May 2011, of the 351 cities and towns in Massachusetts, 148 (42%) had accepted the Community Preservation Act.

* Groton accepted the CPA in 2004.

¹³¹ at the height of the inflationary real estate market and prior to the current economic crisis – and before many municipalities had joined the program.

¹³² By statute, the match can go as low as five per cent.

Criterion 4: Zoning

The concept of zoning needs no explanation for Massachusetts cities and towns. Chapter 40A of the General Laws (the "Zoning Enabling Act") empowers municipalities to control, within parameters established by the statute, land use and development in an orderly, logical and productive manner. One of the areas of activity subject to local regulation is agriculture: location, extent, nature and sometimes, as an indirect result of other land-use issues, whether it can even be practiced at all.

Five sections of local zoning regulations are immediately relevant to the practice of agriculture:

- definition of the terms "farm" and/ or "agriculture";
- permission or exclusion of agriculture in all zoning districts;
- provision of a cluster development option;
- provision of a flexible development option;
- allowance of transfer of development rights.

The following chart provides compares these specific types of content in zoning by-laws of the seven Middlesex County towns previously listed, plus two other comparably sized communities.

	Farm / agric.	Agric. permitted	Cluster dvlpmt.	Flexible dvlpmt.	Trans. of dvlpmt
	defined?	all dist.s?	option?	option?	rights?
GROTON	no	yes	yes	yes	yes
Dunstable	no	yes	no	no	no
Littleton	no	yes	yes	no	no
Stow	no	yes	yes	no	no
Sudbury	no	yes	yes	yes	no
Westford	no	yes	yes	yes	no
Weston	yes	yes	yes	yes	no
Shutesbury	yes	yes	yes	no	yes
Lancaster	no	yes	no	yes	no
	no 9 Groton and	j	-		no

Fig. 9. Groton and the Region: Zoning and Agriculture

Intriguingly, only two of the listed towns (Weston, Shutesbury) actually include a specific <u>definition for "farm" or "agriculture"</u> (or derived words), as used in their zoning by-laws. This is a significant omission, because it implies that the meanings behind the words are traditional and unchanging. They are not, however. Agriculture may or may not, for example, include greenhouse crops or woodland management. A specific definition would clarify the scope of current regulation, while allowing for future amendment(s) to adjust to changing land uses.

All of the towns examined in this comparison allow <u>agriculture in all zoning districts</u> in the "tables of uses" that make up part of the zoning by-laws.¹³³ Several towns, however, then

¹³³ In large part, this is probably a deference to the terms of MGL Ch. 40A, s. 3 (whether that connection is overtly stated or not).

proceed to impose various restrictions on those blanket agricultural endorsements, particularly concerning poultry and livestock, rather than horticultural activities.

Except for Dunstable, all the towns allow <u>cluster zoning</u>, which is a process for concentrating actual construction of a subdivision within a relatively compact area, saving the balance of the subject property for open space, recreation, agriculture, etc., in exchange for various types of incentives. Only five of the nine towns, including Groton, allow <u>flexible</u>

<u>development</u>, a somewhat similar option to cluster zoning, but with incentives to incorporate affordable housing, senior housing, or similar public-benefit elements into the project. Groton's Partridgeberry Woods development on Long Hill Road is a recent example of flexible zoning used to preserve significant prime farm land.

Still Meadow Village on Dunstable Road, an example of cooperative planning between the Groton Conservation Trust and the Groton Housing Authority, in which ten cluster-zoned houses are located in a relatively small area of a 31-acre parcel of meadow and woodland.



Among all nine towns, only Groton and Shutesbury have adopted (by name or by effect) a <u>transfer-of-development rights</u> element. This is an option which is beneficial to open space preservation, allowing developers to increase the density of a flexible development project by offering bonus reward(s) in exchange for transfer to the town or appropriate nonprofit agency, or a permanent conservation restriction under MGL Ch. 184, ss 31-33, of a parcel of at least 80,000 square feet, carrying special value for aesthetic, agricultural, ecological, or recreational reasons, which may not be wetland.

One way to judge the efficacy of Groton's current farm-related zoning is to look at the town's "Master Plan 2011", which includes a very thorough review of the zoning by-law (ZBL) with recommendations for revisions and updates that appear to be needed. Very little of the zoning commentary specifically relates to the agricultural aspect of the community, even though agriculture is prominently featured in the "Economic Development" and "Open Space" sections.

** The fact that there is little discussion of agricultural zoning in Groton's new master plan reflects the town's consistently proactive stance in keeping its ZBL current with developing trends in zoning practice.

Criterion 5: community support of locally grown food and agricultural products.

Community support is critical to a flourishing local agricultural economy. Organized forms of support include:

- the "farm to school" program, an MDAR agricultural initiative, which encourages public and private educational institutions to preferentially purchase food commodities from local farm providers. Benefits include better nutrition, fresher food, reduced shipping costs, and market income retained in the region.
- Community Supported Agriculture (CSA) programs, relative newcomers to Massachusetts, have multiplied quickly in the past decade. The premise of a CSA is the sale of shares in a local farm's crops or products, with each shareholder receiving a portion of the product at stated intervals. The shareholder receives fresh, seasonal, locally grown produce (or in some cases, meats or even seafood), while the farmer receives an advance on annual income to underwrite the up-front cost of seeds, plants, fertilizer and labor. Share purchases also provide a form of agricultural insurance by which consumer and producer alike share the pitfalls as well as the benefits of variable growing conditions.
- support and encouragement of <u>farmers markets</u> a public venue for direct sale of locally grown fresh produce and other local farm products. In many instances, local agricultural commissions have taken the initiative to get these markets up and running; in others, they have sprung up through associations of the farmers themselves, or through citizen group activity. The state has become actively involved as well, making market space available at some highway rest stops.

These markets are particularly valuable for small farmers whose limited time and labor make maintaining an individual farm stand difficult. They are beneficial to new businesses and even to long-established ones located away from main thoroughfares: the multi-vendor set-up draws a wider range of potential buyers looking for varied one-stop shopping. The market has a secondary, social aspect as well: community members come to meet and greet as well as to buy, and in doing so they become invested in a new local tradition. That a town hosts and supports a farmers market is an indication of the acceptance of agriculture as an integral part of that community, and is a benefit to both the participating farmers and the participating citizens.

^{**} As of May 2011, there are five CSAs in Groton, a Farmers Market running from Memorial Day into October, and the Groton School participates in the Farm-to-School program.

The following chart provides a comparative look at various forms of community support for local agriculture, especially in Middlesex County, with selected other towns for comparison.¹³⁴

¹³⁴ It should be noted that not all agricultural endeavors (e.g. hay farms or Christmas tree farms or forestry endeavors) lend themselves to CSA or "Farm-to-School" activities, so that a particular community's overall participation may be limited by its particular mix of farming activities.

	has school/s in Farm- to- School ¹³⁵	has farm/s re- questing Farm- to-School	has CSA farm/s ¹³⁶	has farmers market ¹³⁷
GROTON	ves	ves	ves	ves
Acton	ves	ves	no	no
Bedford	yes	ves	no	yes
Concord	ves	yes	no	yes
Holliston	ves		no	no
Littleton	,	yes	-	_
Stow	yes	yes yes	no no	yes
Townsend	yes	,	-	yes
	yes	yes	yes	no
Tyngsboro	yes	no	yes	no
Pepperell	yes	no	yes	yes
Lincoln	yes	no	yes	yes
Dracut	no	no	yes	yes
Framingham	yes	no	yes	yes
Weston	no	no	yes	no
North Reading	yes	no	yes	no
Boxborough	yes	no	yes	yes
Waltham	yes	no	yes	yes
Sherborn	yes	no	yes	no
Sudbury	yes	no	yes	yes
Belmont	yes	no	yes	yes
Tewksbury	no	no	yes	no
Westford	yes	no	no	yes
Ashby	yes	no	yes	no

Fig. 10: Groton and the Region – Engaging the Community

Criterion 5: open space protection

Remarkably, Massachusetts today includes more protected land than developed land within its borders.¹³⁸ This does not justify any relaxation of efforts to pursue further protection initiatives since large areas not yet developed, including many of the state's farms and forest tracts, have no long-term protection in place to prevent subdivision and residential or industrial development at some future time.

There are various forms of open space protection available to property owners and municipalities to inhibit development of specific properties, but there are only two that the State recognizes as strong enough to be considered *permanent* protection:

¹³⁵ List drawn from an informal survey by the State's Farm-to-School Project during the 2009/2010 school year. In its entirety, the state lists 192 public school districts and 77 colleges and private schools participating in the program. ¹³⁶ Source: http://www.mass.gov/agr/massgrown/csa_farms.htm

¹³⁷ Middlesex County entries have been verified at the town level.

¹³⁸ Comment by Robert Wilber, Chair Massachusetts Land Trust Coalition, at Massachusetts Land Conservation Conference, March 26, 2011.

- <u>Article 97 of the State Constitution</u> mandates that land acquired by a municipality for conservation or parkland purposes cannot be sold or converted to another use without a special act (by 2/3 vote of each branch) of the Legislature. Generally, any land held by or assigned to a local Conservation Commission is construed to be Article 97 protected.
- <u>MGL Ch. 184</u> provides the legal basis for creation of Agricultural Preservation Restrictions (APRs), Conservation Restrictions (CRs) and similar "public benefit" limitations in perpetuity. The approval of the restriction by the Secretary of the Executive Office of Energy and Environmental Affairs (or the Commissioner of Agriculture in the case of an APR) when the principal party is a government agency, reinforces the permanence of the protection in that further public input and a sign-off by the Secretary/Commissioner would be required prior to any change in status.

Figure 11, the accompanying table, compares the same towns as before, relative to the portion of their land area that has permanent protection as defined by the state standard, recognizing only protection afforded by MGL Chapter 184 (including APRs, CRs, PRs) or land falling under Article 97 of the State Constitution (Conservation Commission land).¹³⁹

The numbers shown may be somewhat skewed, in that they include state-owned properties such as the 500+ acre J. Harry Rich State Forest, which is not specifically covered under Article 97. They also may not fully represent ongoing efforts and activities of the host municipality or its citizens in protecting local open space.

The average portion of protected land among all 351 Massachusetts cities and towns is 24.39%, or just under a quarter of a town's area. The Middlesex County average, not surprisingly given its proximity to the metropolitan area, is significantly lower: 17.44%.

Hubbardston	42.75%
Townsend	32.23%
Sudbury	30.64%
GROTON	29.99%
Hadley	29.38%
Stow	27.32%
Harvard	26.41%
Falmouth	24.55%
Weston	24.43%
Templeton	21.25%
Northfield	18.91%
Westford	16.18%
Dunstable	15.92%
Monson	13.33%
Westport	13.33%
Littleton	12.41%
Lancaster	10.23%
Carver	9.65%
Hatfield	8.48%
Rehoboth	3.93%

** Groton is one of the towns that keep that average as high as it is: 29.99% of Groton is identified as protected land.¹⁴⁰

Having a percentage of protected land above 15% (above 25% in one category), gives a town credit points on the annual "Commonwealth Capital" assessment, and enhances the town's position in competing for many state-sponsored grants.

¹³⁹ Source: http://compres.env.state.ma.us/publications/MapGallery/permos_list.pdf. Information is current as of March, 2011.

¹⁴⁰ The latest Groton Conservation Trust map, published in 2010, states that "over a third of Groton" is protected land. This report does not attempt to reconcile the two figures.

Reviewing Groton in Context

Groton is part of an elite group among Massachusetts cities and towns. Whether compared against all towns statewide, or just against the more localized community of Middlesex County, the Town of Groton consistently appears among the leaders among municipalities working to support local agriculture.

Across the state, only 45 communities (13%) have accepted the CPA, adopted a Right-to-Farm by-law, *and* formed an Agricultural Commission: Groton is one of those communities. Within the narrower context of Middlesex County, Groton is one of eight such towns.¹⁴¹ Groton's zoning regulations encompass almost all of the options available under MGL Chapter 40A for tweaking the development process to encourage the preservation of open space for agricultural and other public purposes.

Almost a third of Groton's area is permanently protected land, under one or another form of town, state, or private stewardship; a substantial portion of that land is in use for agriculture, including managed woodlands. The Groton Conservation Commission, moreover, has been active in considering the allowed use of suitable land under its control for agricultural purposes, and has recently hired a professional forester to develop new management plans for its hundreds of wooded acres.

By all standards, Groton has not only been proactive in keeping its governing regulations current with developing trends in zoning, statutory authority, and local policy; but has outstripped the vast majority of other cities and towns in the scope of what it has implemented.



¹⁴¹ Dracut, Dunstable, Groton, Littleton, Stow, Sudbury, Westford, Weston

Quotable Groton: the town speaks out on agricultural land and responsibility

Underlying Groton's bylaws and its communal support of agricultural activity is a careful thought process carried out by the town's planning boards and committees and its citizens. Between 2004 and 2011 Groton produced an open space and recreation plan, a community preservation

plan and, most recently, a new master plan for the town. These were not stand-alone documents. They built on decisions and policy statements that had come before, at least as far back as the first master plan drawn up in 1963. That document discusses residents' concern to maintain the town's "rural character", a major element [of which] is certainly the large area of woodlands, orchards and fields – or what might be called "open space," – land which is not yet subdivided or developed.¹⁴²



Looking at the three modern documents, however, a clear statement emerges of communal respect for and commitment to agricultural pursuits and their benefits to the town. Following are significant observations from these documents that define the thinking of a town.

As Groton was working on the 2005-2010 **Open Space and Recreation Plan**, a questionnaire was developed, asking citizens to express their vision of Groton's future. The replies submitted gave a very clear statement of community support for preserving local agriculture:

- Respondents replied with a unanimous "yes" to the question, *Do you feel there is a need to preserve our open space and natural areas in Groton?*
- In response to the more specific question asking whether it was *important to preserve farmlands*, a large majority of respondents replied that it was "very important"; this positive response was exceeded only by a similar question regarding preservation of open space for water and conservation needs.
- A large majority responded in favor of State action to develop new property tax reductions on farms, forests, and recreation land.
- "Working farms" were the most favored selection for types of businesses desired for Groton, the runner-ups being grocery/food businesses and restaurants.
- Groton's three "most critical" problems perceived by the respondents were the overlapping issues of *loss of rural ambience*, *too much housing development*, and *loss of orchards and farmland*.

¹⁴² Eliot, *Master Plan*, p. II-5. It is interesting to note that a 1959 USDA analysis of aerial photos of Groton identified 800 acres of orchard in the town, as well as 28 acres of abandoned orchard.

• Should Groton *annually appropriate a percentage of the budget to acquire additional conservation land*? The "yes" answers constituted almost three quarters of total responses.

The plan which ultimately sprang from this and many other thoughtful inquiries spelled out the significant issues presented by the "boon and bane" of Groton's appealing landscape. While the issues remain, it should be noted that a majority of the plan's recommended actions to alleviate the situation have been accomplished or put into place.

- The Town's proximity to a growing regional economy is what threatens to compromise its character. [p. 1]
- Central to the development of the [Open Space and Recreation] plan is maintaining the Town's character (including agricultural landscapes)...The Town of Groton has a long history of successful open space preservation efforts... By acquiring and maintaining key land areas, Groton has continued to maintain its rural character while at the same time protecting its water supply, agricultural lands, and critical wildlife habitat and corridors.... With the increase in development pressures in the area, these continued efforts are imperative to maintaining the qualities that characterize Groton in 2005 and into the future.[p. 4]
- The attractiveness of its natural landscape is both a boon and a bane for Groton. As more people become aware of its resources, pressure for residential development of open land will increase.... Although the Town has done much to protect land for recreation and



conservation purposes, there is a substantial amount of developable private property that remains unprotected. The loss of these farmlands and woodlands will have a dramatic impact on the character of Groton. Critical to its future will be measures taken by the Town to preserve key areas, and in managing growth to keep the present identity of the community intact.[p. 32]

• Agricultural lands are one of two threatened resources that are most important to the character of Groton. There are thousands of acres of farmland throughout Town... which are in danger of being developed. If farming in Town continues to be an economically unrewarding profession, even more agricultural will be turned into residential housing. Many local farmers think farming is a viable profession in Groton, and are seeking more land to farm.[p. 70]

Groton adopted the Community Preservation Act in 2004. Over the next five years the community considered the potential impact of the CPA on community life, and developed a set of clear objectives, goals, and procedures, ultimately expressed in the **Groton Community Preservation Plan 2010**.

The portions of the plan which addressed Groton's agricultural character were quite straightforward, all moving toward the goal of *maintain[ing]* the working farmlands and forests of today and... increas[ing] the use of land for agriculture, horticulture, and forestry in the future.

There were two major recommendations concerning the role of the Community Preservation Committee concerning agriculture.

- To take an active stance toward protecting open lands [including agricultural lands] through cooperative efforts among land owners, not-for-profit organizations, the Town and the Commonwealth. [p.15]
- [To] support and provide incentives for the continuation of farming in Groton. [p.15]

Specific objectives to embody those recommendations included:

- To provide incentives for people to use their lands for agriculture. [p.19]
- To provide means for a property owners to receive a return on their farmland and forestry land investments while still protecting as much of the land as possible. [p.19]
- To avoid placing barriers in the way of activities associated with agriculture. [p.19]
- To increase awareness of Town residents of the importance of agriculture and encourage support of local farming efforts. [p. 19]¹⁴³



The most recent community statement which addresses local agriculture is the September 2011 updated <u>Master Plan</u>. The themes of the prior reports are carried forward, and the voice is more specific, identifying the economic importance of agriculture to Groton, and the financial importance of public and private support to sustain agricultural activities and lands.

- Existing farms contribute more than just a visual reminder of Groton's agrarian past. . They are businesses that play an important part in Groton's economy.... They are not simply open fields that provide bucolic imagery and scenic views from the road...[p. 159]
- An economically sound agricultural sector of the economy is critical to sustainable development,... Groton can strengthen this sector of its local economy through better agricultural policy, and also by encouraging residents to support and patronize local farms. Because farming in Massachusetts presents a number of challenges, large amounts of support both from local government and the greater community will be key to developing a sustainable agricultural sector of Groton's economy. [p.145]

¹⁴³ The Groton Agricultural Survey Project, of which this report is one component, is a direct result of this objective.

- Recognize that long-term viability of agriculture will require ongoing support from all levels of government, including local government, As land continues to become more valuable for purposes other than farming, it will eventually convert to new uses. ... saving farmland for agricultural use will require continued land subsidies: through public land acquisition, purchase of APRs and CRs and partnerships with non-profits in order to pool public and private resources. [p.33]
- Recognize that farms are businesses. Farm owners and operators cannot conduct business efficiently and profitably without local and regional customers and the flexibility to adapt their business practices to changing market demands. Efforts to ensure continued access to local sources of food will need to combine a focus on land preservation with the economic development recommendations... [p.34]
- Private initiatives, APRs, and conservation land leases to farmers have helped to preserve Groton's agricultural heritage. Beyond the economic and cultural value of farming, working landscapes also contribute to Groton's scenic beauty. Groton residents say they value local agriculture, and the demand for local, organic food sources is rising. New production and purchasing arrangements such as Community Supported Agriculture help farmers operate more profitable businesses. As fuel prices and demand for quality local food increase, small farms have more opportunities to thrive. Still, it remains unlikely that the value of land for crop production will be able to compete with its value for new development. Protecting agricultural lands as working landscapes will continue to require the involvement of town government and non-profit organizations. [p. 57]



Through its Open Space Plan, Community Preservation Plan and Master Plan the Town is on record regarding its vision of the desirable future for local agriculture. A methodology for achieving that vision has been proposed. It remains to be seen whether that methodology – or even a better one – can be implemented.

Groton's Farms and Farmers

During the past year this survey has compiled a great deal of publicly available information on farms, forests and those who work them. The survey identified 71 separate owners of working lands in Groton, many of whom own more than one parcel, some of whom are institutional owners such as the Groton Conservation Trust and the Town of Groton.

The Massachusetts Department of Agriculture defines a working farm as one which sells at least

25% of what it produces between June and October. For the purposes of this survey, "working lands" have been interpreted more broadly, with the intention of representing the wide range of farming and forestry activities in the town. In addition to traditional agricultural operations such as livestock raising and field crops, the

following are also included in the survey's definition:

- ♦ greenhouses;¹⁴⁴
- managed forest lands;¹⁴⁵
- properties that are otherwise non-agricultural, but with substantial hay fields.

Groton's master plan identified 2% of the town's 2009 work force as engaged in farming, fishing and forestry.¹⁴⁶ While that number of people may not be particularly impressive, the land area and land value managed by those people are.







- 5,265 acres, 24% of Groton's land mass, falls into the category of working lands.
- The working lands have a total real estate valuation of \$59,450,900.
- Of that amount, just under \$39 million is land value; \$20.5 million represents the improvements (primarily buildings) on that land.

What follows are two different ways to look at Groton farming today. A map of the town's working lands and open space is graphic proof of the large land area currently being used for agriculture or protected from future development, although it is important to note that the *agricultural areas are, in many cases, not protected*. The chart that follows the map is a summary outline of survey findings. Some multi-parcel holdings legally belong to a number of family members but are contiguous, such as the Stone and Black family properties, while other holdings are dispersed but represent the land investments of a single owner, including the Franzek properties and the seven holdings of the New England Forestry Foundation.

defined as 'business' in the state property tax code

¹⁴⁵ those with a forest management plan, including timber harvesting

¹⁴⁶ The 'fishing' inclusion is part of a standard labor category.

insert Fig.12: 11x17 Groton's Working Lands and Open Space 2011

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	Street Address of Farm	Owner	Farm Name	Acres	Date(s)	Products/ Animals	Special Notes
		Lindemer, Kevin/					
227	Boston Rd	Christine	Whitney Farmstead	17	1706	beef, apples	AgComlist; ch61A; belted galloways; stable lic.;
162	Common St	Smith, Ralph		30	1880	Christmas trees	tree farm across street
152	Broadmeadow Rd	Chace, Michael/Lynn	Five Oaks Farm	7.5	1820; 1912	horses	AgComlist; stable lic.
	Burnt Meadow Rd; Hoyts Wharf Rd; off Floyd Hill Rd	Bennett Black family		118	1930?	beef, hay, Christmas trees	AgComlist; ch61A Burnt Meadow & Floyd Hill; also ch 61A 64A wood & cropland on Hoyts Wharf
270	Chicopee Row	Janis, Stephanie	Chicopee Farm	31	1986	horses	AgComlist
495	Chicopee Row	Harris, Rosslyn (heirs)	Autumn Hills Orchard	83.6	n.a.	fruits	
13	Common St	Smith, Sally	Common View Farm	9.3	1780?	eggs, flowers	AgComlist; ch61A
109	Common St	Muehlke, Richard	Muehlke Family Farm	1.5	1848	Xmas trees	AgComlist; stable lic."pony, chicks, goose,ducks, peacock"
232	Common St	Souther, Ida/ Rollins		13.3			ch61A
65	Common St	Routhier, J. Paul	Fran-Leon Farms	19	1985	hay	
125	Common St; off Common St; 126 Nod Rd	Franzek, John		128		hay, cropland	ch61A;
20	Dale Lane; Worthen Drive	Gilson, Jodie	Gilson Greenhouses	34.5	2011	flowers, herbs, vegs, CSA; tree nursery	AgComlist; ch61A nursery
1	Dan Parker Rd	Flowers, Carl	Silveus Plantation	97.5	1722	Christmas trees, wreaths, honey	AgComlist; ch61A
73	Fairway Dr	Orchard Trust (Curry)		17.5	1996		ch61A
2, 12, 18	Farmers Row	Albert Stone Family		39	1833, 1933, 2000	hay	permanent CR on part of property
44	Farmers Row; Pleasant St	Lawrence Hmstd Trust	Lawrence Homestead	47	1797	hay, grazing land	11A pasture ch61A; permanent CR on most of property
	Farmers Row	Gunderson, Paul		76		hay	
518	Farmer's Row	Luther, David/Ann	Seven Pines Farm	3.7	1825	beef, pork, CSA	AgComlist
11	Fitch's Bridge Rd	Wilkins, Gary	Gary's Farm Stand/ Riverdale Farm	59		vegetables	AgComlist; ch61A; *signif holdings along Nashua R.
75	Floyd Hill Rd	Beal Brazer, Marcia & Normandin, Deborah	Baralock Hill Farm	68	1830		ch61A
79	Forge Village Rd	Harbaum, William	Willow Rock Farm	5.9	1957	poultry, horses, donkeys, goats	AgComlist; abuts GCC land
17	Higley St	Lawrence, Dana		6.2	1976		ch61A
9	Higley St/ off Peabody St/Farmers Row	Edward O'Neill family	Groton Fruit Farm/ Fairview Orchard	168	1975 etc.	fruit	AgComlist; ch61A; APR (3 parcels)
54	Hill Rd	Reilley, James F		76	c1760		ch61A
	Hill Rd	Nutile, Marianne		18			ch61A

Off	Indian Hill Rd	Est. Geo V Moore (& family)		75			31 A ch61A - 10 years
106	Kemp St, West Groton	Spiczka, Dennis		9	c. 1880	beef cattle, vegetables	AgComlist
18	Kemp St., West Groton	Petropoulos, Jack/Lynn	Wrangling Brook Farm	7.2	1987	beef, (pork), poultry	AgComlist
8	Lone Lane	Carter, Earl	Farley's Farm	1.2	1986	poultry, rabbits, llamas	AgComlist
61	Longley Rd	Radford, John/ Joan	Shepley Hill Farm	7.2	1835		
104	Longley Rd	O'Hara, Hilda		28	1857		ch61A
128	Longley Rd	Best, Valery	Mapleside Farm	43	1852	cropland, Christmas trees	ch61
129	Longley Rd	Eliot Realty Trust		15	1977, 2006		ch61A
145	Longley Rd	Tolles, Ramona (RaymondTollesTr)	Naumox Farm	23	1935	hay; horses; lumber mill	AgComlist; ch61A; stable lic.
245	Lowell Rd	Scarlet, Meredith	Scarlet Hill Farm	135	1776(7)	horses, boarding, lessons, cattle	AgComlist; stable lic.; permanent CR on most of property
368	Main St/ Higley St	Gilson, David	The Herb Lyceum	4	1838	herbs; greenhouses; restaurant	Lyceum at William Livermore barn, Gilson Family Homestead
134	Maple Ave	Shattuck family	Shattuck Farm	89	1840	hay, firewood	AgComlist; ch61A
125	Martins Pond Rd	Helen Trimper Inv. Tr.		76	1977	managed woodland	30A ch61
162	Martins Pond Rd	Pietras, Julia		35	1892		ch61A
196	Martin's Pond Rd	Gibbet Hill Farm LLC	Gibbet Hill Farm	98	[1750]	Angus beef cattle, hay	AgComlist
284	Martins Pond Rd	Willcox, Bill/ Susan	Windy Hill Farm	10.7	1962	pygmy goats, poultry, honeybees	AgComlist; ch61A
435	Martin's Pond Rd	Easom/ Cahen, Helene	Helene's Stables	15	1978	horses, instruction	AgComlist; ch61A; stable lic.
523	Martins Pond Rd	Corbey/Painter		10	c. 1940	sheep	ch61A; stable lic.
16	Mayfield Drive	McElroy, Dan	Groton Center Farms	81		eggs, vegs,	AgComlist; land behind Hollis St.houselots
90	Mill St	Greenlaw, Gail		7	1963	horses	AgComlist
135	Mill St	Tuity Irrevoc. R.T.		7.5		hay	
241	Mill St	Alcott, Ronald		4.2		hay	
150	Mill St	Smigelski, John/Laurie	Excalibur Farm	13.4	c. 1900	hay, horses, chicks	AgComlist; stable lic.
401	Nashua Rd	Mendenhall, Jeff/Linda	Hoff Mendenhall	10	1898	horses	AgComlist; ch61A;

66	North St	Croteau, Gerald/Joan		19	c. 1930	Christmas trees	ch61 managed woodland
122	2 Old Ayer Rd	Thomas More Fndtn	Puritan Hill Farm	34	c. 1900	horses, boarding, lessons	AgComlist; ch61A; stable lic.
284	Old Ayer Rd	MacGregor, Roy+ Peter	Maple Shade Farm	24.3	1850 / 1847	eggs, goats, hay, hay rides, wood	AgComlist; ch61A
170	Old Ayer Rd	Rosenberger Realty Trust	Hillbrook Orchard / John Crow Farm (current)	76.5	1791; 1914	cattle, sheep, ducks, geese, poultry, rabbits; meat CSA	ch61A; APR; meat CSA; aka Hillbrook Nominee Trust
433	Old Ayer Rd, Ayer	Smith, Rchd/Steven		2.5 in Groton			ch61A; pt. of Ayer farm
	Old Dunstable Rd	Stevenson, Brian		13		Christmas trees, firewood	ch61 - 5 years
	Orchard Lane	Brooks Orchard LLC	Brooks Orchard	191.5		hay	113 A ch61A as orchard, now worked as hayfields; APR
409	Pepperell Rd	Box, Jeff/Olga	Flower Box Farm	3	1790	vegetables, eggs, flowers	AgComlist
135	Skyfields Dr	Widmayer, Gus		7	1966		ch61A
328	Townsend Rd	Lyman, Brooks		102.5	c. 1920	hay	ch61A
65	W. Main St, West Groton	Risdon, Emmett	Sunflower Farm	8	1865/ 1873	sheep, vegetables	AgComlist; ch61A
94	W. Main St, West Groton	Blood, Elliot L. Jr.	Blood Farm	80.5	1835	slaughterhouse, wholesale meats	AgComlist
174	W. Main St, West Groton	Staehly, Linda	Herbs & Harvest	3	1934	herb and flower plants; horse(s)	AgComlist; stable lic.
186	W. Main St, West Groton	Loudon, Peter	Fantasy Acres Farm	2.5	1936	turkeys, chickens, eggs, garlic, pot pies	AgComlist;stable lic.
398	W. Main St., West Groton	DeCilio, Robert	Groton Nursery	17		veg plants (esp tomatoes)	
100	Whitman Rd/ 236 Old Ayer Rd	O'Neill family	Fairview Orchards; Groton Fruit Farm	122		apples	ch61A orchards
65	Wyman Rd	Jaillet, Carol	Journey's End Farm	3	1989	horses	AgComlist
21	Wyman Rd/ Meadow View Rd/ 53 Wyman Rd	Kirk, George+James	Kirk Farm	27	c. 1850; 2008	vegs, eggs, goats, rabbits	AgComlist; ch61A; stable lic.
1	Yvonne Drive, Pepperell	Frazer, Dawn	Sterling Riding Stables	12	1975	horses, boarding, lessons, chickens	AgComlist;stable lic.

	civic and non-profit working lands						
	Beecher, Bridge, Farmers Row, Higley, Kemp, Long Hill, Lowell, Martins Pond, Mohawk, Old Dunstable, Peabody, Pepperell	New England Forestry Foundation	incl. Groton Place, Sabine Woods, Wharton Plantation, Kemp Woods, Keyes Woods	1,055		timber; firewood; veg CSA on Higley (lease); Christmas trees on Peabody (lease)	all with permanent CR
	Farmers Row, Shirley Rd	Groton Conservation Trust		136		hay	permanent CR
182	Farmers Row	Groton School		45		hay	
	Jenkins Rd, Shirley Rd	Town of Groton		145.5		hay	CR
	Longley Rd, Townsend Rd	Comm. Of Mass.	Rich Tree Farm State Forest; Squannacook R. WMA	659+	n.a.	timber products	
	West Main St.	Town of Groton	Town Forest	497	n.a.	timber products	CR
	agriculture-related sites						
80	Champney St	Groton Grange #7	Groton Grange	0.5	1890		meeting hall
150	Chicopee Road	Town of Groton	Williams Barn	[93 A]	1840		restored 19th c. barn; interpretive site; Farmers' Market
	Jenkins Rd	Town of Groton	Hazel Grove Park	47.3	by 1900		28A Groton Fairgrounds; 19.3A Farmers and Mechanics Club site
	Town Forest Rd	(Town of Groton)	Poor Farm		19th c.		archaeological site

"A lifestyle choice": the farmers' perspective

Groton's agricultural status may be viewed in the context of other towns or suggested through its own public statements concerning significance and civic responsibility. It may be better understood through a review of the numbers of acres and range of products grown and produced in the town. But the issues that concern Groton's farmers are best expressed through their own words. Some of the concerns are personal. Many of them involve broad-based issues such as taxation. All are considered opinions, thoughtful reflections on agriculture and its place in their lives and the world today.

The following comments are offered anonymously, out of consideration for those speakers who were uncomfortable about public reaction to what they said.

Question: so how do you define farming these days?

Answer: "If what I sell is over 25% of what I grow from June through October, then I am a farmer. That's the state's definition, not mine."

<u>Issues</u>

The real estate tax system really penalizes the farmer. Taxes should be charged according to <u>current</u> use, not somebody's perception of "highest and best".

It's a real challenge to make money as farmers in Groton... [or] anywhere. We have to charge a premium on our beef and apples to cover taxes and insurance. Groton farmers are taxed on cattle as personal property; and on farm equipment too.





Massachusetts insists on charging sales tax on anything that is food for pleasure animals – so the commercial farmer has to factor tax into what he charges for hay, even though haymakers from New Hampshire can come across the border and get away without charging tax on what they deliver.

Potash to provide potassium currently goes for \$600 a ton – only enough to sweeten 10 acres. It may be possible to acquire potash from a biomass plant in Portsmouth NH, as a less expensive option.

I went to NWRA meeting once – one audience member asked – 'why don't you sell to DeMoula's or Donelan's?' – the small farmer can't compete on price with those guys.

Sometimes I think food purveyors say 'locally grown' just to say it, but a lot of their produce isn't very local.

I prefer to keep my business low-profile. No advertising, that kind of thing. Word of mouth brings in the best customers.

If you farm and you only have one crop you're suicidal. You've got to have a second crop....



Dairy farming these days is the surest way in the world to make a rich man poor.

One of the problems with CSAs is that, no matter how much you explain this is a way to <u>support</u> local agriculture, most members expect more, cheaper, and more variety of product than they could find at the supermarket.

Groton is not a farm-friendly town. Let's face it, nobody wants a farm in their backyard. All that dust, and noise....

Question: why does Groton need an agricultural commission?

The quick answer – "too many yuppies in town" complaining about equipment noise and dust and hours (at mowing time they may begin before sunrise to get the hay in). "The Right-to-Farm bylaw makes it a little easier."



Dust and noise ca. 1950: Bill Conley reseeding at Gibbet Hill

Everybody talks about rural character, vistas, "But the vista is a *byproduct* of farming." The estate owner who hires a farmer to rotary mow his land is *maintaining open space*, not doing agriculture. Their land is really 'passive agricultural land'.

You're never going to do anything to make agriculture profitable in Groton – at least not for more than a handful of people. Agriculture in this town is in transition from vocation to avocation – people do it because they are passionate about farming. So perhaps real question is how can we make it easier for people to do agricultural activity here?

- make it possible to use conservation land for agricultural purposes
- adjust Ch 61A legislation to be applicable to smaller parcels
- make rules more agriculture-friendly cf zoning laws

All good farm land in Groton goes to houses.

5-10 years ago there might be one CSA every 10 miles. Now there might be 10 in one mile. Everybody tries to have his niche though.

Poor business skills, divorce, and taxes. Those are the three things that make farms go under.

We don't want your money. We want less regulation. Every time we turn around there's something new.

We're getting older – middle aged now and our youngest is 17. Neither of the kids ever liked to work on the farm. What's going to happen to this place down the road?

I'm at the point that I can't do all the work. I need help and I'm not getting help. And that's why I'd like to find a successor to do the Christmas trees because it's a hitch. No one's going to get used to it overnight because it takes ten years to grow a tree.

No American would do what the Jamaican workers do, and if you do find a college student to work seasonal, it's only one season and every season we have to train new people to drive the trucks, work the farmers markets.

It's hard to get help - hard to find good laborers and hard to afford them.



Ruminations

Brownloaf Hill was owned and farmed by John Gay, who kept pretty much the whole hill mowed with a horse and a 4' cutter blade just because he liked it that way – didn't even use it for pasture.



I don't know why anyone would go into farming today – you work harder, work longer, work faster just to try to stay where you were five years ago. {Why did you go into farming then?} Because it was my husband's choice of occupation.

One-season farming used to be enough, a living, but not any more. The price of everything has gone up so much. For 16 years I could make a living on a 14- to 16-week season, wholesaling, but especially with the rise in fuel costs I can't do that anymore. I could go back to teaching, or being a librarian, but I really like doing this, and I think it's important.

There's a lot of relying on one another [among Groton farm people].

Trading work, helpers in emergencies is not even a question. It's just 'what can we do to help?'

(about meetings) You don't want to get a whole bunch of farmers in the same room if you don't know where the exits are."

"This is what I want to do," she says. "It's a lifestyle choice."

X. A Look to the Future: sustaining agriculture in Groton

To preserve "open spaces" in and around Groton, many public and private agencies will have to work together. Existing and previously proposed open spaces fall within the jurisdiction of Federal, State, Town and Private organizations. Tools for further action also are available to different agencies and groups.

Charles W. Eliot, *Planning for Groton*, 1963

Town Forest Road, Groton Memorial Forest



Thinking today about tomorrow

A recent Mass Audubon study found that, in the 14 years between 1985 and 1999, Groton lost 1.6% of its agricultural land and 5.4% of its forest to residential development.¹⁴⁷ Shortly after those statistics were released, the economic convulsions of the 21st century and subsequent falloff in the local economy occurred just in time to temporarily ease the threat to Groton's remaining undeveloped land. As housing starts, mortgage availability, and regional job opportunities all declined, a planning opportunity arose that will not be available indefinitely. At best, it is a short breathing space without the usual pressure for conversion of farm land to residential development, providing a brief hiatus during which the whole town needs to plan for the future of agriculture and agricultural lands when the economy revives. In New England, that revival has special relevance to farmers and land managers.

In the Fall of 2010, the Groton Grange sponsored a presentation on legal issues related to agriculture. As a sidebar to his principal themes, Attorney Francis DiLuna remarked upon the growing expectation that, as climate change progressively disrupts weather patterns and water supplies across the country, New England - with advantageous water and soil resources - will increasingly become an important source area for farm products.

¹⁴⁷ Breunig 2003, p. 7-8.

Seven years earlier, a "Citizen Panel on the Future of Food in New England," created by the University of New Hampshire, began studying the whole spectrum of New England's agricultural issues. Their conclusion, even then, suggested the same likely course of events.¹⁴⁸ We are not, therefore, looking at the last days of farming in Groton. The escalating importance of agriculture in the northeast is not a fleeting notion, but a growing concern.

Based on that premise, the two most critical pro-agriculture actions that need to take place in Groton and the rest of New England over the next twenty years are to:

1. Curb permanent loss of viable agricultural land to development;

and

2. Sustain the farmers and foresters who keep the land active;

A third agricultural stimulus, consistently mentioned in Groton's master planning from its beginning in 1963, directs municipal efforts to actually:

3. Expand the amount of land used for agriculture.

Municipal management I: coordinate and act

While Groton's public documents and anecdotal comments from the Town's farmers are very much in agreement regarding desirable goals and existing issues, the individual farmers or agriculture-related groups also have their own particular goals and/or narrower interests.

It is imperative that Groton create an organized structure for addressing and resolving issues associated with agriculture. All the pieces of the puzzle are on the table, but there is no one entity whose role is to sort them out, put them together, and create the proverbial "big picture."

- Logically, the Agricultural Commission would appear to be in the best position to fill this central role. It is a Town agency, with direct access to the Board of Selectmen, the Planning Board, and all the other Town entities which interact with agriculture on behalf of the municipality.
- The Agricultural Commission, by by-law, has not been merely *authorized* to interact with other Town boards; it has been *directed* to do so. Accordingly, it can be a pro-active partner in decision-making, seeking to dissuade those other boards from developing any regulations or procedures that might be obstructive or counter-productive for agriculture.
- It might be helpful to have a co-partner performing the central role, particularly if the second party is from the private sector, such as the Grange or the Groton Conservation Trust. Alternatively, the Sustainability Commission might fill the partnership role.

¹⁴⁸ Further information is available from the University of New Hampshire at 603-862-4088.

Whoever may ultimately be agreed upon as the central coordinator, *actions to be quickly initiated* should include:

- Development of a clear set of specific <u>goals</u>, <u>ideally constituting a series of small</u>, <u>but</u> <u>achievable steps</u>, with particular attention to the recommendations of the 2005 Open Space Plan (or its successor, currently being drafted); the 2010 Community Preservation Plan; and the 2011 Master Plan (currently in draft form). The existing Community Preservation Plan is a fine example of a strategic action plan, and could be profitably studied as an example.
- 2. Review the lists of desirable properties to be acquired or protected ("critical lands"), that may have been developed by groups such as the Conservation Commission, Historical Commission, Water Board, Parks and Recreation as well as the Land Trust, for completeness and information updating. Perform as complete a prioritization study as possible, resulting in a <u>ranked list of desirable properties</u>. Special attention should be given to parcels under Chapter 61A, given the Town's time-limited opportunity to intervene in a sale, should an owner decide to sell or convert the property.
- 3. <u>Strengthen available public-private partnerships</u> to preserve farmland through purchase of APRs and CRs.
- 4. Develop partnerships with organizations such as the Groton Conservation Trust to <u>raise</u> <u>funds to purchase development rights</u> on farms, or to assist a farmer in the restoration of historic farm features, in return for which, the owner's obligation would be the <u>donation of</u> <u>a preservation restriction</u>.
- 5. Work with the Community Preservation Committee to ensure that all possible consideration will be given for <u>funding open space and historic preservation through</u> <u>CPA monies</u>.
- Encourage expansion of the current "Groton Farms" <u>signage</u>, as well as investigating possible use of the State's local-points-of-interest highway signage for Groton's farms, either as a group or individually. The town of Berlin has posted signs at entry points that read *Berlin – a Right to Farm community*. Develop bumper stickers or window decals supporting local agriculture.



- Review the Land Fund, the Conservation Fund, and any other town account which might be tapped for land acquisition, to see if there are any roadblocks within their governing regulations that could be eased to simplify their <u>availability for land title or protective restriction acquisition</u>.
- 8. <u>Maintain contact with the Finance Committee</u> and the Capital Expenditures process. Town funding may be in short supply, but occasionally, some funds do become available. When that occurs, the agricultural coordinator should be a ready, familiar contact to make a case for application of that funding to agricultural projects.

- 9. Encourage <u>broader participation in the state Farm-to-School program</u>, both on the part of farmers and involving the Groton-Dunstable School District and Lawrence Academy.
- 10. Encourage every farm to make itself visible via a website whether it be an individual site, or a collective site (ideally established as part of, or as a link to the Town website).

Creation of such an <u>"agricultural homepage"</u> would be an excellent undertaking to be performed as a High School project, utilizing the competent expertise of the students, while helping educate those participating regarding local agriculture.

11. Make a concentrated effort to <u>expand Groton's</u> <u>Farmers Market</u>. Farmers in town whose products do not readily adapt themselves to market sale due to seasonality (Christmas trees or spring plants) or type (hay, meats), would benefit from an advertising display within the market circle.

Municipal management II: across the board(s)



Hand in hand with the work assigned above to an agricultural coordinator in Groton, must come a broader

involvement on the part of many local government entities in a municipal effort develop a townwide pro-agriculture mindset. It is imperative that a large majority of Groton's residents understand and identify with the challenges of the town's agricultural community, in order for farmers to have broad municipal support for legislative change.

Many of the actions described below may seem too little to make a difference of themselves, but actions ranging in scope from very small to all-encompassing, when taken together, will improve the <u>stability</u> and <u>visibility</u> of Groton's agricultural sector.

- Assessors records should ideally reflect that land in active agricultural use is not simply "vacant" land, as identified by the State. While the terminology is understandable as meaning "undeveloped", the land is actually fully occupied by useful plants or animals. It should be possible to distinguish between "vacant" and "vacant-agricultural" or simply "vacant *" with an asterisk. This would signal to a potential developer or an interested citizen that agricultural property is not just land lying begging for someone to do something to it.
- The <u>Planning Board</u> should amend the language of its zoning regulations to include specific definitions of "farm" and "agriculture", compatible with the present language in Groton's Right-to-Farm bylaw.
- The <u>Conservation Commission</u> should make every effort to continue identifying parcels under their management that are appropriate to lease for agricultural use. This includes forest lands such as the Town Forest. The Commission might benefit from consultation with the town of Weston, which partially offsets the cost of forest management by sale of timber and firewood. The New England Forestry Foundation, with over 1000 acres of woodland in Groton, could be a valuable planning partner.

- The <u>Historical Commission</u>, as lead sponsor of the present survey, should make every effort to widely disseminate the information in it. Forms of public outreach need to include:
 - o posting of the survey report on the Town website;
 - distribution of the accompanying Farmer's Reference to every Groton agricultural enterprise;
 - working with local publications, especially the Groton Landmark, to publish appropriate general interest sections, such as farm profiles or interviews (with permission);
 - consideration of publishing the entire report in book form;
 - adaptive reuse of the exhibit developed during this project, for display at other public venues including the library, schools, the senior center and town hall;
 - working with The Groton Channel to develop or to fund development of a feature program based on the photographs compiled for the project exhibit.
- The <u>Historical Commission</u> should consider developing a "10 Most Endangered" list of Groton's heritage farmlands, taking into consideration not only present working lands such as the Franzek parcels, but also historic agricultural properties such as Elmwood Farm, 446 Boston Rd, and 193 Chicopee Row. This list would also provide input to other boards for the town's list of desirable parcels to purchase or protect.
- The <u>Historical Commission</u> should also consult with its historic resource survey consultant, Sanford Johnson, to determine whether unprotected agricultural resources have been thoroughly documented, including secondary features such as outbuildings, stone walls and landscape elements.

Preservation of agricultural landscapes means preservation of the farming activities; otherwise, it simply is the preservation of land as open space. There are instances in which changing technology sometimes requires modifications to existing farm structures, or the addition of new ones. It is important to know what the features of an agricultural setting are and which features the community treasures in order to make a case for preservation of these settings.

Action beyond town borders

Many of the issues raised by Groton's farmers and citizens are larger than Groton, and cannot be resolved at the local level. Local farmers – ideally as a group or through a spokesman such as the Agricultural Commission – need to join with broader-based groups to pursue issues such as tax code amendments, further reduction of the Ch 61 parcel-size requirements, reclassification of greenhouses as "agricultural" rather than "business" property. Such larger entities, all of whom participate one way or another in state and national lobbying efforts on behalf of agricultural interests, include:

- Farm Bureau
- Farmers Union
- Small Farm Institute

- Freedoms Way Natural Heritage Corridor
- Montachusett Regional Planning Commission
- The Trustees of Reservations
- New England Forestry Foundation

Section II of this report, the *Resource Guide for Local Farmers*, lists a large number of additional organizations, lobbying groups and other resources that work to advance the cause of New England agriculture in general, and farmer-specific issues in particular.

Engaging the public

Just as all issues cannot be settled at the local level, so some forms of support need to come from private citizens' groups and individuals. The best stewards and advocates for protection of Groton's working lands are members of the community. There are many ways to communicate the importance of these special places to the public, and to connect their preservation with the shared values and goals that community members have already expressed in various planning documents and forums.

The Grange, the Williams Barn Committee and the Groton Conservation Trust might take leading roles in developing some of the public engagement opportunities cited below. Others might be introduced by or through Groton's schools. Whatever non-governmental organization may be the driving force in spreading the word that Groton continues to be a farming town, it is important to maintain timely communication with the town's "agriculture coordinator" (as recommended above) or the Agricultural Commission so that entity can continue to function as central clearinghouse.

Think creatively about how to educate the community about the values and threats to working lands and to their farmers, as well as how each town resident benefits from these special places. Use a combination of strategies to get the word out about agricultural landscapes and preservation of community character, including:

 Festivals and Tours – Tours are a great way to draw attention to the history around us, and to engage more people in caring for it. The Barn Tour cosponsored by the Williams Barn Committee and the Public Library is an example of a tour with enduring success – the accompanying tour booklet was quickly out of print and is still in demand. Groton Fest in September illustrates how festivals draw people of diverse interests together and



provides a broader potential customer base than even farmer's markets. Make sure events are well publicized.

 Signage and Banners – Signs are a very effective way to repeatedly draw attention to places and activities. Banners can also bring attention to the significance of farms or their products and make a celebratory statement about their contribution to the town. See comments above about signs.

- Written Materials Clear, concise and engaging written material with engaging illustrations is a reliable way to convey information about farming, forestry, and their connection with community character. Make use of fact sheets and flyers to get the word out on particular issues such as a town ordinance that protects heritage landscapes, a threat that needs to be addressed, or an upcoming event.
- School Curricula Start teaching at a young age. Children are very receptive to engaging stories, and there are no better stories to excite children's imaginations and build pride of place than stories of their town's past and present. Teachers have an opportunity to connect history with environmental issues, farming with economics, landscapes with land uses through classroom study, hands-on projects, and field exploration of the town's farms and forests. Subsequently, students have an opportunity to teach their parents that preservation of agriculture is everybody's business. In Groton, the presence of private schools that draw students from other towns and regions provides additional 'bang for the buck" families well beyond the town's borders will become aware of Groton's agricultural riches and, hopefully, some of the challenges that need their support.
- Lectures and Workshops Use these forums to raise awareness, educate at a deeper level about Groton's agricultural history and its present resources, and broaden the base of interest. A very successful recent example of this was the recent talk on legal issues in farming by Francis DiLuna, cosponsored by the Groton and (Pepperell?) granges, which packed the house.
- Website Make sure that Agricultural Commission, Historical Commission and local organizations' entries on or linked to the town's website are current, and include information about issues, proposals for preservation strategies, and upcoming events.
- Media Coverage Use all avenues including press releases and local cable access to keep the public informed about topics and events. Work with local reporters to develop special interest articles that highlight Groton's farms.

Remember that bringing an issue or a heritage landscape to people's attention once will have only short-term effect. *Outreach, education and interpretation must be ongoing concerns that involve preservation and conservation interests, teachers and community organizations in repeated projects to attract and engage the general public in the future of Groton's farms and farmers.*

Where does a farmer turn...?

While the support of municipal government and local community for agriculture in all its branches is vital to the continued success of farmers and farming in Groton, many questions and issues can only be addressed by land owners or land managers themselves. Over the past year, the Groton Agricultural Survey project has gathered dozens of sources of information and assistance for local farmers, on a host of topics. Some sources are very specific, such as the Massachusetts Beekeepers Association. Others address an extensive range of farming concerns, farm sizes, and geographic regions, like the USDA.

Rather than reinventing the wheel by attempting to thoroughly describe each organization and project here, the Agricultural Survey has organized summary descriptions into a separate binder.

Section II: Resource Guide for Local Farmers is designed as a handy reference for beginning and long-time farmers. It provides contact information for resource organizations whose primary mission is support, guidance, or assistance in some form to the agricultural community.

It is intended that the Guide will provide immediately useful guidance when you're facing the question: where do you go when you have more questions than answers? It is our hope that the agricultural community – both in Groton and across the region – will supplement and update the Guide as needed in the months to come, developing a reference which grows and changes as new questions arise and new expertise is developed to address them.



Conclusion

When the authors of this report began exploring farming and the agricultural infrastructure of Groton, it was with some trepidation. There was a lot of information already out there, a lot of public attention already directed, a lot of governmental recognition in evidence. The project's dual focus however, combining historical perspective with investigation of agriculture's current status in town, required a new way of looking at information and new expectations of what needed to be known.

How many farms are in Groton? How many were there a hundred years ago? 200 years ago? And how is a "farm" defined, anyway? What has changed in Groton's agriculture? Is anything the same?

The historical perspective of this report presents a different way of looking at Groton's land and its people. Agriculture and land stewardship have been driving forces throughout the town's history, motivated by different causes and influences at different times, but with the same long-term effect of maintaining a vital agricultural presence up to the present day.

When it came to writing about Groton's farms today and recommending ways in which the town could secure a future for its farms, farmers, and farm lands, some of the same trepidation returned. A look at Chapter IX, the 2011 status report, quickly shows that so many of the right steps have already been taken. The community, either corporately or privately, has:

- established an agricultural commission;
- approved a right-to-farm bylaw;
- instituted farm-friendly zoning regulations;
- applied Chapter 61A tax abatements;
- adopted the CPA;
- supported the use of agricultural preservation, conservation, and historic preservation restrictions to protect farm lands;
- protected hundreds of acres through outright purchase;
- emphasized the value of agriculture to the community in planning documents;
- established a farm education center and a farmer's market;
- promoted local agriculture through signage and tours.

What was left to say?

Groton does not need substantial further bylaws or bylaw revision. It does not need additional committees to implement the bylaws, regulations and public efforts already on the books or underway in support of agriculture and farmland preservation. These tools are already in place. It does need to learn to "think farming". Going forward, Groton needs to develop its agricultural awareness, from recognizing the farmland that is its heritage, to hearing Groton farmers' points of view; from considering agricultural benefit when planning land uses, to allocating committee time and funding.

The positive efforts need to be sustained or implemented. The implementation needs to be coordinated. The farmers need to speak up and to keep a weather eye.

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APPENDIX



Conversations with Groton Farmers

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The following material was collected between November 2010 and June 2011, through a series of conversations and interviews with Groton farmers, as part of the Groton Agricultural Survey. Some of the interviews were taped and transcribed with the equipment and staff support of Freedom's Way National Heritage Corridor. Other interviews were summarized as "profiles" or "conversations". All of the following have been reviewed by the interviewees and adjusted for errors and omissions.

Elliot L. "Barney" Blood Jr. Blood Farm 94 West Main Street, Groton

Transcribed conversation between Barney Blood, Electa Tritsch and George Moore, April 28, 2011.



Three generations: Matthew James Blood, Elliot L. Blood Jr., Richard Elliot Blood, 2009

[chat about setting up tape recorder; settling down]

Electa: Okay, so I do know something about the history of the Bloods in this town and I discovered just recently something that you may or may not have known. You know before the town was actually settled there was a trading post here, run by a man named...

Blood: Tinker

Electa: Tinker, yes, right.

Blood: John Tinker.

Electa: Right. It turns out that Richard Blood bought Tinker's land and his house.

Blood: Well I didn't know that.

Electa: How about that? In 1661, or around then. So he took over that original trading post. Blood: I didn't know all that.

Electa: There. That's my contribution.

Blood: You came to me for information, and you're giving me information over here.

Electa: I just wanted to do a little tit for tat here, that's all. So... You started to talk about your family here in town and I didn't want to stop you, except I wanted it on tape. So, if you want to keep on going, that's fine.

Blood: I almost lost my train of thought.

Electa: Okay

Blood: I was telling you that I'm a direct descendent of Richard Blood. And this house was not built by Bloods, it was built by a Mr. ... Graves.

Electa: Graves. Ah! Ezra.

Blood: You got it right.

Electa: That's because I was doing my homework this morning. Do you have a history of your family?

Blood: Pretty much so, yeah. And I've got a history of the town of Groton. I went to a party one time they had at the Groton Inn, probably 50 years ago and I sat next to a man and we got talking and I said, "What do you do?" and he says, "I own a rubbish business." And he says,

"You know what? I picked a book up out of the rubbish about the town of Groton." And I said, "Do you want to sell it?" and he said "Nope. But I'll give it to you." It was in awful shape, but my wife sent and had it done over. 'Course I've heard it a dozen times

Electa: There's a lot been written on Groton, I was impressed to find.

Blood: I was born in the same room my father was.

Electa: Oh, that's wonderful. That's special!

Blood: Across the street...

Electa: Across the street?

Blood: Yeah, this house over here where Brian Legasse...[lives] My grandfather built that.

Electa: Now who lived *here* then?

Blood: Well my..

Electa: At that time?

Blood: Well, that time, my great-grandfather.

Electa: Lived at 94 West Main?

Blood: That's right. Number 94. Well it was just 94 Main Street, West Groton.

Electa: So then your grandfather built the house across the street.

Blood: Yes.

Electa: For your father, maybe?

Blood: For his bride. And I've got the letter, the original letter that my grandfather had written to my grandmother proposing marriage.

Electa: In a letter? Not in person?

Blood: Uh-huh, in a letter, and how he'd met her is interesting. My grandmother worked for Mrs. Lewis in Lexington and they were coming with a stagecoach and they were going up to East Jaffrey. And they stopped to water the horses and my grandfather was coming up—I don't know how my grandmother described it—but, anyway he was walking up by the road, just hunting a woodchuck and he talked to my grandmother. And uh, I guess they started writing and next he went down to visit her and as time went on they got married.

Electa: Wow! Well, they must have hit it off.

Blood: I would think, I would think. And of course I remember my grandmother and grandfather too. He was a dairy farmer. And he did...

Electa: Now, wait! Hold on, I've got to get this straight. Your grandfather was Charles? Is that right?

Blood: C.E.E. Blood.

Electa: Right, C.E.E. Blood. Thank you.

Blood: I've got a calendar, wait, uh, what's that say? Aahh, [reads] 1931...C.E.E. Blood.

Electa: I've seen his name on a map from that period.

Blood: Oh, I'm sure.

Electa: That makes sense, Ok. So was he a big dairy farmer, ...

Blood: Well, no, uh, I think he had at the most 12 milking cows.

Electa: Oh, ok.

Blood: And he has to sell the milk and that's before they pasteurized of course. Electa: un-huh?

Electa: I was just writing about James Lawrence the other day who, let's see, he lived until about 1920, I'm not sure when he actually died. But he had something like 55 milking cows and 70 other cattle. It's just an amazing herd for this area.

Blood: I didn't know them before, but I've heard the name. I know he has a son and a grandson. Electa: Right, but I don't know anything about them yet.

Blood: Well I don't know anything but the name, that's all.

Electa: Now, I was trying to do due diligence here – that's hard to say - and I looked in the assessors records for information on your property and it says you have, I'm just confirming that this is right, you have seventy-eight acres?

Blood: Left, yep.

Electa: In this part of it.

Blood: Yep. And I sold a hundred acres to the West Groton Water.

Electa: Ahhh, so that's down some road or other...where Newell's Crossing is?

Blood: Yep, that's right, and I remember when that was a station there and the train came. Electa: Really?

Blood: When I was a youngster sometimes, now I

don't know, I can't imagine wasting a penny, but I put it

on the track and let the train run over... [chuckles]

Electa: That's not a waste, that's art.

Blood: Ha-ha, I know.

George: Did the train pick up milk?

Blood: Uh, if it did, I don't know. My great grandfather raised hops.

Electa: Ok...

Blood: And he used to put the hops on the train and went to a brewery up in Nashua somewhere, now I don't know where it was.

Electa: You're great grandfather, wait, I've got to go back...

Blood: He died in 1919.

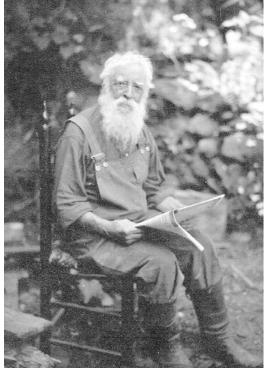
Electa: Edmund, died 1919. Thank you. So he was one of the hops raisers? Because your great-great grandfather did too, according to somebody or other. That's late for him to be raising hops! Interesting. Wow.

Blood: Before my time.

Electa: Really?

Blood: [laughs]

Electa: Ok. So, hops went on the train to a brewery northwest of here. Or north of here.



great-grandfather Edmund Blood ca.1910

Blood: Yes. It went to, I think Nashua.

George: That's that line right there, Barney? When did they tear those tracks up? Blood: Thirty-five years ago, maybe longer. You know, time goes. I'm eighty-eight, and I'll be talking to someone and I'll say how's your dad and they'll go, "well, he died in 1949." [Everyone laughs]

Blood: I was selling a goose one time and this lady said to me, "Well, are they old?" "Old goose?" I said to her, "I don't know, it was something my father had."

"Well when did your father die?" And I said "Oh, 25 years ago."

Electa: Did she still buy it?

Blood: Well, you know, she knew I was kidding. But I didn't know how old the goose was!

Electa: So, do you actually raise livestock?

Blood: Yes, we have feed lots, I feed a few and I keep a few pigs. I always try to have over 15. Electa: Why?

Blood: You tell her, George.

George: That's the limit.

Electa: 15? So you're just trying to make life difficult for George, you're saying?

Blood: No, no, I wouldn't make it difficult for George because I like him.

Electa: [chuckles] Besides, he's an inspector.

George: Yeah, right!

Blood: But, uh, [l'm] grandfathered. Sometimes I might have a hundred pigs on the farm for two days, you know, in the cooler hanging.

Electa: Oh, that makes sense. So are you saying 15 slaughtered pigs or 15 live pigs?

Blood: Well, they would be alive...

Electa: For a while?

Blood: Then be slaughtered.

Electa: Okay. One has to come from the other...

Blood: Then processed into hams and bacon and whatever.

Electa: So you do the whole process from start to finish here?

Blood: Yes.

Electa: And then end up with head cheese?

Blood: No, no.

Electa: I bet there's not a big call for head cheese these days.

Blood: No, no. Years ago I can remember eating it. I think my grandmother used to make it as I remember.

Electa: Really?

Blood: Always had head cheese.

Electa: I've seen it the deli cases.

Blood: Yeah, it's got a lot of spice to it, but I like it. But it's not a big seller.

Electa: I could imagine that.

Blood: Not a big seller.

Electa: What, what is? If you could point to one product that's your biggest seller, what is it? Blood: Well, it's bacon and ham – gosh, now I think I'm being examined by the Internal

Revenue.[chuckles]

Electa: No, I promise.

Blood: I tell it like it is and I pay my taxes. Uh, ham's probably the ... I don't know how many we sold. I know it was over 500.

Electa: Wow. And that's from here, right? Right out of the store?

Blood: Most hams, the pigs were not all slaughtered here. We have to buy hams, and then smoke them.

Electa: Okay. So you have a big smoke house? Or, well a sizeable one?

Blood: Three ovens.

Electa: And how many hams does an oven hold?

Blood: Well, I've got three ovens and they hold, depending on the size of the ham: the big hams -20, and the small hams -50. And we'll do about 60 a day.

Electa: So it takes all day to smoke one?

Blood: Well, usually they'll do it at night. I have a girl that works for me and has been doing it for probably 20 years. They'll put them in late in the afternoon and by the morning they'll be cured. Electa: What do you use for smoking?

Blood: I'll tell you, we use sawdust.

Electa: That must be hard to find.

Blood: No, it is not.

Electa: The right kind?

Blood: I get that question a lot. I just go right to the phone and I order, go to Lowell and get it. Electa: Oh, ok.

Blood: And I like... we use maple and hickory sawdust. So it's not a chemical.

Electa: Who was it we were talking to, said it was hard to get sawdust? For... for bedding? Blood: Probably sawdust for the farmers for bedding ... yeah.

George: yes.

Blood: Well, this is a different thing. They make, uh, sawdust. Well I don't know what else they do with it. I know that I've been down there, to Lowell to get it. But I haven't been for 10 years where people work for me go and get it. Because you know...

George: I think they're making wood pellets now for the pellet stoves.... I get [my sawdust] from Parlee [Parlee Lumber, Littleton, MA] and I'm on good terms with them so they call me when they have a load and I'll go down get a load. But um, that's soft wood, that's pine. [man walks past]

Blood: That's my son from West Groton. He went to the Lawrence Academy, graduated from there and went to the University of New York. I never thought he'd be back here.

George: Yeah? Your other son is out in New York?

Blood: Yes, a dairy farmer, the most horrible business you can be in. It will make a rich man poor.

Electa: Dairy farming? You mean no matter where? I thought that was [true] just in New England.

Blood: No, it's bad. The price of grain and the price of milk are so out of whack.

George: Well, Rossback just went out of business

Blood: Yeah, I know he did.

George: And he was saying that it cost him \$16 to produce a hundred-weight and he was getting \$12.

Electa: Oh, that's crazy.

George: You can't do it, you can't do it.

[another man walks in]

Blood: This is my son Richard.

Richard: Hiya.

Electa: Hello.

George: Electa Tritsch, she is interviewing your dad for – actually he might have another career. Richard: Oh?

George: As a historian.

Richard: Oh... ok.

Electa: Yeah, that's right, a historian.

[Blood and Richard chat; Richard leaves]

Electa: Um, so you say you were surprised he came back here?

Blood: Very, very, and his ex-wife is in the other room doing bookkeeping for me.

Electa: That... could be... challenging.

Blood: But she works for me. I don't like her; I love her as my daughter-in-law.

Electa: Yes. How many people do you have working in total?

Blood: Well, the most I've had is twenty-two.

Electa: And is that recently? Or....

Blood: No, no, that was a few years back. I guess I have probably about twelve on the payroll now.

Electa: And are they mostly full-time or mostly part-time or ...?

Blood: Well, I have some part-timers. Ayuh. Ayuh. It's hard to find what I call them, "old-time meat cutters". They know how to cut – swinging meat. Swinging beef would be the hindquarter and the forequarter.

Electa: Okay.

Blood: The beef would be broken down into prime cuts from a steer. It's got to be broken down. Electa: That makes sense.

Blood: Yep, and the "new meat cutters" as I call them, know how to open up a box and cut it. Electa: Ah, I got it. That makes sense. So starting from scratch, in other words?

Blood: Exactly. Exactly.

George: You've got a lot of people who have been with you for many years.

Blood: Oh, Tom Payton has worked for me forty years.

George: And Alan?

Blood: Well, Alan, left and worked for the Internal Revenue for twenty years and then he retired and came to me and said "I'd like to come back to work for you." I said "You got a good pension," and he says, "Oh, well I just want to do something." And as nice a man as I ever knew, George. If you left your pocket book out there and your name was in it, you'd get it back as it was. He doesn't need to work, you know, he gets a pension and lives alone. I can tell you, I could be upset at something and I'll go with him in the truck and in ten minutes I'm laughing. That's just the kind of a fellow he is.

Electa: That's a special talent too. That's very rare. So, do you find that there are younger folks who are interested in getting into the business?

Blood: Ayuh, a lot of them are until you tell them it's time to clean the pen.

Electa: [chuckles] Right, which is part of their...

Blood: that's right...

Electa: They just came to do the cutting, not the cleaning the pen.

Blood: But the real good meat cutters, you can't afford to have them cleaning pens. They've got to be cutting and producing.

Electa: Right, I would think so. So this is highly skilled. It's a well-paid job as well, as jobs go? Blood: I pay them as little as I dare. [Chuckles] No, I don't. No, I'll go and I'll hire someone and I'll start them off on something and say now if you can produce and know your business, there's room for more pay. And I try to be good to them all. We're under a strict rule here, by the Department of Agriculture. You can't believe the paperwork. It is unbelievable, unbelievable. And the inspector, I've had him for years and we have a meeting every Wednesday and he says, "Well, my big problem this week is that I saw someone smoking." I said, "Someone smoking when they were cutting meat?!" "No, no. They were smoking with a white coat on outside." I know, you're going to say why.

Electa: I wondered, yes.

Blood: Well, because, smoke could get on...

Electa: the coat.

Blood: the coat.

Blood: Well 'course I don't smoke. I did years ago. Came home one night from a selectmen's meeting and opened up a package of cigarettes and we lived in the other house. My wife would always wait up until I got home. She wanted to know what happened and might have a snack or something. And she says, "You opened up another package of cigarettes." She said, "I was watching Kate Smith" – You probably don't remember....

Electa: I do.

Blood: She said, "Some doctor on the program today said smoking was bad for your lungs." She said "I wish you'd stop." I threw that package away and I haven't smoked since.

George: That was it?

Electa: That's true love, that's what that is.

Blood: I was at the meeting one time and I had an accountant and attorney in the other room and the attorney said, "Barney, where's your ash tray?" And I said "I have no use for one. We don't smoke in this house." And he had to go outside and smoke and I thought well there's a man who graduated from Harvard College and he doesn't know enough to throw that damn cigarette away.

Electa: I was talking to the Lindemers earlier this year and they said that they bring their belted Galloway's over here to...

Blood: Oreo cookies! I know them. Nice people.

Electa: Do you do a lot of your business for private clients like them?

Barney: Yes, yes. All over New England.

Electa: Would you say the majority of it?

Barney: You know, uh... I don't know that, that would be hard for me to say. Now at Easter time we kill probably 150-160 lambs and they were all mine. But other times in the year, [like] in the fall we're very, very busy. In fact, in October we were booked up until February.

Electa: Oh that makes sense. Because they don't want to winter over?

Blood: That's right, exactly.

Electa: So, go back to the part where you, you have some livestock that you what? You fatten up here? Is that basically it? So you keep them for how long?

Blood: Well, that depends, now we do some Halal business, that would be for the Muslim people and I'm not particularly fond of doing the Halal business. Nothing against the Muslims, but I don't think that hanging them up and cutting their throat is the way to do it.

Electa: But that's the way it's supposed to be done?

Blood: Yeah, that's ritual. And if you don't do it then they'll say we're like, biased or something. But that's not a big part of my business. But now, like at Easter time, the Greek people have their Easter the same time as us.

Electa: Oh, it was essentially the same weekend for a change? That's very unusual. Blood: Right there, the 24th.

Blood: I have a great call now for locally grown, and people will pay whatever you ask, but that doesn't give you a right to soak 'em. Make a profit, but make a legitimate profit.

Electa: But do you find that most locally grown meat ends up having to cost more?

Blood: If you buy your <u>Angus</u> at an auction, you'll pay more. Now, I had a lady come in months and months ago and look for hamburg that was marked for Angus and we didn't have any. And I said "Well, take some of..." and she says "Oh no. I'll come back when you have some." Now, I know very well, if we have a package that came from another breed, of the same

quality....Couldn't tell her. Couldn't tell her. But I wouldn't sell her something that wasn't Angus. I, uh, that would bother me inside.

Electa: Mmm-hm.

Blood: But you have to charge a little more because you pay more.

Electa: Angus is very popular right now.

Blood: That's from the advertising.

Electa: I wondered about that. Although, if you talk to Bill Conley, he insists they are *the best* cattle in the entire world.

Blood: Yeah, he and I have been over that a hundred thousand times. And I like and respect Bill Conley.

Electa: Do you have a preferred breed that you would point to?

Blood: Well, I'm going to tell you, I think the best-flavored hamburg comes from a Jersey and they're not a beef animal.

George: No, milker.

Electa: Interesting. Why? Do you have any sense of that?

Blood: I don't know why. The fat would be perhaps a little yellow, whether it would be something like that.

Blood: I have two or three customers and – did you ever know Bill Hall from Hollis? George: I have heard of him, yep.

Blood: Well, I did a lot of business with him, and he's a wealthy man. And a hard worker he was. I went there one day and he was sawing wood and uh, the only meat he would eat would be a Jersey. He'd get a Jersey heifer and bring it down and have us process it for him.

George: Interesting. How often do you go, do you go every week to the auction?

Blood: Pretty much, yes. I didn't go Tuesday. I was kind of tired and I had, the week before, bought 54 head up there.

Electa: This over at the Agway?

George: Yes.

Blood: Flame Auction.

Electa: I remembered you mentioned that. I didn't realize there was that large a herd that would get sold every week.

Blood: Well, they allow them to come down from Maine and from Vermont. They come from all over.

Electa: Really? So, is this one of the few places around, that has livestock auctions?

Blood: Well, there's one in Whately – Northampton – [*Northampton Cooperative Auction Association*] in Whately, Mass., y'know, and I've been to all of them of course. I've been to all of them.

Electa: But this is one of the best ones?

Blood: Well, I don't know that. It's the most convenient for me. Years ago, I used to have a fellow buy for me out there [in Whately] and then you had to have a truck and by the time I had to pay him the commission and the truck, it's the cost, the cost of products were costing too much. But years ago I'd go out myself and take, maybe, someone that worked for me to drive the truck and trailer and bring home the livestock. It's like an old [unclear}, better slow down a bit.

Electa: It's a lot of work.

Blood: Yeah, it is.

Electa: So how many cattle could you fit into one of those trailers?

Blood: Uh, on a possum belly, twenty. I don't have a, mine's just a small trailer.

Electa: Ok.

Blood: And I had a big, large trailer. But Alan drives my truck, likes the small one, getting around the farm.

Electa: I can imagine..

Blood: And, uh, we go to Flame and any of the dealers bring in animals for us to slaughter from all over New England, we pick them up at Flame for no charge. And that's something I thought of – we had a poster made to put up on a wall down there. 'Course they'll call me every once in a while and say "Oh we got a steer out in New York we'd like you to pick it up." [begins to laugh] I had it worded just from Flame that we would pick up an animal to be processed.

Electa: Um, so people come here to Flame from all over New England?

Blood: Mmm-hm

Electa: With their livestock to sell...

Blood: Mmm-hm

Electa: And is most of the livestock they sell ready for processing or...?

Blood: A lot are mostly milked off dairy cows that would go to processing for hamburg, and making frankfurts, bologna, and cold cuts...

Electa: Ok.

Blood: And buyers come in. Pennsylvania has a buyer and they buy the better animals and when I go, they'd be my competition. And I try to buy, uh, if I see a steer with long horns I know they don't like to ship them because they can injure the other cattle. Electa: Oh I bet.

Blood: So I get on those, buy those 'cause I bring one or two home and I can divide them in my trailer.

Electa: Mhm. That makes sense.

Blood: Makes dollars sometimes.

Electa: Would you say that the business of running a slaughter house is profitable? Blood: What would you think?

Electa: Well, based on what you've said so far, it'd have to be profitable or you wouldn't be in it. Blood: About right, 'bout right.

Electa: But I also am guessing that you don't make tons of money. Maybe I shouldn't guess that. It strikes me that there are a lot of expenses involved in running this kind of a business. Blood: My electric bill's around \$5000 a month.

Electa: For the coolers?

Blood: Yep.

Blood: And then workman's comp. is \$25 to \$30,000 a year. My taxes to the town is \$44,000 dollars.

Electa: Now, the taxes to the town, oh! I just learned this, we have to talk about this –that livestock are personal estate and they're taxed at the same rate as real estate is. And that any personal estate over 10,000 dollars on a farm is taxable, which includes all of your equipment and your vehicles and the livestock that you keep here? Or do you have to keep the livestock here for a certain amount of time?

Blood: No, there's no special time. Other than – no, I take that back. When you buy from an auction, you're supposed to be processing within 72 hours, but I have talked to the woman that comes out and I said well yeah I've had these two steers but I've sold them to some Muslim people because they wanted to have special feed and they pay you for it too. And they went along with it. And I never asked the question since. You know.

Electa: Hmm. Interesting, So there, there are sort of, special exceptions, then.

Blood: When you mention religion, they back off.

Electa: Anyway. I was just surprised to find this out about the extra taxes that a business has to pay for what is considered personal property rather than real property. But I guess you must be used to it.

Blood: Years ago my mother-in-law owned some land up Pepperell Road. And it didn't perk at that time and they were charging her for house lots. So I went up to the assessors – Henry Tolles.

And I said this isn't right, and they changed it. And about six months later—maybe four months—my son came to me and said, "Dad, the Assessor's here. Wants to go over your property." Well, I said, "Sure." They picked up more stuff than I got, off of my motors and things, you know. Which was all right, was all right. I could afford it better than she could.

Electa: But still. Hmm...How many buildings do you have on this property? I know there're a lot of them.

Blood: Five, I guess.

Electa: A lot of them. Are many of them—new? I mean, I notice that some of the buildings are obviously fairly new?

Blood: Aaahh. By new, you mean twenty-five years?

Electa: Yeah.

Blood: Yeah.

Electa: Remember, I'm a historian so for me that is new. OK. But the barn here, closest to the road is old?

Blood: My great-grandfather built that barn.

Electa: Okay.

Blood: And this house didn't look like this when my father lived here. I came down one night: it was cold. And he said, "Oh, I'm cold." And fussed about the fuel and things, and the windows are blowing. So anyway I made a deal and I said I'll fix up—this was an old porch where this [the sunroom] is, and the shed was converted into an apartment for my father—and I sold my

house where we lived. I owned it free and clear, so I had some money. So I called up an attorney, Larkin. Do you remember Larkin?

George: No. I know the name.

Blood: Well, at one time he was the town counsel for a while when Ralph Bowmar was sick. And I was, had been, a selectman, so I knew him and I had done business with him through the town. And he said, "Well, I'm awful busy." And I said, "I'll tell ya, I don't care how busy you are. My father wants to settle, and I'd like it done tomorrow." He said he'd do it. Electa: Okay.

Blood: So I went down. I had everything lined up, what I was going to pay my father. And my father had a 1939 Plymouth 6-cylinder car. And in the agreement, I said I would pay for all the maintenance and the fuel. And the lawyer said, "Barney? You realize what you're doing?" And I said, "If he runs that car 24 hours a day, what difference is it going to make?" And, so we made that deal. And I fixed up that part of the house first. Had the money from the house we sold. And he used the car until he died.

Electa: So you basically moved back into the house you were born in, then? Blood: Right. That's very different from this house.

Electa: I can imagine. The first time I drove along West Main Street I came by and I saw the sign saying *Blood Farm*, and then I saw this incredible Federal house, and I went, "Wow, this is really neat." And then I started looking, and I said, "But wait, look at this." And then there's an addition here, and then there's an addition there, you know. [laughing] It says its history on the outside, which is kind of nice.

Blood: Mmm. I had designed the changes in the house myself.

Electa: Did you build it too?

Blood: No. I didn't do the work. But, I came down one day, when I said, "I'm sorry but going into the Dining Room I wanted it so you could look right through, to be spacious." And they had it closed up. And I said, "You got to rip that down." "Oh, no ..." And I said, "Wait just a minute, now. I'm paying you by the hour and so you're going to do it." And they did. And I wanted the stove over there. And they said, "That's not a place for a stove." And I said, "That's where I want the stove." Do you remember Al Duncanson?

George: Yep.

Blood: Well, Al always—I like him very much— and he used to say... Al, he called me "Babe", don't ask me why. He said, "Babe, you don't need that stove there." And Al died the day after that stove was put in.

George: (somberly) Wow.

Electa: Do you take that as a message?

George: Yeh, right. It's an omen.

Blood: No, no, no. I'm not going to give that a lot of thought either. I liked Al.

Electa: Then tell me about Barney. How did you get that as a name?

Blood: Well, my father wanted me to be named Charles Edmund Elliot after the grandfather and my mother said, "No I want him to be named Elliot Jr." My father had been down to Ayer, he got the train up here to the square to get the groceries and he bought this record: *Barney Google*. Electa: Ohh, of course!

George: With the Goo-Goo-Googly eyes.

Barney: And a wife 3 times his size! Don't tell that to Doris.

George: No, certainly not.

Barney: So, he said to my mother, "Call him whatever you want. I'm gonna call him Barney." Now I have that record...

Electa: Still?

Blood: In my den. And I have the Victrola it was played on.

Electa: Ah, that's nice. With such a long family history you must have some wonderful – artifacts – mementos, treasures from the family that came down?

Blood: Yes, yep, I have a watch my great grandfather had.

Electa: Nice.

Blood: Some things like that. I have collection of guns. There's one right in back of you. Electa: Ooh, sure, that's a – wow! Have you had it redone?

Blood: No, no. I bought that probably in 1950. I was delivering. I had a contract with Victory Markets selling their sausage and they had a store in Concord. And there was a sporting goods store, near the Market and I would go in after my last delivery. They had two of these. They had a long rifle and this one. And I said I'd like to buy that. And they said—uh well, I guess I introduced myself—and they said we got a man from, oh, I don't know, Manchester or Nashua who's going to come after it. And I kept going in every week, when I'd deliver the meat or veal. And then one week he said, "I'll tell ya, Mr. Blood. You come in next week. I'm going to call that man. If he doesn't come, I'm going to sell you that gun. I paid \$125 for it—and I had a man come in wanting to buy it. I said no, I don't want to sell it. And he said, "What? Have you got the box that it came in?" I said, "I don't think so." "Well," he said, "I'll give you \$250 for the box." Electa: Wow.

Blood: I threw it away.

Electa: Of course. I've heard that story. That's an Antiques Road Show story.

Blood: Yeh. Yeh.

Electa: [laughter] The powder horn is beautiful.

George: Winchester, Barney? Winchester.

Blood: Yep. Model 66.

(George, simultaneously): Model 66. 35 caliber?

Blood: 30–30. I've got a 32–20.

George: Ohh, really?

Blood: Yeh, it's an old one.

George: Yeah, Yeah.

Blood: I've got a gun that a Mr. Holden gave me. Probably, I might have been seventeen years old. He lived in Ayer and my grandmother used to take care of his wife. And it came from one of the Holdens and it's a flintlock. And some of the Holdens were at – I was going to say Valley Forge, but not Valley ...ah, the Revolution.

George: The Revolution. Sure, sure.

Blood: Parker's Hill, would it be? Bunker? If I could know that that gun was there, would be great. But I don't; and nobody to ask.

Electa: Oh, well. But, still....There is so much to ask about, it is hard to know, [laughs] how to continue. Umm. I want to ask you some more about your land, and the different uses you have put it to. And the different uses you remember for it from earlier on in your life. You said that you have feed lots. Do they take up a lot of the...

Blood: No, just small. Acre, maybe.

Electa: Total, or for each one.

Blood: Well, no. The little feed lot, there's no cattle in it now. I have a lot of pigs in there. But it goes up the street. And I've got one down back. And I have a permit to sell gravel. And my great-grandfather sold the gravel to the railroad company.

Electa: Ahah!

Blood: for \$800 and he built two houses across the street with the \$800.

Electa: I know. You still own those houses, don't you?

Blood: I own one of 'em. I own the Post Office, too, my wife and I. I feel you know more about me than I think you do.

Electa: [Laughing] I do, I do. Well, not much more, though.

Blood: But I am not a poor man.

Electa: I didn't think you were. [Barney laughs] I didn't think you were. You have too good a life. Blood: I live like one, I live like one, my wife says. I buy second-hand clothes. Electa: Well, yeh, that's one of the reasons you're not poor. Right?

Blood: Well, that could help.

Blood: And I play the stock market.

Electa: Oh, that helps.

Blood: Sometimes. [laughs]

[chat about an old barn]

Blood: Oh, my barn—when I made the deal with my father to buy this place, I had people say, "Why don't you tear that barn down and put up a..." I said, "No." It's all put together with pegs. Electa: Oh, really. Well, it certainly looks to be in good condition.

Blood: Well, I've had the roof done over, you know.

Electa: Inevitably.

George: I watched a contractor take a barn like that down. It wasn't even a barn. I guess it was a blacksmith shop up in Sudbury. Been there forever. And, what a job they had to take that thing apart. I mean it was solid. It would creak, it would move, you could push it. It would give a little bit. But they ended up finally—they wanted to take it apart and save the lumber, you know—but they cut it.

Blood: Well, you know, the timbers are valuable.

George: Oh, yeah. Oh, yeah.

Blood: Wooden pegs. Years ago when I was young, we'd jump in the hay. Go up in the loft and jump in the hay.

Electa: And then swim your way out to the edge. [Laughter] So, back to the land again – because that's my particular interest with all these farms, to see how different people are using their large or small pieces of property.

Blood: Well, I'm going to tell you, I don't like a lot of the development. I like the town of West Groton as it is. And they're talking about putting a sewer in. I'm opposed to that. It will just bring more people and, ah, I love everybody here. But, we don't need a lot more.

Electa: Mmmm. Well, it opens up a great deal of land for development that is impossible now. Although, where you're located you must have—I mean I hate to put it in these terms—but, your land must percolate really well.

Blood: Yep.

Electa: because of, ahh, what do you have, mostly gravel? Or is that just the area...

Blood: Some; that section over there would be gravel, and back of my smoke house—you'd think you're at the beach.

Electa: Oh, the sand.

Blood: When I got the permit for the septic system there, they came in. There was, ahh, Harlan Fitch—I'm sure your remember Harlan.

George: Oh, sure.

Blood: And so, they dug a hole, and put water in it, to see if it perked. And Harlan says,

"Where'd you get all that sand?" And I said, "Well, don't tell anyone, but last night we were down the beach and got this."

[Laughter]

Blood: We got the septic system built and I got a permit from the Federal Government to slaughter— a processing plant. So Dr. Gilvarge—I never forget his name—came in and said. "Well, you've done a nice job, but were not going to accept that." "Well," I said, "Nashoba did it." And he says, "Well, Nashoba's not giving you the permit to slaughter cows." He says, "You've gotta make it bigger."

Electa: Ohh.

Blood: So we did. [pause] And he was probably right, I don't know.

George: When was the slaughter-house started? Did your father...?

Blood: Oh. No. My great-grandfather did that.

Electa: Really?

Blood: Yes, and – I'm sure you never knew Mr. Charles Lawrence? Charlie Lawrence? George: No.

Blood: He lived to be old, and I used to buy strawberries from him. And I'd go up on my bicycle – so you know that wasn't yesterday.

George: Yep.

Blood: And I'd go around peddling the strawberries. He knew him. And he used to tell me about my grand.... Lost my train of thought already. And, ahhh....

Electa: Slaughtering... Who started the...

Blood: Oh, Oh. He said, my great-grandfather used to slaughter pigs for himself. And I guess he had a tub outside where he would heat the water...

George: Scald 'em?

Blood: Yep. And carry the water in. And, so he must have been doing a good job, and the neighbors would ask him to do their pigs.

George: Sure.

Blood: You know, I've got a license from the 1800s from the town of Groton.

Electa: Really! Who knew that licenses went back that far.

Blood: I've got it. I don't know exactly... way back. And my grandfather and great-grandfather's name were on it.

Blood: You see the tub where my wife has the flowers? Well, you can't see it 'cause of the cars, but it's a wooden tub. [Possibly the one used by his great-grandfather.]

George: I've seen it.

Blood: Well, they thought they did great things when they had a stove inside the slaughterhouse to heat the water. And we used to burn automobile tires—you can imagine what they'd do to you today.

Electa: [gasp] The smell!

Blood: And of course, you couldn't.... Everything has to be stainless steel now.

George: Oh, yeah.

Electa: So, I hadn't realized that the slaughtering had gone back that many generations. Blood: Oh, yeah.

Blood: I'll have to dig out that license. I've got it. I think it's in one of my gun cabinets. Yep. Electa: I hope you're making sure that all these documents are going to be cared for in the future.

Blood: Well. [sigh]

Electa: They're really special.

Blood: I don't know what will happen to a lot of things. There's a lot of things I have. I have a gun collection. I have some valuable guns.

Electa: I suppose you could always write them into some codicil to your will, or something. Blood: Well. I'm going to do some more work on that, you know. And, aah-ha. I'm having my casket made out of lumber that was raised in West Groton.

Electa: Town Forest lumber?

Blood: No. Eddie Cutler cut it. I don't know where he got it. And, in fact, I got a call—I was going to have one of the carpenters that work for me make it—but then, Anderson I do business with—you know Brian Anderson?

George: Yup.

Blood: Oh, he said let me have a professional do it. Well, I just want it made out of lumber that was from West Groton.

Electa: Did you ever live anywhere besides Groton?

Blood: No. I went to Florida a few years ago. I couldn't get back quick enough. Two years ago I was up to the beach, talking to Margaret on the phone, and she said, "Are you near the water?" And I said, "Yes. Right near the ocean." And she said, "Would you do me a favor?" And I said, "Of course, Margaret." "Take that GD phone and throw it right out in the ocean. Don't be calling."

Electa & George: [Laughter]

George: Is that Margaret, ahh....

Blood: McPartlan. We go up to Winnie Sherwin's—and Helen Surica's, every month, you know — local people gather up there. Doris and I go. I saw her and she gave me hug, and she kissed me... And I said, ohh, Margaret, I hope you're feeling better, and come back to work. And Doris and Margaret are very friendly. Doris calls her all the time. And I said, "Will you hurry up and get better? I am getting sick of only one woman giving me hell for not [*chuckles*] whatever." Electa: Are you telling me that one isn't enough?

Laughter all around.

Blood: Oh, I have a good wife.

Electa: Yeah. I got that impression. Has she been part of the farm-the business?

Blood: Not really. Well, no, I won't say that. She does bookkeeping, and years ago did a lot of it. But now there is so much to do, and it's too much, getting older. I forget things, and so does she sometimes. You know, every once and a while she'll send a check to somebody's already got one. It happens, you know.

Electa: The more I talk to male farmers, I'm discovering that the spouse is an important part of the business.

Blood: Very! I had a friend I did business with, Earl Graves in Shirley. And he was saying, "Tell your son, if he's gonna farm, to marry a schoolteacher so he'll have some income."

Electa: Is this the son in New York?

Blood: Yeah. Years ago.

Electa: Umhm. How funny. So, why do you think the son in New York moved out there to become a dairy farmer?

Blood: Well. It was getting that he wanted more cows.

George: Was he a dairy farmer here too?

Blood: Yes, he did. Yep, he did.

Electa: Here on Blood Farm.

Blood: Yes, yes, and it wasn't working out. I was running a business that was profitable and running a dairy business. So he went out there, and there was some kind of a government deal that he got this place. And he has three lovely daughters. And one is, I don't know if she's got a degree, a doctor's degree in education yet, but she's a schoolteacher. And, another one works for the state. And another one is going a college part-time and working. And she wants to be—she told me one day, "Grandpa, I'd like to be a pediatrician. But," she said, "I don't think people would want to come to Dr. Blood." And I said, "You know how to change that dear. Get married." [Laughter]

Blood: So, the girls are wonderful girls, granddaughters, we have.

Electa: And certainly with a lot of drive, it sounds like.

Blood: Yes, yes. And my grandson, Matthew, works down here for me. The more I see of him, the better I like.

Electa: Now, Matthew is ...?

Blood: Dick's son. And that would be his mother, in there doing bookkeeping.

Electa: Ok, got it. So, how many children do you have all together?

Blood: Two boys, Richard (Dick) and Jeff.

Electa: Ok. I just wanted to get that straight.

Blood: Dick had two: Matt and Rickie.

Blood: Did you ever know Isabel Beal?

Electa: I didn't. I know of her.

Blood: You make me think of her.

Electa: Really?

Blood: Not on your questions; [your] ... mannerisms.

Electa: Umhm.

Blood: I loved to find something, years ago, about the town of Groton, that she didn't know. [Laughter] And she'd say [mimics voice], "Barney, Barney! Where did you find that out?" Electa: She sounds like she's a wonderful person.

Blood: I loved her as a person. You'd have liked her. You'd have liked her.

Electa: Everything I've run in to about her makes her seem that way.

Blood: She used to come over and visit with us. I'm a trustee of the cemetery, and she was our clerk.

Electa: Were you ever involved with the Grange here in town?

Blood: I got a citation once—Good Citizenship.

Electa: Well, I guess that's an involvement. But, it wasn't part of your professional, or personal life?

Blood: Not really. I was too busy with my business for a lot of things.

Electa: Okay.

Blood: Dr. Ayers always wanted me to come to the Rotary. And, my favorite answer was, I'm a little leery of men that sing when they're sober.

[Laughter]

Blood: And, I liked Dr. Ayers very much. I was too busy.

Electa: So this is more when you were full-time engaged to it, definitely more than and 8-hour-aday job?

Blood: Umhm. Years ago I'd get up at half past 3 or 4 o'clock in the morning—to go to the Brighton Stockyards.

Electa: They don't still exist do they??

Blood: No, no.

Electa: When did they stop?

Blood: George Washington bought beef there for the Continental Army.

Electa: Doesn't surprise me. I was writing about them during the 19th Century, but I didn't know how long they existed.

Blood: I don't remember when they started...I used to go down there on every Monday and on a Friday.

Electa: So when would you say they stopped?

Blood: Oh, I don't know. They built Flame, probably, thirty years ago, maybe.

Electa: And that was... it kind of replaced Brighton?

Blood: Yes. Now, it is run by Huey McGovern and Ron Pollock. And it still goes by Brighton Commission.

Electa: Oh, okay. Sorry, I interrupted you about going down to the stockyard.

Blood: Well, I'd get up early in the morning. And what did I have... a Studebaker truck. And I'd put, you know, the stick you'd stick into the oil to keep it warm.

George: Eh, block, engine heater. Yep.

Blood: And I'd go out in the wintertime at night and put that in so I could start it in the morning. George: Right, right.

Electa: And after that, you'd come home from the ...

Blood: What I tried to do, I'd try to take a load down with farmers that had cows that were not producing. And I get paid for both ways.

Electa: It makes sense.

Blood: And I did that. And sometimes I'd pick the cow—cattle—up the night before. And then leave early in the morning for market. And then I'd buy a load of calves and bring them home and process them or slaughter them, whichever word you like the best.

Electa: I'm sure process sounds much better, but...

Blood: yeah.

Electa: The guy who wrote the Historical Commission description of your farm referred to you as having an *abattoir* in your backyard.

Blood: French word.

Electa: Yeah, I know. It's just I have never heard them called that before. [Laughing] Blood: I do once in a while.

Electa: It is more respectable sounding.

Blood: Well. I put an ad in the paper one time. And I didn't mean to have it this way. But, I wanted someone who wanted to learn the 'art of slaughtering'. I had a woman call me; go up one side and down the other. And I said, "Would you stop just a minute? I want to ask you one question. Do you eat meat?" "No!" "Well," I said, "I thought so." So, I said, "I'd like to have you come over and talk to me in person." "I don't want anything to do with you." And I said, "You know, if you keep talking, I don't think I want much to do with you."

Electa: Well, it sounds like a challenging business from a social standpoint. And yet, it is so essential. So, am I right that you're one of two slaughterhouses in Massachusetts? Two – what? – large livestock slaughterhouses?

Blood: In Massachusetts. For a long time I was the only one.

Electa: Oh, so then the other one is fairly recent?

Blood: Well, Adams' farm burned, and I knew the original one, years ago. And I liked the man, and he got a place for his son, son-in-law, and daughter, and wives—the daughters wouldn't have any wives but the husbands—and they got a big grant from the Federal government. And they don't have to pay any taxes to the town for a while. Now wouldn't I look nice going to the tax assessors and saying I would like to do the same thing?

George: Wow.

Blood: Why do I have to pay taxes? But, there's room for both of us.

Electa: So where is he located?

Blood: Let's see, he's in, ahh ... I'm getting tired.

Electa: Yeah, it's about time to finish up.

Blood: Oh, that's all right. Ashburnham... [calls out to woman] Sharon!

Sharon: Yeah?

Blood: What town is Adams in?

Sharon: Athol.

Blood: Athol. I couldn't remember.

Electa: Athol. So close.

Blood: You been there, George?

George: No. No. But, didn't they-they burned-and rebuilt.

Blood: Ayuh.

George: And are they still running, are they still operating out of there?

Blood: I lost four customers to 'em. And, people told me—one man said—my father's very friendly with them, and so we're going. Out of the four, two of 'em came back.

Electa: Oh! That's a good recommendation.

Blood: Yep. I never inquire why. You know, sometimes, even officials can get in trouble if they don't keep their mouth shut. And, I didn't mean it that way.

Blood: Are you a vegetarian?

Electa: No. Are you kidding? No, I'm not, although, occasionally I can talk my husband into eating fish.

Blood: I like fish.

Electa: I like fish, too. He has limited choices, you know. Anyway, that's another story. Hmm. I'm interested at the fact that the two slaughterhouses in Massachusetts are very close to each other. Relatively, given the shape and size of the state. And, also, fairly close to the northern New England states so that it's easier for clients to bring their stock here? This area? Blood: Well, I have people right in the same town, but I am sure there's people in Groton that go to other slaughterhouses. I can't get 'em all.

Electa: Are there others that you're aware of? Are there many other slaughterhouses in the New England area?

Blood: Oh, yeah. In Connecticut, and in New Hampshire; 'cause in New Hampshire, Lemay's the only federal plant in New Hampshire. And, I'm friendly with all of them.

Electa: You're making a distinction between a federal plant – which is to say, federally licensed? Blood: Yes. Grant of inspection, we call it.

Electa: Ok. And there are others that aren't federally licensed?

Blood: No. Well, they would be custom places. In other words, their product can't go to a store. Our meat can go anywhere in the world.

Electa: But most of it stays here?

Blood: We've never exported any, but the hides that come from the animals, we export it. A good many times. They go, a lot of them, to Italy, and to Korea. And, they make those shoes and things. The government's put most all the tanneries in this country out of business. Electa: Because of...?

Blood: The pollution.

Blood: The pollution.

Electa: The pollution. Yeah, right. I've read some of the reports of 19th century tanneries and pollution. It's a challenge. It's a really interesting business. Well, I don't want to tire you out. Blood: That's all right.

Electa: I'd rather save something for another time.

Blood: No, you can go for it. If I fall asleep, be sure to shut the door on your way out.

Electa: I just want to thank you, before anything else...

Blood: Well, that's all right.

Electa: ... for being willing to do this, because...

Blood: Glad to do it.

Electa: It's very special.

Blood: I like what George is doing for the town. Very interested in agriculture. And I like that. George: Hey. Did a lady from Shirley call you, her name is, ahh, Meredith.

Blood: Oh. I know her very well.

George: ...from the Shirley Historical Society. Meredith Man-se-kay-vich, or something like that. She wanted to talk to you about the Squannacook River, and the mill that was here.

Electa: Here? In West Groton?

George: Thompsonville. She wanted to talk to you about Thompsonville.

Blood: Every time I go by and see that water going through that sluiceway – what a waste, George! It should be generating electricity.

George: And they've got a pretty good set-up there too.

Blood: Well, didn't they.... I talked to Fran Dillon about it one time 'cause I was interested. I own land, well, it doesn't abut it because of the railroad goes through there, to hitch it up and run it. You know, so you spend a \$100,000, but you're paying \$5000 a month. It's not long before you'll get it back. But, Fran Dillon told me they did something that blocked it off.

George: Oh, I don't know about that. I know years ago...

Electa: So there's a hydro-electric plant already there?

Blood: Already was there. Yeah.

George: It's all still there.

Blood: Of course, that's old. That was probably put in in 1914 when World War I started. It was Germans that built it.

Electa: But that makes sense, sure.

George: But they were going to try and get some grants to get it back up and running. And I don't know...

Blood: Oh, I never heard that.

George: Yeah.

Blood: I'd be interested in that.

George: We were down there—my father-in-law went all over the world building power plants. Blood: Oh, is that right? He knew about it then?

George: And we were down there; he can't walk around much anymore. But we walked down from my house one day, and we were looking in there. And a guy came out from the office, and I figured, oh, Jeese, he's gonna throw us out. And he said, 'You want to go inside?" So he unlocked the place, and walked in there, and were talking about it, and at that time—and that was probably 10, 15 years ago—he said he was going to try to get some grants to get that restored. But I guess.... He said it would not have been that much of a job.

Blood: Is that right?

George: Yep.

Blood: Do you remember Stanley McNiff years ago?

George: Oh. Oh, sure.

Blood: Well, Stanley and I were friends. I did business with his father and his grandfather. And he was interested in buying it. And I said if you get control of it, I said, I want to talk to you about getting the electricity business. And he told me they had newer generators that would be much more efficient now.

George: Oh, yes. Sure, I'm sure.

Blood: Of course, it didn't fly. But, he was a good-hearted guy. A good-hearted guy. George: He was a realtor?

Blood: Yep. He come over one time to buy a leg of lamb. And he said to Margaret, "You tell Barney I was here to buy the lamb, but they're too high. Not gonna buy it." So, two or three days, I took over a leg of lamb. "I'm going to give you this," I said. "Have you got any welfare, food stamps you could give me?" Go an' embarrass him.

George: He might've had some tucked away somewhere. [chuckling] Blood: But, I liked him.

Electa: Ahh. You keep talking and I keep losing my train of thought. You see, it happens to all of us, I think. This is a slightly off to the side question. What do you think—I'm thinking about your family and the centuries that they have lived through in this town. What is the oldest item that you have, that is family?

Blood: [pause as Barney gets something] Take a close look at that.

Electa: All right. [Music plays] Ah, there we go. That's nice. This is a salver, it's a calling card salver, with [music continues to play]

Blood: My grandfather Smalley had it.

Electa: That's really interesting. What does it say? J. and J.G. Low Art Tile Works. From Chelsea. Yes.

Blood: It's made there.

Electa: It's beautiful. I've never seen one like this.

Blood: And it's valuable.

Electa: Oh, I'm sure. Anything that's Low ceramics has to be valuable. So this is an 1890s piece. And, as far as you know, this is the oldest piece that you have.

Blood: Oh, I don't know that. I don't know.

Electa: That's interesting. It's a beautiful piece.

Electa: So you know, the oldest thing that you have is this lamp. I just realized...

George: That lamp right there.

Electa: This house.

Blood: There a lot of old things.

Electa: No, it's all around you.

Blood: I've got watches...guns...

Electa: Right here. I just realized that. Have you ever found any arrowheads? It seems to me, being so close to the river ...

Blood: Only the one I took out of my head that the Indian shot in...

Electa: Oh, that one?

Blood: No, I haven't. No.

Electa: Well, you've survived rather well. It's just I was looking at that topo map of Groton, and this area, it just looks like a great place—if you were a Native American—to have a planting field or a little cluster of houses or something. But I'm surprised you haven't run across anything like that. It may be that you were not looking for them.

Blood: Ah, old things. We use it for a hog scraper, but my great-great-grandmother put candles in it. Stand up, George, you'll put a hand right up on it. Watch, over by the stove chimney. Put your right hand up, George.

Electa: Where the handle is.

Blood: Higher, Higher, George. It will look like a ...

George: The flat- iron thing?

Blood: No. No. Like you'd scrape a hog with.

George: Oh, I see it. Oh, yeah.

Blood: Well, you can take it down. Look at it. Can you see it? Take it right down, George. You haven't got it.

George: mumbles something

[conversation becomes unclear for several seconds.]

Electa: So you're saying that's a hog scraper?

Blood: What we use it for. My great-grandmother, she put candles in it.

Electa: Right.

Blood: Well, I mean 'cause it looks that way. You move the base up as the candles burn there. I found that up in the attic.

Electa: Attics are great places. You never know what you're going to find up there. All right. We're gonna go. And I have a feeling that as soon as we leave, I will have more questions. Can I call you back?

Blood: You can talk to me a while longer if you wish.

Electa: Well, no, because I have to digest what you have already told me before I can figure out what all the questions are that I didn't ask you.

George: We'll do it again?



Blood Farm house ca. 1900

William Conley Gibbet Hill Farm Farm Manager (retired)

Notes from conversations between Bill Conley, George Moore, and Electa Tritsch; March 1, March 8, April 29, 2011



- Bill and his wife Norma both grew up in Connecticut Valley (CT) farm families. Her father grew cigar tobacco and ran a dairy business including door-to-door delivery. She and her two brothers formed a family corporation with their father but when he died, the brothers sold a one-mile long stretch of frontage on Connecticut Route 190 off Rte 91, which is now taken up by large malls. Bill's grandfather was a tobacco farmer in Suffield, whose farm is now the site of a huge truck terminal.

Bill's wife, Norma, was a math major at UConn, and specialized in jet engine design after graduation. When they moved to Groton she got a job at the GE plant in Fitchburg, designing steam turbines. She left when she was pregnant with their first daughter, but told him she had lain awake most of one night, worrying whether the turbine she'd designed for a particular manufacturing plant was actually working. She never found out.

Bill joined the Navy during World War II right out of high school, just under age 18, because he'd heard somewhere that if you had to die, drowning was a pretty easy way to go. More than that though, when he was a boy a group of naval reservists had set up a sea scout program which he had joined. Every so often they would take a trip down to the submarine base in Groton CT, and the sailors would take them on one of the WW I submarines for a cruise around the Sound. The boat creaked and shuddered. They all thought it was great.

? So did he serve on submarines?

No. He passed the physical, put in his application, but his commanding officer felt he'd be wasted there and sent him to Ford instead, for 6 months training. He worked on developing oxygen generating systems for aircraft carriers and industrial gasses for ship repair, then serving in the South Pacific for two years.

One day when he was training in Dearborn, Henry Ford came to the factory. It was Ford's 80th birthday. He announced to all the naval trainees that the Ford plant was involved in a competition with GM and Chrystler, to see which plant's employees would donate more blood to the Red Cross. Ford said that he would shake the hand of any man who gave blood that day. Bill did, and collected on that handshake.

? With that kind of training, how did he end up in genetics and animal physiology in college? "I just reverted to type when I got out." At age 22 he enrolled at University of Connecticut on the GI bill, majoring in genetics and animal physiology. The chair of the English Department tried to get him to switch his major to English. He was beginning work on his Master's degree while finishing his B.S. in 1950.

- background on Marion Danielson Strachan Campbell: Marion grew up on Danielson estate, on Farmer's Row. The estate had gardeners, greenhouses, a flock of chickens, pigs, cross-bred beef cattle (Hereford/Angus). Malcolm Strachan, her first husband whom she married in 1949, died 1960. He was an Episcopal minister, chaplain of the Groton School. They had 2 boys, 2 years apart: Stephen now lives in Denver and Richard lives near Seattle and is involved with forestry. She married Douglass Campbell in 1962 and after that moved partially to New York City. Mr. Campbell was an urbanite, loved the culture, theater; she commented "I've got to make one mandatory visit to the opera a year" but she was back here a lot.

Marion graduated Class of 1943 from Vassar with a major in psychology. Her father was an army colonel working in Washington during the war. She joined him there and did psychiatric hospital work with returning veterans. She came back to Groton before the war's end when meat rationing was in effect and bought a few head of Angus from Houghton Priest in Townsend. "They multiplied."

Mrs. Danielson suggested she needed to find another place for her growing herd. Joseph Connolly had just put the 200-acre Gibbet Hill farm on the market for \$20,000. He was a bachelor, with a dairy herd, and the farm was not doing very well. Groton was just a sleepy town, with many roads still gravel. Nobody wanted to buy here then. Marion bought the farm from him in 1947 for \$18,500. Connolly took his money, bought a '48 gray Buick then went to Rockingham Park and apparently spent most of the rest on the horses. He kept that Buick for years, apparently repainted it himself with what looked like a paintbrush – maybe a broom. It was not pretty.

The Gibbet Hill property had previously been owned by Brigadier General William Bancroft, who had fought with Teddy Roosevelt at the Battle of San Juan Hill during the Spanish American War. Bancroft was head of the Boston Trolley Company. The trolleys were horse-drawn at that time. They had to do something with all that manure, so he got the idea to ship manure out here by rail car, down to the Junction. They shoveled it onto horse-drawn tipcarts, drove it up here and spread it all by hand, all year round. Bancroft spent a lot of money on the property, including constructing the castle, and laying a road across the property through Half Moon Swamp.

By the time Marion bought the place the soil was neglected; Connolly had done no liming. In 1949 there was a small apple orchard up the hill toward the "castle", and more trees out of sight (to the west). Maybe Baldwins, plus heritage varieties. The trees were old, past their usefulness and we eventually cut them all down. "Mrs. Campbell has a thing about old apple trees though; she always made me keep some just to look at." During the Campbell era the Gibbet Hill property included a couple of fields that were hayed; the rest was pasture.

By 1949 Marion had decided she was going to raise Angus. In October she sponsored a field day for Angus breeders – there were 250 in New England at the time – complete with a clam bake. She contacted UMass (= Mass Aggie) about finding some students to help out at the event. UMass was not interested so she contacted UConn. Bill was one of the students who came to help out for the day.

? What happens during a field day?

There are talks – a professor from UMass talked about how an Angus should look; somebody else would talk on pasture renovation – it was a professional education event, and a way to get the word out about what you're doing. [George Moore comment: 'We'd call it networking today'.]

In April 1950 Bill received a phone call from her, inviting him to come to Groton to interview for a job as her farm manager. He wasn't interested; he was aiming for graduate school, possibly a PhD, and had offers of graduate assistantships from Washington State, University of Kentucky and Cornell. He came to the interview to turn down the job, but Marion Danielson Strachan kept making nice offers. What really changed his mind was her saying, "Remember, this is a challenge to your abilities." He finally agreed to sign on as farm manager for two years, but never thought twice about leaving the job in the fifty years after that.

"I came the 13th of June, one week after graduation. I barely had time to get a moving van and get our stuff up there...."

They started with 25 cattle and the 200 acre Gibbet Hill property. George Kirk (Kirk Farm) worked as a farm hand at Gibbet Hill through high school. At Bill's suggestion George went to Kansas State University to major in animal science, but only stayed a semester or so. "I think he got homesick. Besides, the living situation was terribly overcrowded. They had them sleeping in rooms under the stadium." Later on Barney Blood's son Jeffrey worked for Bill as a kid. [Jeffrey is now a dairy farmer in New York state.]

"When the herd reached 600 we said we need more space."

1952: bought the town farm (96 acres +/-) from Elmer Woods who lived in Ayer. Previous owners had been Houghton Priest and Mr. Willard, who each owned part. It was a working farm in 1952, with a dairy operation run by Woods' son Kenneth.

At some point the town farm had had a dormitory for the residents, as well as a pest house across the road that had been built with money donated by Clara Endicott Sears [cf. Fruitlands Museum, Harvard]. The small cape still standing on Town Forest Road may have been built by Priest with materials from the dormitory building. When Mrs. C. bought in 1952 only a barn was still standing on the property, and a cellarhole remained from the pest house. The cellarhole disappeared during the residential development of the area ca. 2000.

The soils down there were all silty loam; lots of sand, and it floods a lot. We grew a corn crop once in a while with irrigation water from the (polluted) Nashua River; John Smigelski tried growing pumpkins there.

Adjacent to the 96-acre parcel was another 17 acres with farmhouse and big old barn with more modern annex that Mrs. C. wasn't interested in. Bill and his wife bought this parcel in 1965. Barn was torn down with timbers recycled; Ashley Pickard in Littleton bought the trusses, to use for an addition to their barn.

Late 1954: Bill was good at trimming cow's feet, so he was up the road from Gibbet Hill helping 82-year-old Charles Raddin with the 20 cows in his commercial dairy herd. "My son's not interested in cattle," Mr. Raddin said, "I want to sell – know anybody who might want to buy?" Raddin was asking \$54,000 for the property with business and herd. Bill decided that was too much money for him so he refused, but Marion Campbell decided to buy it. At the closing Mr. Raddin said, "You know, I just thought of something – I own 12 acres off Main Street too. Why don't you throw that in to the deal." After Mrs. C. bought the property she sold the stock of hay, livestock and machinery; with result that the net cost to buy that 136 acres and the other 12 was \$28,000.Mr. Raddin owned the fieldstone house on Main Street, and moved there after he sold.

The Raddin farm, known thereafter as <u>Farm #2</u>, had a huge dairy barn – 150 feet long with two 75' ells. *[see photo]* It stored 25,000 bales of hay. It was known as the biggest barn in Middlesex County, but it was getting old and wasn't up to modern standards for housing livestock. It was torn down in 1960 and replaced by 2 smaller modern barns (built 1957, 1960). (Note: these barns were torn down ca 2000 when Meredith Scarlet established a horse farm there).

Bill and a demolition crew took the barn apart but salvaged the really nice weathervane of a trotting horse. Bill climbed up on the roof to get it – "amazing what crazy things we did in those days." He tied a rope around himself as a safety harness – not very safe, but it managed to hold him when he slipped, until the men could let him down slowly. (The barn was 3 stories high.) The weathervane was reinstalled on the new barn, but it was stolen during a rash of weathervane heists in the '60s. Bill gave the directionals to Meredith Scarlet when she bought the property.

The Raddin farmhouse was where Bill and his family lived until 1990, when Mrs. C. sold him a house lot on the opposite side of Lowell Road. He built a cape there, incorporating chestnut beams from the Millerite barn that had been part of the Danielson estate into the kitchen/ dining area, and a stained glass fixed transom over the hallway door, depicting a Gibbet Hill panorama with Angus prominent in the landscape, designed and executed by Laurie Smigelski.

All our crop stuff was grown at Mrs. Bates' property [later called Puritan Hill Farm]. We leased that for 30 years. When she died the land went on the market for \$350,000 with house and barn. Mrs. C. passed on the offer. John Geils (of J. Geils Band) bought it.

? What did you grow there?

Corn for silage, and a bit for feed corn. We bought an old-fashioned corn picker – it only picked one row at a time. Some oats for grain. We also grew some corn on the slope behind where Meredith Scarlet has her arena.

?Corn is hard on the soil, isn't it?

It was easy to manure that slope right out behind one of our barns – lots of cow- and green manure right there; just add some fertilizer. When we stopped growing corn there the soil was actually richer than when we started. We planted a crop of winter rye.

? What is the best soil for corn? Well-drained loamy soil.

? Were the crops for feed? For sale?

Silage: the grass, alfalfa, silage corn is chopped into 3/8 to ½" pieces; you can get 20-30 tons per acre, a complete feed in itself, called 'dry matter'. All you have to do for the crop is a little weed control and fertilizer; takes about 110 days to mature. We grew alfalfa mostly; chopped it and added corn meal or gluten for a carbo-boost. We could get two crops of alfalfa cut early, then a third crop cut for hay.

The cattle were fed strictly hay on Sundays – there was only one man on that day, and he'd put out round bales for them – it was the only way for a single man to feed up to 400 cattle.

Corn silage was far and away their preferred feed.

? Where did the other feed and such come from?

Most of our hay came from Canada; we bought peanut shells from Virginia to use as bedding for the exhibition cattle. It's the most absorbent bedding around. Some people use sand now in cattle barns. Sawdust is problematic – if it's all softwood that's fine, but hardwood sawdust isn't absorbent, and animals can get a number of diseases from different kinds of hardwood. One time we bought some sawdust from a cabinetmaker – most of it was fine, but there was some mahogany mixed into it. The cattle started tearing up, eye infections – an allergic reaction to the mahogany.

A Chronology of Campbell Properties

- 1947: Gibbet Hill 200 acres; \$18,500. The three Gibbet Hill barns were built by Bancroft; dairy barn was torn down in 1972.
- 1952: Town Farm 96 acres, \$15,200.

That was the only property she was going to develop. One day about 1995-96 she sat down – 'we're getting older; what are we going to do with all this property?' She decided to develop that one property to show those guys in Chicago she wasn't so dumb. But she got beaten up by the Groton Herald and certain ladies who are not here to defend themselves. After that she said she'd sell every last acre. Told me to get a real estate license. I did. Didn't really need it. I let it lapse this year.

- 1954: Farm #2 (Raddin) 136 acres [+ 12?]; \$54,500.
- ca. 1955-56: Bertha Gilson property 35 acres on Shattuck Street, corner of Lowell Rd; \$3500.
- 1972: Pinecrest Orchard 72 acres, bought from Steven Sabine; now a hayfield, adjoins another parcel across the Ayer line that had been owned by Mrs. Danielson; \$125,000.
- 1974: Martins Pond Road 40 acres bought from Helen Priest Trimper; \$40,000?
- 1976: Brooks Orchard 200 acres bought from Helen Priest Trimper; \$275,000 300,000. The orchard had been part of the <u>Brooks Estate</u>, owned by Lawrence Brooks, that stretched from below the Groton Cemetery and Blossom Lane along Martins Pond Road all the way to the orchard. Mr. Brooks was not well; he had a conservator to look out for him; his sister was Leverett Saltonstall's wife.

The estate had been bought in 1944 by Mr. Fletcher, Donald Priest's father in law. (Priest already owned Hillbrook Orchard on Old Ayer Road – he had restored the flat land at the foot of the orchard and planted it to hay. Bill Conley was the first to hay that property. "Mr. Priest was a true gentleman. He always wore a bow tie – bib overalls and a bow tie.")

Helen Priest Trimper operated Brooks Orchard with Charles Mahoney for a while, but then sold to Mrs. C.

1977: William Wharton property on Broadmeadow Rd – 70 acres (includes what is now Five Oaks Farm); \$200,000.

This property was rented between 1961 and 1977 for hay fields. Bill has a ca. 1938-39 aerial photo of the property showing all apple trees. When they leased the property they removed the trees, used a Caterpillar to push back the topsoil; regraded and replaced the soil to make a cornfield. They also grew corn across the road. Good corn land (= Paxton loam)

1980: Mrs. Danielson died; Marion Campbell chose the Danielson Groton estate as part of her inheritance: 300 acres +/-, a majority of which was held in trusts. The property included a 9-room brick cape built in 1964 and located on the same site as the earlier 42-room mansion and the Groton Hunt stables and barns.

The Groton Hunt Club stables were on Shirley Lane; the club house was a wing preserved from Joy Mansion when it was demolished to make way for the new home in 1934. Mrs. D. had 100 foxhounds in a kennel down the road.

Another inherited property was Vizcaya, James Deering's estate on Biscayne Bay in Miami. Large estate house, extensive and exotic formal gardens – Deering had employed 50 gardeners to maintain the place. Mrs. C and her sister inherited it; donated to Dade County with endowment. Sold thousands of other acres – Deering family had owned the whole of Key Biscayne, as well as this. Mrs. C. told Bill about going to the closing for some of the property, all being bought by Cubans. They arrived, literally, with bags of cash and she watched them pour it on the table. "From that day on I've just loved cash," she commented.

Marion Campbell died in 1998. Bill Conley was asked to liquidate her real estate holdings - "It was the easiest thing I ever did – land in Groton was in big demand - despite floods of vitriol from abutters and other townspeople. One woman came into the office, sat on the floor and said she would not leave until Mrs. C. promised not to develop her properties."

We had many discussions with The Trustees of Reservations about the land here; many many discussions. I think very highly of their operation. Mrs. Campbell was interested in selling to them. "In the end though, it was the trustees-of-Mrs.-Campbell's decision, not the Trustees of Reservations." [i.e.: the money managers in Chicago responsible for her estate]

- 80 acres of the Gibbet Hill property was bought by Dan McElroy from Steve Webber- McElroy is doing a great job restoring them to agriculture. The land is really wet, the area's called Half Moon Swamp. Back in 1957 Bill and his crew dug an irrigation pond there – they went 40' down through peat and suddenly "hit a gusher – that water must have shot 20' up in the air."3/8 notes unsorted

- Bill was a member of the first conservation commission in Groton. He sat on that board with Sabine, Norris, Harrison Ripley (forester who worked fro William P. Wharton); Lucy Lawrence (wife of Carl A.)

Other Comments

<u>Travel</u>

"We went a lot of places with [Mrs. Campbell] and on business for her – places we'd never have gone on our own – South America, Australia and New Zealand; the British Isles, Ireland, South Africa, the Soviet Union."

One Angus Association annual meeting in Canada when Bill was President (on Board of Directors from 1977; elected president in 1985) – was attended by the Queen Mother, who had a sizable Angus herd at Balmoral ("Aberdeen Angus") She asked Bill if he had a herd? He replied yes – in Massachusetts. Her comment "Massachusetts – I believe that was one of our colonies."

The Queen Mum was very interested in livestock, also had pigs, horses. Bill traveled to Scotland several times in June to visit herds there – Royal Highland Livestock Show in Edinborough.

Another year the Angus Association met in Sydney Australia; Bill played hooky, flew 350 miles to Ayers Rock, the world's largest "monolith", then hitched a ride the rest of the way in a Cessna with the mailman delivering mail to cattle stations in the outback. The Rock is an aboriginal sacred site; there were aborigines living in small grass huts all around the base. Today there is a Sheraton resort nearby, but the whole area is a reservation, managed by the aboriginal people who live there.

In 1965 Bill was part of a CIA-sponsored group that spent a month touring the USSR, from Moscow to Khazakstan, to study soviet farming practices. Kruschev had insisted they grow corn in Khazakstan, but it wasn't a good place for that – too cold. Funny thing was, the women did all the work. The men would be sitting on fences, smoking away; the women would be out there in the field, shoveling.

<u>History</u>

- The Wilcox farm (corner Martins Pond and Shattuck) had been owned by Helen Trimper's husband.

- House on the Brooks estate now owned by McClatchy.

- Bayard Underwood (d. summer 2010) did extensive research on the Millerites in Groton (Farmers Row).

- Mrs. Kerry Glass (Lincoln) is writing a history of the Groton Hunt Club (lives near the Gropius House, Baker Bridge Rd).

- There is a Hodgson-built house on Shirley Lane, assembled in 1936, owned by Philip DeNormandie; falling apart.

- Gibbet Hill has been the setting for scenes from two movies. *Karate Kid 5*_featured a scene of Hillary Swank running downhill through a field of yellow rye. It was taped over and over; Bill

developed great admiration for her stamina; the ground was plowed, rough footing and she just kept doing it. The farm was paid \$1000 for the afternoon's field rental.

In School Ties a bus drives down Lowell Road. The scene out the window is of a sloping field with cows scattered across it. The film crew wanted the cattle arranged across the hillside (not a bovine habit). Bill had the bright idea of placing small piles of grain across the landscape to attract them to different locations. He got word to let them out; then something delayed the bus or the filming, but the cattle ate. That was the end of the plan, but the scene was filmed anyway.

? Can you tell us some more about Marion Campbell's parents, the Danielsons? Mr. Danielson graduated from Yale; comes from the founding family of Danielson CT. He worked in Chicago for some time after graduation – probably met Barbara Deering there, when she was a young debutante. Her family were the Deering farm equipment people, very wealthy. Mr. & Mrs. Danielson came to Groton because he had a job teaching English at the Groton School. They bought an estate on Farmer's Row/ Joy Lane.

In 1923 Mr. Danielson founded the Groton Hunt Club. At some point he also launched the magazine *The Sportsman* and edited it for years. At some (other) point Mrs. Danielson bought *The Atlantic Monthly* as a present for Mr. D. Mrs. Campbell inherited it and continued as owner for some time.

Mrs. Danielson built Groton Hospital (now Seven Hills Pediatric Center).

? Was their place called the Joy Mansion? Surrenden?

Surrenden was a name I came up with when the town bought the property – they were talking about all kinds of weird names – Wachusett View,.... Surrenden had been the name of Mrs. Danielson's kennel of 100 purebred Walker foxhounds (she also had a separate kennel of wirehaired dachshunds). The name Surrenden dates back to England, 1500s.

The house they built on Joy Lane was beautifully situated for a view of Wachusett. Due west of the barn that is still standing, on the Nashua River bank, is the Danielson animal graveyard – mostly horses, some hounds as well.

The day Mrs. Danielson, who always rode sidesaddle, decided to stop riding, she put down every one of her horses.

?Why?

She didn't want them sold; that was just her way. She gave away all the tack, too; saddles, riding equipment, boots and all.

? Did you and or Mrs. Campbell interact much with other Groton farmers?

There weren't that many farms in Groton during that period – Skyfields (Walter Weiwell); Westfield (Farmers Row); the Raddin farm. They were mostly dairy farms, and all Guernseys. - Robert Shattuck sold his dairy farm on Martin's Pond Road to Malcolm Stone, who named it Stone Ridge Farm and had a high-producing herd of Holstein cattle until about 1960. Shattuck moved across the river to the Hayes Farm [now Shattuck Farm]. There was the Watson Farm on Chicopee Row.

- Stephen Sabine (married Mary Lawrence, James's daughter) owned the 100 acre farm on the north side of Groton School. That land is now owned by Groton School and Paul Gunderson – it is very wet property (the Smigelskis had to do a lot of ditching and soil improvement to make it useful for haying). The present Sunset Farm Bed & Breakfast was the farm manager's house – Weston Thayer. He did all the work with horses at least until the 1950s.

- The Lawrences still own Annandale Farm, in Brookline.

- Brownloaf Hill was owned and farmed by John Gay, who kept pretty much the whole hill mowed with a horse and a 4' cutter blade just because he liked it that way – didn't use it for pasture.

? Why Guernseys, do you think?

Their milk had the highest butterfat content – remember these were the days when that was considered a good thing.... Holsteins produce lots of milk but very low fat – they used to say if you could see to the bottom of a glass there must be Holstein milk in it. Brown Swiss was an old-fashioned dual purpose cow. Jerseys have lots of milk solids and high butterfat.

Northeastern Massachusetts has always been a big Guernsey area – the Appletons, Ames family, Pingrees...

? Why do you think that is?

It's all a matter of association. You know, 'We belong to the same club; went to the same school; drink the same scotch – so I want to have better cattle than you.'

? Did he / Mrs. Campbell have any connection with Amelia Peabody (Dover)? Oh yes. She raised a different breed – Herefords – but "we beef cattle people used to visit around a lot". Miss Peabody also raised Yorkshire hogs – all white, long bodied. Her property is a Trustees Reservation now? [Yes]

[discussion of other Trustees reservations – this in Leominster] Louise Doyle, now, she had a dairy herd at least in the 1950s.

? What was your association with local agricultural organizations? The Grange was almost defunct during my career. The Farm Bureau was important though, representing farmers' interests to the legislature; running farm bureau stores – you could buy retail grain, bailer twine, just about anything a farmer would need.

(Background information: the Eastern States Farmers Exchange in New England merged with the Grain League Federation from New York and northeast Pennsylvania to become Agway – local agent was Theophilus Smith.)

? Has the appearance of Angus changed much since 1950?

Oh, immensely. Used to be, a herd bull, 2 years old, would weight 1500 pounds. Today a oneyear-old weighs 1500 pounds. People got carried away with size for a while. There's one picture of me judging at a cattle show. I'm standing behind the bull and all you can see are my western boots and my hat. Normally you'd see from the belt buckle up.

There were problems for a while with people crossbreeding for size – not purebred Angus at all. A lot of them came from Oklahoma.

- The Association didn't allow artificial insemination until 1970.

- The Association finally introduced a certified Angus beef program in 1977 – 6 or 7 tests your animals had to go through to qualify. It took a while to catch on; 2 or 3 years before the packers sold 1 million pounds of certified beef. But it did. Now they sell 135 million pounds a year.

- In the 1980s the Association passed a ruling that all show winners would be blood typed. That was just when DNA testing was coming in. Nowadays you can test from a single hair.

? What makes pure Angus better than mixed breeds or other beef cattle?

They have far and away the best carcass; the meat is tender, with good internal marbling, not just that line of fat around the outside, and this comes just from grass feeding.

- In the 1980s Bill bought a farm in Missouri near St. Joseph (location of the National Angus Association headquarters). The original property was 240 acres; it is now 900. His sons raise Angus; grow assorted crops. "I'm probably the only guy in Groton who's grown soybeans." Conley family farm in Missouri: Bill, Donna and Trey Conley – business known as Conley Angus. After 1985 most of the cattle sold from Gibbet Hill were sold at Conley Farm.

"A lot of the money comes from breeding, rather than meat sales. It's amazing what they can do. My son was telling me he got a call, someone wanted one male and one female embryo from a particular16-year-old Gibbet Hill cow. The breeder came and extracted the embryos and fertilized them in vitro with sexed sperm – you can pick the sex you want. My son said, 'I didn't want to do it – the vet cost \$2500.' But he sold those 2 embryos, the female for \$8,000; the male for \$15,000. Bill muses, "How long before human petrie dish embryos use this method?"

? Was Gibbet Hill primarily a cattle breeding operation, or did you sell beef as well? What we call the 'lower end' of the bull calves were sold for beef. We'd castrate them, feed them till they reached about 1000 pounds or so. Some of them were butchered at Blood Farm; then we had a small group of customers who bought meat for their own freezers. Very little commercial. We sold to Victory Markets for a couple of years.

Barney Blood did a lot of specialized butchering.

We sold beeves at the Brighton Stockyards until they closed in the 1960s¹. There were a lot of customers from Kansas, Nebraska, Montana who wanted to buy our bulls.

We had what's called a "closed herd" on our farm for 50 years – in other words we bred all our own females; only some bulls were purchased from other farms. When the Angus Association started to build a performance data base (quality of offspring, consistency of breeding) we signed on right away. A lot of people didn't do that, but we developed national markets for our cattle because of [the high quality of] our data recorded on that base.

The original herd Mrs. Campbell bought came from Ontario, including a female named Belle. Three hundred fifty female descendants of "the Belle family" – that one cow – were born at Gibbet Hill. That's some kind of record. You see, in this business the average life of a herd was maybe five years – the investors who decided to get into this business were always surprised at how complicated it was. They'd try it and then sell out after five years or so.

? Talk for a bit about Mrs. Campbell and her farm operation. Clearly she didn't need to do it to make money but it sounds like she was quite invested in the business. Did she do it to make a profit? To be the best there was?

Show a profit yes, though small – more like break even. She operated it as close to the vest as possible. To keep the land open too. This was not a hobby. She was very active in the national Angus association, and became a director, then president of the New England Aberdeeen Angus Association.

? Was she here often? How much was she involved in the day-to-day business? She was here a lot. She had bought a 1704 Cape on Shirley Road before she was married; it was in terrible shape; she had a structural engineer in – would cost \$25,000 to repair, so she replaced it with a new house. In 1988 – her mother was dead – Mrs. Campbell moved into her mother's house and donated the Shirley Road house to the Groton School along with a 13 acre parcel. They use it for faculty housing now.

? But you ran the operation for her? She trusted you?

¹ The Stockyard Restaurant now in Brighton was built in 1970 "next door" to the stockyards, according to their website.

I had a great time doing just about anything I wanted to do. But she was very businesslike; always examined the receipts; none of this swimming pools for the farm help nonsense. How can you make a profit, she said, if you're operating in the red? So she played it pretty close. The things she spent money on were practical.

? So the farm did make a profit?

Not at first, when we were building it up. But once we had sufficient numbers of cattle, and enough markets – we had a national reputation – it was profitable.

? Did Mrs. Campbell ever talk about her views on conservation and/or preservation? She loved conservation. In many ways she replicated what her mother did. It was part of the family tradition in which she grew up. For instance, her cousin Brooks McCormick in Barrington Illinois sold the development rights to his land to a conservation organization. At his death they got over 800 acres of land just outside Chicago. Her brother Roger donated a land parcel on Mackinac Island to the Episcopal Church – the town fathers were really upset about losing the tax income.²

Some time in 1995, 1996 she said to me "We're both getting older – what do we do with all this land I bought? I think I know – the kids have been urging me to do something like give it to the town." But she felt the need to develop her land at Town Farm; "I just want to show those guys in Chicago I'm not a dumbbell." There were lots of meetings. I went to the meetings (she didn't) with her lawyers, and people were ranting and raving – even got up on a table at one point. Then Mrs. C. picked up the paper and read the headline *A Tale of Two Developers* – she was the bad guy; the other one was golden. "To hell with those bastards," she said, "they're not going to get a thing."

?What parcels did she donate to Groton and non-profit organizations?

- 1.8 acres for the police station;
- 10 acres adjacent to what is now Surrenden to the water department;
- a long strip on the riverbank west of the Nashua adjacent to the Town Forest, 7-8 acres;
- 13 acres on Farmers Row, now faculty housing, to the Groton School.

She was going to donate to the State close to a mile of land east of Shirley Road, between the Ayer line and the Groton School, for a riverwalk, but the State never finalized the deal.

-The couple who bought Gibbet Hill #1 and #2 and Brooks Orchard, Nancy Webber was born in Groton and Steve Webber a resident since he was four years old, paid \$10.5 million for the two farms and orchard.

? Did Mrs. Campbell have other occupations/ interests/ hobbies besides the farm? She loved to travel, going to interesting places. One time she went to Greenland, got on an icebreaker and traveled through the Northwest Passage. Caught a puddle-jumper out of there to someplace where she could get a commercial plane back home. Things like that. Every place she went, she'd bring home a sculpture of a bull or a cow for me, from a foreign country. The biggest ones are on that shelf in my living room; my daughter has a whole lot more small ones.

? Did her husband travel with her or was this something she usually did on her own? He did, a lot.

? As farm manager, how many men did you supervise - how big was the farm crew?

² Marion Campbell and her sister also donated Vizcaya, a spectacular family estate in Florida, to Dade County in the 1980s.

Mrs. Campbell started out with a manager, whom Bill replaced in 1950, and a herdsman, Joe Pritchard from UConn. Pritchard had previously been superintendent of livestock at UConn; he stayed on at Gibbet Hill for 4 years, then retired. In the early years there were one or two besides me; eventually it got up to 5 or 6 employees tops. A couple focused on crops, but they all helped with the cattle, and they were all long-time employees, staying for 15 -30 years.

? Any seasonal help?

It used to be that the agricultural program at UMass Stockbridge – it was a 2-year program – required its students to spend the months of April through October on a farm. They were great for seasonal help. Then they adjusted the schedule to be the same as other students – that was no good because about the time they learned their way around the farm they were gone. But the whole focus of an agricultural education is different nowadays. There's less emphasis on crops and livestock and more on the sciences

? I see that would be a problem because they'd be gone for harvest in the fall. When is the spring busy time in cattle raising? Are the cows 'scheduled' in some way to plan their calving? Absolutely. You aim for calving from January through the end of March.

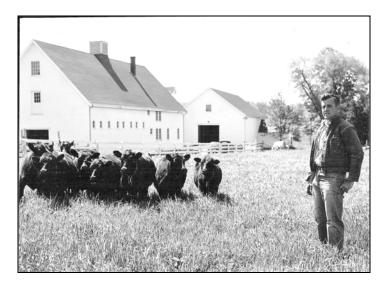
? Why?

Because that way they'll be old enough for sale the next spring as breeding animals. The bulls will be 15 months when they're needed for insemination.

? How long is a cow's gestation period? Just about the same as humans – 283 days.

? Did you use a vet for the farm?

We used a vet for testing; but I pretty much learned from watching him. We did much of our own vet work. Castration and artificial insemination was all done on site. We had our own liquid nitrogen tanks etc., and three men including me did the inseminations.



Bill Conley and the Angus herd advertising a good pasture by the Gibbet Hill barns, 1950s

Carl Flowers Silveus Plantation 1 Dan Parker Road, Groton

Transcription of interview and farm tour by Carl Flowers, Electa Tritsch and Robert Hanson, November 15, 2010.



Electa: Today is Monday the fifteen of November 2010. Bob Hanson and Electa Tritsch are spending the morning with Carl Flowers in Groton. We thought we were recording earlier but we weren't but we haven't missed much...relatively. I was going to give you this form so you know what's going on. We have hooked up with Freedom's Way which what you are familiar for these interviews because they have all this handy-dandy equipment. This form says that you agree to be a participant in the Saving Voices: Saving Farms and the Groton Agricultural Survey projects. [Requisite signatures done, with some chat. The following discussion concerning Dan Parker Road has been abbreviated]]

Carl: And for what it is worth I have been struggling with the town. And I did file suit two years ago and we have had our day in court and we are waiting for a judgment. Nobody in the Town Hall would talk to me. I have been called a liar. So I just want to tell everyone right now that you are talking to a liar. And I was put on a police watch list.

Bob: Have the police been on your property without your permission?

Carl: Yes and I was wondering why they were doing what they where doing and the police officer that was here wouldn't tell me. And then the Town Clerk's father died. I had harvested my first honey – that was the first year I had bees. And instead of just giving her a sympathy card I gave a jar of honey to her as well. And I get back home and about ten to fifteen minutes a

police car comes up. "Well, things are slow in Groton; can I just come up to visit and see how things are going?" Well that had never happened before and then it happened a couple more times and I'm like, "Jeez, what the hell is going on?" And a police car would turn around at the bottom of the driveway. Sometimes I would hear a car and it would wake me up and it would be turning around up here. And then one day at the Town elections a Groton police officer there on duty said it was ridiculous that I was the police watch list. And that was the first I knew. Electa: Oh you didn't know?

Carl: No. And from another town, Pepperell, a police officer was wanting to hunt and he said, "Well, why don't you hunt?" and I said, "I wouldn't have a chance" and he said, "What do you mean?" and I said that I had found out that I was on the police watch list. He said, "Well, let me look into it" and he looked into it and he said, "You have nothing to worry about now. There have been some changes in Town Hall. Don't worry about it; apply for your gun permit." Well, I haven't because I have a problem seeing blood and guts. I mean someone else, I don't have a problem with them doing it. But I just can't even catch the damn mice that run around the house.... So there's that and nobody in the Town Hall would talk to me about it. They lie in Town Hall.

Electa: Was that also because you were in the middle of the court suit?

Carl: The court suit was only final two years ago.

Electa: And this has to do with the road out here being a public way or not?

Carl: Right, and the issue is, if somebody is coming from Dunstable to the back field [to cut Christmas trees], and someone is coming from out back and they meet head on, somebody has got to back up. Well, if you've got three or four cars backed up it makes a problem. It will never get to where a living can be made if that's going to be the standard routine.

Bob: If the town ever maintained the road, and if the town failed subsequently to specifically discontinue the road it is still a public way.

Carl: Yes I don't disagree. I have a layout of the road – the 1772 layout. I also have the 1868 or '69 layout of the road. Approved by town meeting. But they say they discontinued Dan Parker Road from Martins Pond Road to the Dunstable Road. The other interesting thing that I found was, when James Fitzpatrick lived in this house from 1888 until Lillian Fitzpatrick died in 1942, they lived on "Shattuck Street / Road" – they seemed to use 'street' and 'road' interchangeably back then. How can they be living on Dan Parker Road and Shattuck at the same time?³ Electa: Did Dan Parker Road even exist at that time?

Carl: There is no record of Dan Parker Road prior to the day Dan Parker Road was abandoned. Electa: That's interesting. Did you know who Dan Parker was? Is?

Carl: He lived on the road. I have someone who is going to give me a picture of his house. And Dan Parker's wife smoked a pipe. And the picture was taken with her standing besides Dan with a pipe in her mouth. So I haven't gotten it yet but I've located it and I'm going to hound the person until I get the picture.

The other thing is, in the 1930's the assessor or assessors were required by state statute to do a house-to-house visitation every year for the purpose of assessing poll taxes on the inhabitants of the house, and to make a street list and a resident list. If they came here every year and they have James Fitzpatrick and his wife living on "Shattuck Street", this has to be Shattuck Street.

Electa: So you're saying this was Shattuck Street. That's what you're thinking? There is no other Shattuck Street?

Carl: There's Shattuck. And [shows a map] that's where it began, and ended at the town line here.

³ We need to have an accompanying map that shows the roads to help see what everyone is referencing.

Electa: [looking at map with Bob] Here is Martin's Pond. I am not finding Shattuck. There it is. Oh it's nowhere near this, its way over here. And we are over here. Ah, but look: a dotted line. Dan Parker becomes Martin's Pond becomes Shattuck.

Electa: All right then. You said that you had a paper with a list of concerns and issues. Ah, you've got it. Okay.

Carl: And this is a list of things that Mike and I talked about. He was the kid that I was telling you about. That when he came the second time, man! He's got a notepad and he's writing down notes and he's probably, what? 19 years old, being a sophomore. And damn! You don't have to be writing down all this stuff. I'll just keep my mouth shut. And we get to talking about all these things because no matter who the kid is, they are not going to own my property outright, so that I die and the next week they sell the place and walk off with all that money.

Electa: So it sounds like you have in mind some way to protect the property?

Carl: I haven't done anything yet because I want it to stay as a farm, if all these people are telling the truth that more people want to farm than ever before.

Electa: The number of farms in Massachusetts has actually increased.

Carl: But are they just 2 or 3-acre farms.

Electa: Well, they are smaller. I don't what the actual...

Carl: I am of the opinion that while I am alive, this farm can be brought back to where a living can be made. And that's the point that I think is important, and that's the point that most people lose sight of. Oh yeah, here's Dunstable for instance, they bought the Ferrari property and used it to grow Christmas trees. Well I'm glad they're not there anymore because I don't have that competition. But they are just letting it grow back. They are doing nothing with it. And that's what happens when the town buys it. Another thing that's on that list: my understanding if the town owns it they cannot be entering into a lease more than 5 years.

Bob: That's true, but they don't have to lease it -- they can license it indefinitely.

Carl: Well that's something that isn't known then. This is where there's an issue involved and that's why I don't want anything to do with the town. I believe I'll tell you something else: I'm glad I know that! Because no one ever said that.

I wanted to build another house – that's another one of the things I've got listed here. Where do I go [when I retire] if I'm not making a big income? Where do I go when I can't farm anymore? And so that got me thinking, well that's where another small house would come in. Because whoever moves into this house, I'm sure as hell not going to live in the same house with them, especially if they're going to have kids. I want my own place. But I'm thinking of it in my own terms too, when I get to approaching the "drool" stage in life that I'll have somebody banging on the door " Hey Carl, you still breathing?" "Yeah, could you take me to the grocery store this afternoon?"

I do have a home health care insurance policy so that that would never be a part but if I get to the point that I can't drive it's a win-win situation. Whoever gets to be my age and can't farm anymore, needs a place to move to, and in between it can be used for farm labor to offset that cost. Or the money [from renting it] could be set aside and that would be pension, retirement money. I mean these are things I've never thought about before until I started farming. I mean, I had no idea how lucky I was to have a job working for 34 years for the state of Florida. Having the pension and social security and everything else.

Electa: That makes sense.

Carl: I've talked to a couple of people who said, "Oh Carl, sounds like you need to do some estate planning." Well one of the things in my estate planning at this moment is to sell this place. And I have a capital gains tax of 35% instead of 55% when I die if they reinstate the [inheritance] tax. So I've already saved myself 20% that I can go off and have a good time with living down in Key West, or Margaritaville, and stay drunk on the beach and wait for the big tide to wash me out. That's it!

Electa: But that's not why you came here is it?

Carl: No it's not. I blame the Simmons' for that. I don't know if you know Jerry Simmons, his wife just died a couple weeks ago and they lived where Hugh McGovern lives just up here. And I've never missed a summer here from 1949 and I'd go up there [to visit the Simmonses]. I thought I was a big help! There was the first time I took a calf out of the barn on my own; took it for a walk down to the brook for a drink. And do you think I could get the calf back to the barn? No. And so I go get Mrs. Simmons and we're pulling and we're losing ground and she goes and gets her husband. And he comes because she was going to tie the calf on to the bumper of the truck and pull it up to the barn. The three of us are pulling, and the whole time we're pulling, he is swearing. And I swear he could swear for 10 minutes and not use the same word twice. So I got to thinking about that and other incidents where I was "helping". Was I the proverbial pain-in-the-you-know-what and maybe my aunt and uncle were paying the Simmons to take care of me during the day when they went into Boston?

Electa: So who were your aunt and uncle then? What were their names?

Carl: My aunt's name, she used the name Silveus (S-i-I-v-e-u-s) and she was a physician at the Lahey Clinic. She was the second female physician to be hired by Doctor Frank Lahey and if you go into the Lahey Clinic, so I have been told, her picture is in the lobby. So, I think that is kind of neat.

Electa: So Silveus was her maiden name?

Carl: Was the maiden, and it's Latin.

Electa: First name?

Carl: Her first name was Esther. And she always wanted a farm; she wanted to live on a farm. My uncle was not into farming. I wanted to go to UMASS; I wanted to have a nursery is what I wanted to run here. And I want to say that Margaret Thurlow....Thurlow's Nursery's up on the North Shore somewhere. We made 3-4 trips up there over some of the summers when I was in high school and looked at the stuff and Mrs. Thurlow was a nurse at the Lahey Clinic. And that was it. My uncle wanted nothing to do with it. Every acre that you see that's cleared right now, I had to pay to clear it. There was no open land because everything grew back to woods. Electa: Open land? No open land when?

Carl: When they died in 1980.

Electa: 1980, and you've been here since then?

Carl: That's when it became mine, and I had to pay some inheritance tax also.

Electa: Did you sell land to pay the inheritance tax?

Carl: No, it wasn't that much. It was minimal in-fact. My aunt left this place to my mother and when we saw what the inheritance tax was, my mother said, "This is ridiculous for me to inherit this." (ecause my mother was 80) "and how much longer am I going to live? And where are you going to get the money to pay it when I die?" So she went back to the lawyer and told him, "I don't want the place." And oh, well that could be a problem. And a few days later: "Well, Carl is your son so if you disclaim it..." it would naturally go to me. That's how it slipped into my hands, because she wouldn't accept her inheritance.

Electa: So who's sister was she? Esther's?

Carl: My mother's sister.

Electa: So Esther was your mother's sister. What was your uncle's name?

Carl: Elmer Carlson. He was an importer/ exporter in Boston; had his office on Atlantic Avenue.

Electa: Does the Carlson have to do with Carlson Orchards, Carlson?

Carl: No, no relation at all.

Electa: Ok, whole separate thing. So this was sort of like their summer place?

Carl: They lived here full-time when they bought it, because this place was... It was a bulldozer place.

Electa: That bad?

Carl: It was pretty bad; no electricity, no running water.

Electa: So they could buy it inexpensively.

Carl: Well, the deal was, my aunt was looking for a place that was less than 50 miles from Boston and cost less than \$10,000. And they got this, and they did a lot of work. I 'spose that's one of the things.... But having no electricity, no running water. I don't know, for an 8-yearold...my grandmother was here; my mom cooked on that stove and it had to have been given to James and Lillian Fitzpatrick. It has an 1887 date on it, and they were married in 1887 and that was the "Big Scandal"! How dare an Irish Catholic marry a Yankee protestant in 1887! Electa: I remember, we swapped stories about this.

Carl: Yes. I did the genealogy on the Fitzpatricks, as with as everybody else that's lived in this house. So I get down to Mary Jane Dunn,. Her grandfather was Edward Fitzpatrick, the brother of James Fitzpatrick, Jr. So I called her on the phone, "Mary Jane Dunn?" "Yes?" "Are you a Fitzpatrick?" "*Yes, what about it*?" "Oh, well I live in the Fitzpatrick place in Groton." "Ohhhhh."—So everything, I mean instantaneously it changed. They had a family reunion here and so, yeah, I met the modern version of James Fitzpatrick – he's up in Vermont now. Electa: Farming?

Carl: No, I don't know what he's doing. He was in Pennsylvania—York, Pennsylvania—I want to say, when they had their family reunion. Mary Jane Dunn lives In Pepperell! [To Bob] You know the Dunns? She's a Fitzpatrick.

Bob: This is Jimmy's wife?

Carl: Yes. Anyway, that's how I met her because I did the genealogy on the Fitzpatricks.

Electa: So when did your aunt and uncle buy this place?

Carl: They bought it in '48. They closed on it January 31, 1949.

Electa: Strange, that they closed on it that late.

Carl: Well they had a survey. They had a survey done.

Electa: Oh that's good, so you had a survey done on the property? That's a valuable piece of paper. And was it the whole, what, 100 acres?

Carl: I forget how many acres. They bought a parcel, this parcel directly across the house from the Simmons and I want to say 18 acres. And there was a piece that was taken for back taxes and they bought that. So those two parcels brought it up to the 133. There's a close tie here. Samuel Bowers, who lived and grew up in this house – his grandfather was Jerathmael Bowers that I told you about. He became the first tavern keeper in Groton at the Champney house. Electa: Which is where?

Carl: On Champney Street. It's a yellow house if close to where the old town common used to be. It's an apartment house now but it used to be an inn and a tavern and Samuel Bowers kept that. What was the name the used to call him?... "Landlord" Bowers, because he owned lots of land obviously. And when I learned that knew I had to go back to the registry in Cambridge and find out how much land he owned. I'm not remembering it right now, it was a lot of land. Electa: I bet it was more than 133.

Carl: Yes, because he had sold this place and another person came and owned it. But the interesting thing is the connection that a Bowers was here. A Lieutenant John Woods buys the place and some other land and his son Isaac Woods builds another house which J.B. Raddin buys and lives in. There's a Groton road named after him, he owned Gibbet Hill.

Now there's another connection: the person who is doing a lot of my land clearing and trucking my manure in for me is Bennett Black. He's a Raddin. So here's the trilogy, I mean I think in terms of 3 for some reason. So what does it mean that I've made a relationship with Bennett in doing land work, and we have the Bowers. We have Isaac Woods selling to J.B. Raddin, and Bennett's a descendant of J.B. What are the odds of this happening with a property? That's like slim to none.

Bob: Pretty narrow that's for sure.

Electa: Can I ask you some questions about the forest part of the farm?

Carl: Sure.

Electa: You obviously grow Christmas trees. Were there any here before you started those? Carl: No, every piece of land was forest when my Aunt and Uncle died.

Electa: So full-sized forest?

Carl: Well, trees that were maybe like that. [Makes medium circle with his hands] They weren't huge trees. But I had to pay to have all the land cleared, and that's an expensive deal. Bob: Out of the 133 acres, how many do you think were cleared?

Carl: Probably about 18-19 acres. I want to get it up to about 25 acres. I don't know if you know about John Robbins or not, he's a consulting forester and lives in Concord? And he's been working with me on doing this when I started looking for somebody to be my successor that lived relatively local or could do an easy commute. Because I'm at the point that I can't do the work. I need help, and I'm not getting help. And that's why I'd like to find a successor to do the Christmas trees because it's a hitch. No one's going to get used to it overnight. Because it takes 10 years to grow the tree. Anyway, the immediate objective if I carry through is to have 25 acres of Christmas trees – figure 1,200 trees to the acre; that would give a 2,000-tree-a-year income. Part of the annual income; that would be \$90,000 at \$45 dollars a tree.

Electa: \$45 a tree?

Carl: Yeah, I jumped it up to \$50 this year to include sales tax. What a nightmare it was, 6 and a quarter on a tree? Some people buy one tree; some people buy a wreath; or a wreath, a tree; two trees. It was a nightmare, so I said I'm upping the price its 50 dollars and it includes the sales tax. Well, I'm giving myself a bit of an increase, maybe a dollar or something like that on sales tax but I don't want to go through that nightmare again on trying to make a change and all that. There's \$90,000. My objective is to have a gross income on this place of \$200,000. And that the person who farms, their income would be the equivalent of the average household income for the Middlesex County, Lowell area and that's \$80,000, and that's the objective. And the other \$110,000 goes to fees for hired help, for whatever. I definitely believe it can be done. But the town has to cooperate; I spent \$70,000 - over \$70,000 - on my lawsuit. And that's taking money away from getting a farm up to where a living can be made and looking at it a bit further than that. Yeah, maybe a full-time employee someday could be here.

Electa: Complicated, at the very least. Imagine you were 40 and you had gotten this far with the farm, could you imagine expanding the products from the farm?

Carl: Yes, I do. [The other \$110,000 has to come from a] second crop because, where I've been and talked to people, if you farm and you have one crop, you're suicidal. You've got to have a second crop, and that's where I think that my wreath business is one.... it averages out to about \$50.00 an hour. Doing the tipping and clamping and the decorating.

Electa: \$50 an hour, given how much you can charge for a wreath?

Carl: Well, lets say I'm charging \$20.00 a wreath that includes the tax, so this is going to be a bit less that 50. I can clamp 5 wreaths in an hour and I can do enough tips in an hour to make the 5 wreaths. So at \$20 per, that comes down to \$50 per hour. So you can hire some people to do work if you want to expand it to a mail order business.

Electa: Right, yes we talked about that on the phone.

Carl: So that could be another part of it. Now I went to a place down in Mendon, Mass. The man had 10 acres; most of the trees that he sold, he got from somewhere else. But the weekend I got there he was very upfront with me. We eventually got to where we were talking money. That weekend was the best weekend he ever had when we got to talking about money. He brought in \$40,000 that weekend. So that's where a gift shop comes in if you just stick to holiday, Christmas stuff, the wreaths, the trees, that garlands, the kissing balls, the swags.

Electa: The boxwood trees?

Carl: Yep, yep, and that can be a part. Well I met this kid about 6 weeks ago in Dunstable, I don't know whether you know the Frys or not? Adam Fry wants the farm. I don't know where it's going to go but he's interested in greenhouses, and a greenhouse business up here would be

good. That could be the second crop, and then if you have a gift shop it would seem like you've got the second crop. So we went up to the King farm, and they've got 4½ acres and greenhouses, and this year they just started growing produce for wholesale in the grocery stores. And here's this huge greenhouse, and they've got a pipe almost up to the ceiling of the greenhouse, and they've got these wires hanging down that may be about 3 feet or so above the ground. Or pots, pot after pot of tomato plants and they're growing out of this wire. Better-looking tomatoes than I've ever seen growing outside. Then I go to this other part, all these cucumbers hanging down, melons hanging down. I've never seen anything like that. And he says "Oh yeah, we're looking to expand." Well I'm thinking, ok they're doing wholesale. If Adam wants to get into the greenhouses and the Christmas trees, there is yet another crop. And if you can sell tomatoes and salad greens et cetera all year long....

Electa: Or even most of the year....

Carl: There's another niche. Well, I talk to him, thinking he's out there in lala land; then I do a little reading and maybe he's not so far off. [The idea is] that you bring manure in. You run piping through manure piles. [If} you bring those copper pipes, with the heat let off in the greenhouse, you're not using electricity. So maybe there's something to it. I don't know, I need to look into it!

Electa: What about extensive rather than intensives crops such as hay, for instance. Is there enough of that around here?

Carl: I think there is, because I went to a workshop one afternoon at the Littleton Electric Light. And one thing, one issue, in Middlesex County and Essex County is the amount of horse manure. It's getting to be a problem.

Electa: It fits right in with your greenhouse project.

Carl: Yes, and my soil enrichment out there, too. If the board of health doesn't find out and hop on me because I've got piles of manure standing around. We get to some ridiculous people who don't know what the hell they're talking about.

Bob: Just in fairness be aware that the local boards of health are being leaned on by the state relative to manure issues.

Carl: Yep. Which reminds me, this just came out in the paper. You can have that.

Electa: Oh, good picture! Is this the one from that (Carl: Lowell Sun.) Yeah, that one you and Mike were interviewed in? Mike Roberts? He said something there--

Carl: Mike went to the meeting with Jesse Reich and I gave Hiroco several names and phone numbers, I don't know who she called. I think she did a very good job.

Electa: Looks that way, yeah. Do you have another copy of it?

Carl: I have another copy of it other than that one there.

Electa: Ok, no more hay.

Carl: I just think that's just something that everybody is into.

Electa: What about nurseries? I mean you've mentioned nursery, and you apparently gave up on that.

Carl: Depending on what you're doing I'll tell you, I'm on the Sustainability Commission. And I don't know how much of what we talk about is realistic or not. But I have done some reading. By the end of this century – we've got 90 years to go – all of the southwest is going to be a desert. If its true or not I don't know, I'm not going be around. But if it is true, according to other stuff that I've seen, the population from Mexico and all the southwest is going to be up here in the northeast, from Chicago east is where the population will be and up to Canada. I mean look at the fall we've had so far, I mean maybe there is some legitimacy to that. Well, if we keep going the way we're going we have the 2-acre house lots. All we're doing is using the land up for nothing, so does that mean that all of our food is going to have to be grown in greenhouses? Roof-tops, will they have green houses on top of them, growing food for people living in those buildings? I don't know, but there are people out there more informed and smarter than I am saying it's going to happen.

Well, we're in trouble if we don't start doing something. I think one of the big scourges is the attitude that we have to have the 2-acre house lots.... My take on that is that the 2-acre house lots and mega-houses that they build on 'em are like the Victorian houses: they are all pretty much torn down now, the ones surviving are like prehistoric structures. Because they've been torn down. They were just too big.

Electa: Too inefficient or something?

Carl: Yes.

Carl:I think that for people that farm, that struggle to make a living, there have to be some changes, serious changes. Like that house that I want to put there to move into so I'll always have something to do. I can sit on the mower and mow 25 acres of grass all day. I'd rather do that than sit in the damn house watching T.V. all day long, and let a young person do the bull work out there and it's a win-win situation I think. But no you've got to have the 2-acre house lot;⁴ you've got to have the frontage. Well there's where a change has to come.

Electa: This guestion is sort of related to the 2-acre house lot issue. In terms of protecting the land, I'm wondering whether part the way of doing that could be putting some kind of conservation easement on that. - Both parts of the house lot as well as part of the farm. Carl: There's that, but the thing that gets me is that when I was on the board of directors of the Mass. Christmas Tree Association, we had a workshop at a small farm in – Amesbury, I want to say - the farm was a dairy. [The farmer's] father died; the farm was going downhill; his mother was still living there by herself and she keeps writing "You've got to come back, you've got to come back" and so he gives up. Well it declined enough that he applied for the APR program. He qualifies. He gets it, and takes a big hunk of money out and he's done, he's spent all the money on doing all the upgrades and everything. And he goes to the bank to borrow money to finish. The bank won't loan him any money because of the APR: there's nothing to sell. There's no development rights, and it's the same as if it has a Conservation Restriction, you can't borrow money. Because the bank wants something they can sell in the event that you can't pay. Now, someone said that's what federal loans are all about, that I don't know... this comes back to if there is to be a successor. Should that successor have some ownership of the property? Then we come back to the farmer, "Well what if I have to shut down?" And [if he's my] age, "Where do I go, what do I do, where do I get the money to buy a house?" And he's right on target. There has to be some creativity if we want to keep the farms that are working today. Electa: What do you mean by creativity?

Carl: Well let's say putting a house up there; forget the 2-acre house lot.

Electa: So it has to be on a separate lot, is that correct?

Carl: The towns, the by-laws state that you have to have a 2-acre lot.

Electa: So that's the zoning regulation?

Carl: Yes.

Bob: You also get into issues of having multiple dwellings on the same spread.

Electa: Well I was wondering whether maybe that could be done instead, but it sounds like it can't. Or it's worse?

Bob: You probably-- I haven't read the Groton zoning by-law but there's no reason that a by-law couldn't be amended to have special provisions for agricultural grounds.

Carl: Well that gets into a whole other -- its like the Agricultural Preservation Restrictions today. I used to think that was wonderful, but I don't trust that or any kind of restriction today. If it existed in 1900, let's say, and you had to use the same farming techniques in 1900 into the future, you're still using oxen and horses. We can't think that far ahead! We have to provide some

⁴ Check the local and state law. The consensus in the office is that the 2-acre zoning is for a single house lot. A subdivision bylaw would permit him to build a second house on the property – what isn't clear is what is actually permissible: do house lots have to have frontage or access? What defines access? If his road is a "driveway" then is there a bylaw limiting the # of houses on a single driveway. We should clarify this.

leeway if it's farm related, agriculturally related – then I'd say it's allowable. I used to have a barn out here in the late 50s early 60s when the barn burning was going on in the area, and I'm sure Pepperell lost some barns as well as Dunstable and Groton.

Electa: It was a tough era for youth and destruction.

Carl: I don't know but when I think about it now, thank God the damn thing burned. Because I would be paying taxes on it and that's just one more expense.

Electa: I just had a long conversation with a man who's a dairy farmer in Connecticut who owns a wonderful piece of land with a probably 18th-century barn – spent a whole lot of time and money restoring the barn so that it would look the way it was supposed to. It burned. It was torched, there was no question about that and I said well you got the insurance for it then. He said no, I can't get insurance on a barn. You can't get insurance on an old barn, he made this as a blanket statement.

Carl: Well that gets back to another issue. I don't want to put any kind of restriction here if the planning board or the conservation commission is going to be "Oh you can't do that, you should have thought about that before." I mean what if someone doesn't want to grow Christmas trees and they want to grow something else? I forget what organization it was I talked to; they had a farm and there was a deed restriction and it had to be organic gardening or farming only, and they couldn't find anybody that wanted it. So it sits there and its going back, it's going to be.... Bob: You can go to court and get that kind of restriction resolved.

Carl: Well that's something I don't know, but the emphasis was don't tie a successor's hand into doing a particular type of farming. And that's where I'm coming from, as much as I believe the Christmas trees are a niche, I don't think I should tie someone's hand into growing Christmas trees.

Bob: You could put in a general restriction of something like "for commercial agricultural use", leaving the definition open.

Carl: The bottom line for farming is you have to have a suitable piece of land and it has to be agro-tourism. That if you don't have people coming to your place and saying, "Oh look at this, oh look at that! God I've never seen tomatoes growing on vines! 10 feet!" That's probably an exaggeration but let's say 6 feet. When kids come here in the spring, you know what? They're here to get a Christmas tree. They have nagged their parents, "We gotta go there to get the tree." They come here look at Parlee's over in Tyngsborough – they've got school groups that come from Cambridge, from Boston, and I don't know where else. And they come and they pick, and I think that is where a part of farming if you want to be successful has to look at.

Electa: That's certainly something Mike Roberts had been talking about. We think of it and couch it in terms of interpretation and public education kind of stuff. And that's really what it is. I mean the function of the tourism will provide you some income, but it also indoctrinates at least one if not three generations, that farmers and people who care about farming consider important. But I think you're right about that.

Carl: And I think farmers need to have some business classes, because most of them who talk to... depending on who you're talking to. [Local loan officer] He's the biggest villain around because he loans farmers money and they can't pay them back and he forecloses on their livestock or the land. And it's because those people, I would go even farther than that I think that one of the shortcomings of public education here if not the whole country. Kids ought to be required to take a business economics class. They need to know how to make a budget, they need to know what they're spending their money on. "Oh I got 20 dollars, lets go blow it on this. -- Oh, I can't pay that bill." And that's why people go under, because they don't do any of those things. And why shouldn't it be a required class? I taught advanced placement and American history for more than half of my teaching career, actually probably like 2/3 of it. Just as they require American History they ought to require a business economics class. That affects their daily living.

Bob: Or at least teach them how to balance a checkbook.

Carl: Exactly! Exactly. One time when I was talking to Hughie, let me see if I can remember: poor business skills, divorce, and taxes. Those are the three things that make farms go under. Electa: Do you agree with that?

Carl: I do, 100%. If you get a divorce and you own the farm yourself, it's split in half. And that's one thing that if I find a successor whether it's male or female the property of the farm cannot be subject to a divorce agreement. That whoever stays and farms -- they get it all. End of story. Electa: Why? What would be wrong about dividing the land on this farm in half?

Carl: Because I think you limit the possibilities of making the living that we talked about earlier, that household income of \$80,000. I use the \$200,000 because the town for whatever reason did an appraisal on this place. And so I'm saying 10% of its value should be the gross income. Of the 2 million dollars that Avery Associates came up with, which is the value of it right now, \$900,000 was the agricultural value. Well let me tell you, at age 70 with some farm income, a full pension and social security I can't afford to pay 900,000 for this place. So what is the chance of a 25-35-year-old buying this place? It's slim to none. That gets into a whole other thing, I am not going to allow this place to become an estate for a Bernie Madoff or Martha Stewart, where they can say, "Oh, we sell a few Christmas trees and we're keeping it in farming." No. I want somebody middle class like myself. The middle class is shrinking and I'd like to do something for a middle class person, to be able come here who is really wanting to work.

Electa: Well, but suppose you were faced with the hard choice? You either get Martha Stewart or nobody?

Carl: I'd rather subdivide it and have 50 houses here.

Electa: Why?

Carl: Because there isn't really any affordable housing in this area. I have absolutely had the thought of going to HUD and donating it to the federal government for affordable and low-income housing. There are good people living in Lowell and they're trapped there because they can't get out. I'm sure people in Groton or Dunstable, they'd be up in arms, probably shoot me if I did that and they found out.

Carl: I don't know what has happened to us, to this country in the last however many years. When I bought my first house, I worked 3 years, I paid rent I was able to save enough to come up with a down payment. It was a dump, I did improvements. I sold it, I bought another house. You can't do that; a 25 year old can't do that in this area today.

....

Bob: We were talking earlier about 5-year leasing on the town land.

Carl: Oh, if the town owns it?

Bob: Yes.

Carl: You can only lease it for 5 years, that's the number I've heard. How accurate is that? Bob: Well that's the state procurement act. The town has to go out to bid to get someone to lease the land for maximum income to the town. Now there are a couple of back doors; the town can make formal statements to the effect that the value is not the primary interest of the town in leasing the property, that they are more interested in agricultural things in the community. Carl: Well that's where change in thinking has to come about then. But it still goes back to, if you don't own it, you can't borrow on it. I'll use Surrenden Farm [as an example]; it's being hayed right now. What would it cost to put a fence up if you wanted to do cattle in there? What would it cost to manure that place -- to build the soil back up when you know you can only have it for 5 years? I spend between 4-5 thousand dollars a year bringing manure in here.

Bob: But that can be a part of your lease agreement, that if you make capital improvements to the property that either it would be deducted from the lease or some other compensation made if the lease is not renewed.

Carl: Yeah I could see where there could be some discussion on that then. But another interesting thing about Surrenden Farm and all that the houses that were there, they sold the houses off.

Electa: So they sold the houses off for what?

Carl: Because they got money back. They got from the 3 point whatever million so many millions back from the buildings that were there that they didn't have to be carrying a loan on. Bob: Well when Pepperell bought the Pepperell Springs property it was 160 something acres. The funding for this was a real collage of sources. The fallback plan was that there were 7 potential house lots fronting on a street, not integral to the redeveloped wilderness notion of the parcel as a whole. If push came to shove and any of those other funding sources had fallen through, then we would have gone to selling house lots to make up the balance.

Electa: Grafton did that with a piece of land, farmland that they had bought, to preserve the rest of it.

Carl: Which reminds me of something – no matter where you go in this house today, what you see out of any window is what every inhabitant of this house has ever seen. When the Fitzpatricks owned it 75 percent of this was either pasture or tillable. You're still seeing what was here historically.

Electa: For one period of time.

Carl: For that period of time, or when Jarathmael Bowers built the house and you had trees growing right up to the edge of the wall there. You're still seeing what Jarathmael Bowers and maybe his family saw, and I think that's kinda neat. I don't know any other place in Eastern Massachusetts where that happens. That parcel over there [across the road] used to belong to the Fitzpatricks. James Jr. had to sell it to... I want to say Everett Tarbell in Pepperell. And it became available in 1956, and that's how the Tullys got it, and the Tullys donated it to the Dunstable Land Trust. So that's kind of neat. There will never be a building there to ruin the setting that this place has. The same setting that every inhabitant of this house had, no matter when. I think that's a neat thing.

Electa: That stonewall out there is pretty amazing. Did you have anything to do with rebuilding that stonewall?

Carl: No, that's exactly as it was.

Electa: Do you think we should take a walk around?

Carl: Sure, we can take a walk.

[They start through house]

Electa: I'm just looking at this particular room, it seems--

Carl: This was added somewhere near the 1825 and 1830 by John Woods. It's early Greek Revival. The 3rd John Woods to live here over extended himself, had to leave Massachusetts and went over to Brooklyn, New York to escape debtors prison.

Electa: Debtors prison has never made any sense to me. Hey, Northeast High School! Broward County?

Carl: Yep, I was Broward County teacher of the year. And I got a 4th place from the Joint Council on Economic Education for teaching economics. Got a free trip to California from Fort

Lauderdale. And there's a bunch of other stuff I could show you, but...

Electa: This is a wonderful room. Now am I right, south is out there?

Carl: South is straight back that way.

Electa: Really? What a strange orientation for a house.

Carl: Its east and west to this way.

Electa: So instead of the front of the house facing south like one would think it should, it's the left side of the house that faces south. Huh. Something got turned around.

Bob: Oh, you did Bicentennial stuff too?

Carl: Well I'm a re-enactor, a Colonial re-enactor. We do the Battle Road and we're doing the Fourth of July parade. I've done that 11 years in a row.

[They move outside the house]

Electa: Why is this filled up like this? Wait a minute, the whole house is raised up on a terrace – about 2 feet above the height of the roadway.

Carl: Yes, that is a question many people ask and maybe when we come back we can take a look in the cellar. I think it has something to do with the Underground Railroad when the Fitzpatricks were here because they did harbor slaves, this was a station. And Leroy Johnson's mother knew the Fitzpatricks and they would tell stories about harboring slaves in the house. Bob: But it was an architectural convention in 1750, and later, to put houses on a glacis.⁵ Electa: Well it was also an architectural function when you had to dig out a cellarhole and you only have to dig it out half as high ... except that this is built into a slope isn't it?

Carl: It did slope and actually if you read the layout of this road from 1772 it came 6 feet from the northwest corner of the house and this is about 20 feet.

Electa: Are you aware of very different types of soils? Here for instance it's quite hilly. Are there other parts that are quite flat?

Carl: Yes and we can look at some places. This was probably pasture because the soil here is basically lousy. In fact this soil here was improved through manure from the Pepperell treatment plant about 3 or 4 years ago. There was a sign out that said "Free Compost" and I said "Oh Jeeze, I'm going to run in there" and it's the Pepperell Treatment plant. And here are these mounds of stuff and they're running out of room, and so I took almost all of it. Several of them came out here – I'm sure they thought I was buying it to compost it and sell it, when they're giving it away.

Electa: Have you entered into a more permanent agreement or something?

Carl: No. Apparently they're selling it. I mean they were getting 10 dollars a yard for it. Talk about luck. Of course it was all tested and everything so there wasn't anything wrong with it. Electa: Now that line there. You've taken the topsoil out of here, right?

Carl: Right when we go out in the back, you can see where we've put some of this. I mean its just bony material. This is all sorry soil. And when I started looking to plant, I met with Chuck Perna who was a state forester; Charles Connelly who was with USDA and lived in Pepperell, and Bob Leupol who lived in Lunenburg. And they spent a half a day with me. I wanted to grow produce because that was what farming was, and they're convincing me they're all foresters. A lot of people where getting into growing Christmas trees, and then one of the questions was, who's going to do the spring planting, where are you going to be? Fort Lauderdale. Well who's going to do the harvesting, where're you going to be in the fall? Fort Lauderdale. Well I guess you don't want to do produce, you know? So okay. I want to say it was Chuck Perna that said, "You have seen trees growing out the side of mountains, haven't you?" and I said "Yeah." "Well, trees can grow anywhere. Your forester can plant, and by the time you're ready to harvest

maybe you'll be retired." And that's what did it.

Electa: Do you have trails through any of your property?

Carl: No not really.

Electa: I'm thinking of your idea on agri-tourism and wondering if clearing the trails might be helpful?

Carl: Well, one of the things I had fantasized about is making this a holiday farm – that every holiday you come here to get something. Like Easter, you have Easter lilies, you have chickens running around here all the time, you get your eggs. Maybe grow turkeys just to have them around. Or have somebody else growing the turkeys and you buy them wholesale and bring them here, to help support other people that are growing different things.

Electa: Oh that's an interesting idea. You do have wild turkeys here, don't you? Carl: Oh god yes, I wish I didn't have a damn one of them.

Electa: It's interesting that so much of this land, so much of this area right here was clear. I'm looking at all the little small saplings in here, except the pond feature.

Carl: Well they're not that big when you think about it. One day, I was walking out looking at the road, and I was in the woods, and I find a charcoal pit.

⁵ A "glacis" is a slope, not very long or very steep.

Electa: Oh! How did you notice the pit?

Carl: Well I just knew it when I saw it. I guess it was just one of those days I guess there may be charcoal pits around here and I just never know, and my mind was just in the frame at the time. And it was there, and I'm telling John, my forester about it. And he's just going "Oh god, I've never seen one, what does it look like?" So we go out and I show it to him.

Electa: Now was this actually sunk down?

Carl: A charcoal pit might have a depression maybe about like this, but 12 feet across. John and I walked around and we counted 18 complete and partial circles that were back there. Electa: Can you imagine what it smelled like?

Carl: Well this gets into the woods they're growing here. I thought that the charcoal pits were there because a parcel that used to belong to the Fitzpatricks is where iron was mined. And I thought they were using the woods to make the Iron, and John is saying "Well that's impossible" and I'm saying "Well there's no other reason for it." And so we come back from lunch and we're arguing about it, and getting a loud with each other. And so we go back and we measure the trees. And he said this tree is this wide and this is how many years it would take to grow this big, and I said those trees were here when I was a kid. When I was 8-9 years old, but he said, "How big does a small tree have to be to look like a big tree to an 8 year old?" That's how we arrived at the growth of the trees. He's a forester, that's his training.

And this is where the pond is or used to be. And I used to have a raft, I'd pull myself across it. The water was right up to the top when I was a kid and it's filled in, I would like to clean it out. And depending on who you talk to, I can. But I don't really know well. Alan Cheney over in Dunstable he said that if there's any problem you just go up there and a little bit further, none of it is a wetland.

Electa: It's a vernal pool I betcha. But it may not have been certified yet.

Carl: I don't think it is, and what difference does it make? It's a historical feature. I don't think there's any other place that they could cut ice. There's a ditch that runs all the way up to the road. That probably brought water in. There is no other place that they could be cutting ice. This has to be what that is about here, because this is not a [natural] wetland.

Electa: No, it obviously has been excavated around the edges to make it what it is. And there's no outlet right?

[They head back toward the house]

Carl: Correct. If we take a left we'll end up on Unquity Brook, and the property goes down to the brook. But the issue there is it never freezes so you're not going to get any ice. And there's another place by Unquity Brook, where the Bennetts lived.

Electa: Now, is the brook one of your property boundaries?

Carl: It is, yes.

Electa: And are the other boundaries equally natural, if you know what I meant?

Carl: Well they're stonewalls.[Here] I just thought that maybe if we're doing the Holiday farm theme, half an acre of pumpkins, and maybe half an acre of Indian corn.

Electa: Indian corn would be great.

Carl: Stuff like that, you could drive to and you see the pond, where ice was cut in the late 1800's to get that....

Electa: Sense of depth.

Carl: Yes, to get people to see some of the historical features.

Electa: Now is this also a roadway that keeps on going?

Carl: Well this has kind of grown over now. One year John got a call from the state forester, that our federal grant was going to expire if we didn't exercise it. It was a matching grant to my money: I put up a thousand dollars -- they put up a thousand dollars. It was for a cart path going back into the woods. And that's what this is.

Electa: Oh, "Forests and Trails:" the trails funding.

Carl: That could be what it was, so John said "I don't ever recall us applying for one." I said "Gee John, I don't remember signing for one either." "Well, we must have because they said you got it. "Okay, so let me see if I can get \$1,000 dollars [for the match]. So I got it just in the nick of time, and so we did it and then, after the work is done, "Oh but we made a mistake. You didn't get the grant." But I still got the money though, but they made a mistake.

Electa: So that explains why you didn't you think you'd applied for it?

Carl: Yes. But it would be nice to re-establish this and make it connect. It would be just a single road, one car; no two cars passing back here.

Electa: Why drive? Why make it a driving trail?

Carl: Well I don't know, it could be a hayride. It could be a hay wagon pulled by a tractor or oxen, I think oxen would be neat. Then you've got to feed them....

Electa: I was thinking of walking and snowshoeing.

Carl: See but that gets into another issue I've had. I called the Mass Department of Agriculture. They don't return calls. I called UMASS they don't return calls.

Electa: Really? The extension service? That's strange.

But anyways we went into a C.O.R.E. meeting in Boston and when that got finished we had about an hour and a half to wait for the train to come back to Ayer. So I said "Lets go over to the Department of Agriculture its only a little way across the street", "Oh do you really think we should?", "What's it going to hurt?" So we go up and the receptionist is there, "Who would you like to see?" Oh Jeez I can't think of his name. And finally Jared Kennedy comes out. "Oh, well let me see if he's in". So she leaves, and she goes back. "Yes, he'll be with you in just a minute. Come back here to the conference room." And I say to Jared "I'm Carl Flowers, I'm the person that has left several messages for you that you never bother to call me back on. And this is Mike, and this is the kid that I told you about. I want you to see that he also is a real person." "He sat there he did not know what to say. So finally he gets up and says "I'll be back in just a minute." And he brings all kinds of papers for different programs.

Electa: Well that's good.

Carl: They're state employees, and if there really are young people out there that want to farm, they should be jumping on it, rather than me just selling the place and taking the money, and doing whatever.

Electa: I have a different question. What's your favorite place on this farm?

Carl: I don't know that I really have a favorite place. I guess the house.

Electa: Besides the house.

Carl: I really don't know that I have one.

Electa: Well, let me do it differently. What do you think is the most beautiful, striking, interesting looking place on the farm?

Carl: Well I think if we were standing up here on the hill where all the treatment plant manure came to and you look out, it's a nice view. There's another place we can go to out in the back where there's really a nice view.

Electa: Do you have any other foundations or cellar holes on this property that you've found, besides right around the house?

Carl: Well, the Bennett cellar holes. They're depressions; they don't look like real cellar holes. They're only about this deep and they're kind of filled in. And then when I was going over something in the deeds – it's amazing how you read something and it goes right over your head;

then another year you read it again and "Oh, why didn't I pick that up before?"

Electa: So the Bennett place then is maybe just a house or was it a small farm too?

Carl: I think it was just a small farm, I've got his deeds somewhere in the house. Small barn, and there's a wall back there, and there's a bar way which tells you something was going on there.

Electa: Now by "bar way" do you mean like with stonewalls on both sides? Carl: Well like you just came through right there, just an opening through the wall. Electa: Oh okay. So the view went over this way?

Carl: This was all woods, and that was a problem when I was trying to take pictures of a house. It was kind of hard. I had to take 3 different pictures, because I couldn't get the whole house, but now it's cleared. But the interesting thing about the center part, it's a 4-bay, not 5-bay, which is unique and that's one of the things significant that qualified it for the National Register. Electa: It's very tall and skinny.

Carl: I've got a picture of the Raddin house on Raddin Road; I'm going to get a picture of the Parker house, to show why this should be called a mansion house in comparison to those two houses in 1760-1770 style architecture. The Raddin house and the Parker house are one story...how many rooms were in it? 3? 4? This house has 6 in it.

Bob: I don't think you're going to be able to find any continuing consistent use of the word Mansion House.

Carl: Other than it just being a bigger house than what everyone else has.

Electa: The other thing that's nice about Christmas tree farming which I've never appreciated before is you have a sense of progression, because you can see the different ages and the different sizes. And it's so quiet.

Carl: And this right here, that over there, and whatever those bigger trees are there, is one rotation.

Electa: One rotation?

Carl: 2,000 trees.

Electa: Now do you shear these, prune these?

Carl: Every year.

Electa: And when does that happen?

Carl: All summer long. That's what gets me down. That's where I'm falling behind, and I'm going to get further behind unless I find a successor that wants to do this that I can pay as part-time help. These trees had only been in the ground for [a year] when they were sheared. You can see where they've been sheared there, where they cut them off. They grew faster in about 14 months than trees than I had planted in other places, and it has to be because of all that manure I trucked in and I planted the clover [between the rows]. It has to have something to do with that, because normally when you plant trees they just sit there for a couple of years. No new growth, nothing. And to think that these put on enough growth that you had to prune them so that they don't become leggy, and I've never had that experience before. We'll see in another place where the story is very different.

Electa: Interesting. Carl, these aren't all the same kind of trees are they? Carl: They're balsam and frasers.

Electa: Ok, so they're not the same. I feel better. Do you have any sugar-maple stands in your property?

Carl: There are a few sugar maples, but not many. Not enough to get into that. And I don't know if that's actually a good thing to do because of the number of people who are doing it now in other areas.

Electa: If you're right about global warming, then it's not going to be cold enough here in 50 years for Christmas trees.

Carl: And that's another thing. I read in a couple of publications that I might not be growing balsams anymore, because of the warmer falls, that the needle retention is not going to be there. And therefore [I should] go with the frasers and the canaans which are North Carolina, West Virginia. They almost look identical, but they're used to the warmer falls therefore the needle retention. Last year I had 3 people bring trees back because they lost needles, so maybe there's something to that.

Electa: And these are fresh cut? Hmm. Do the deer bother these nice little saplings?

Carl: That is an issue. There were deer out here last year grazing and they were after the clover. They did snip off the top of some trees when they were grazing so I called Fish & Wildlife. And if I'm really interested in a long-term solution I should allow hunting, which I do. And I should put a 10-12 foot fence up. Well I could build a new house for less than putting a 10-12 foot chain-link fence around the property. I don't know if you're familiar with Carlson's over in Harvard; they've got a fence around – I have no idea how many tens of thousands of dollars they put into that. And to me that's not a decent answer. You don't make enough money farming to do that. Electa: Now the road is coming here, and what about there? Didn't we see somebody going by? Carl: Yes, those were hunters. This is the 1772 layout going this way; where those people are walking, that's the 1868 layout. --We're going to go this way, and we can meet the Broads.They live up right off of Raddin road. And I will let you tell what you do.

[Electa introdcued to Molly and Tim]

Tim: We've been here for 17 years in this town. So we've been walking through here for pretty much all of that time.

Electa: Do you see a lot of wildlife as you're walking through here?

Molly: We have, we have seen wild life. Deer, over there. And some pheasants.

Tim: Don't you mean turkeys?

[question about turkeys being a problem]

Carl: Well not a problem with me, but there's this couple in Townsend with their produce and if they'd eaten a whole tomato not a problem, but they peck a hole in this one, take a few steps. Peck another one and then they go another few feet and they get down in the dirt and do this and tear everything up. Nobody cares; you call Fish & Wildlife and they are protected. You can't shoot them, Unless it's during season.

Electa: Oh well, during season, that makes sense.

Carl: And that's an issue, why do you want to farm when you're making your living and the deer or turkeys or whatever come in and interrupt your living?

Tim: But I have seen, years ago, 2 moose in this woods that we walked through adjacent to this. We walked around wetland and I saw 2 moose there. We see owls, lots of great blue heron. Electa: In the wetland area?

Tim: Yeah, yeah.

Carl: I know a fellow who was hunting coyotes, and every time he saw a coyote it was after midnight. Hunters can't shoot them after midnight. It's against the law. And he's one of those persons who is strictly by the book whether its 12:15 or not. He won't shoot them.

Molly: Is it daylight savings time or not?

[Molly and Tim move on]

Electa: Now, why are there areas here that were not cleared? Are those old areas?

Carl: Well, there's a ditch there. And I wanted to keep the buffer with the power lines, so that when you do look out the house you're not... the historic view is what my thinking was on it. Electa: And besides, it keeps the ATVs away.

Carl: Well they still come in.

Electa: But they go under the power lines don't they?

Carl: They do, but I've got trees growing under the power lines too.

Electa: Oh, you do? How did you swing that?

Carl: Well I own the land. They just have the right of way over the land.

Electa: But isn't there a height limitation, I assume?

Carl: A good 8-10 feet, and as long as I'm 25 feet away from a pole so they can get to their poles, I'm free to do whatever I want to do.

Electa: So there are some limitations but manageable ones. This is another example of the stonewalls coming to the sides. How wide is this roadway?

Carl: 18-20 feet l'd say is what you want.

Electa: 20 feet is a 2 rod road right?

Bob: Rod is what? 6?

Carl: A rod is 13 and a half feet.

Electa: I have a cheat sheet I use at home because I can never remember. Now whose wires are these? Power lines?

Carl: National Grid.

Electa: Both? The regular power and high-tension?

Carl: The ones on the iron poles are the Hydro-Quebec, which adds a historic note because it's so far the only direct current line in the United States. Back in here is where I want to clear another 3-4 acres, and that'll bring it up to 25 acres where there will be Christmas trees. Electa: Why would you say here in particular?

Carl: Because you can go directly from here, right across into here.

Electa: But there's nothing particular about the soil?

Carl: I think it is a little better soil in here also. It goes back to why we planted where we planted. Where the poor timber was, is where the poor soil was too. I mean it's always location, location, location, no matter what it is.

Electa: Right.

Carl: And there's some good soil back there that if another crop were to be planted like the pumpkins, gourds, Indian corn, whatever, might be planted to do the holiday farm theme. Electa: It almost sounds as if you need investors.

Carl: Well the thing is I have my pension, I have my social security. Everything I've been getting from tree sales I have been putting back into the farm, I haven't spent anything on myself, although I have tapped into it to pay the costs of the lawsuit, and I've taken out of my savings to pay that. The town just doesn't seem to care.

Electa: I mean obviously *some* people in the town care, why else would they go to you first [for trees]?

Carl: That's something that blows me away. The fellow that does my masonry he had dinner with some people and he came back and was telling me how upset they were with the town treating me the way they treat me. And there were apparently a bunch of other people who have the same feeling. – This is 100% clover. I got the person who dug this up out of the grass to move it back here. I won't have to fertilize it. The other thing is that the clover won't grow more than 5 inches. It's a bit of a hurdle right now, but I won't have to harvest like the trees. It cuts way back on the chemical use.

Electa: Sure, that makes sense. Well you have pure organic honey, pure clover honey or something?

Carl: I guess, but there is no such thing as organic honey in this area. I think you have to be 3 miles from any structure or chemicals that would be used. So you're going to be in northern Maine or Vermont.

Electa: So how much honey did you get? Carl: I think this year – I did it with Al Horton who lives in Dunstable – he got about 600 pounds. Electa: And do you sell honeycombs as well or just honey?

Carl: We did do some of that this year; it's hard to do.

Electa: Does he do the processing?



Carl: He has the extractor at his house, I don't really have the facility here to do it. I've looked into it. If I had 25 acres of clover and 3 hives to the acre. We've got 75 hives, figure 100 pounds per hive. Yeah, it'll probably [bring in] around \$10-20,000.

Electa: So do you have to do anything special to the hives during winter?

Carl: Well, they need to be wrapped with tarpaper because that helps them hold heat, although it's not absolutely necessary. And we may have to feed them or look into them again. Electa: Now this field that we're looking at is how big?

Carl: It's about 1 acre, one acre and three quarters, an acre and a half. If this were fully planted (on the right side it's not planted) there would be 2,000 trees. This would be one rotation. Electa: So this is when they were planted around here, right?

Carl: Yep, the spring. And you can see what the drought [did to] them there that they died so I've got more over-planting to do here as well. If I don't, they dry out. There were some places where almost everything they planted this spring they lost because of drought.

Carl: But that's just one more thing, improving the quality of the soil in the clover because I don't mow until I think everything's dry then I come out here with the mower to cut the clover. I'm behind the mower at noon-time when I'm awake because the clover holds moisture.

Electa: I would assume that other farmers who plant clover, well, they just plow it under in the spring?

Carl: They plow it in the spring, or they plant it in between rows of their crop, and they have that plastic they put on their rows when they plant and in between the rows is the clover. So they don't really harvest it, and I wouldn't have had any thought about clover other than because I keep bees. I If they can bring nectar in without having to fly 3-4 miles, bring nectar in from right outside their hive, I've made them more efficient.

Electa: They get fat.

Bob: Not to mention, happy.

Electa: Those trees up there are just beautiful.

Carl: But they're very old, and that is sorry soil. So one of the places I'll probably spend \$4-5000 for having manure trucked in.

Electa: So is that wetland there, down beneath the power wire?

Carl: There is some wet in there.

Electa: But that's just some brush that hasn't been cut back?

Carl: It's called meadowland, that some people might call wet. But in the spring, there's water here, from the snow. But give it a couple weeks after the snow's gone, and it's dry. It's good meadowland, but some conservation committees call it wetland, others don't. And that's some of your best land.

[They move through one of the tree plantations]

Electa: That's a neat little tree.

Carl: Yep. It'll probably be wreath material.

Electa: Now when you say your wreaths do you spend-?

Carl: Trees that are not going to be sellable as Christmas trees I will go and tip. And I tip them heavily. Because I want to re-plant and I want to compost. I mean I'll probably put 4-5 inches of manure on this.

Electa: I can see it can use it; there's a lot of moss on there. It's an interesting environment, it surprises me that the trees do as well as they do.

Carl: Well these trees have been here about 16, 17, 18 years. They're okay, but there's a lot that are not top-quality trees.

Electa: Oh I think these are great. We've given up on a lot of places that we used to think were great Christmas tree buying places, because they shear them so close. Or the ones they buy are so closely sheared that there's no room to hang ornaments. We seem to be weird thinking that way.

Carl: Well that goes to show there's no such thing as a perfect Christmas tree because some people want lots of space because they hang lots of ornaments on them. Other people want 'em

real tight, I call them lay-on trees – that you lay your ornaments on. But a lot of these will be gone.

You know, you get down over there where it gets wetter, you could plant blueberries. I do have 287 blueberry bushes and we can go back that way and I'll show you where the blueberry bushes are.

Electa: And are those U-pick?

Carl: That was my intention but I can't be there, where people are picking their own blueberries, and mowing grass, and shearing, and herbiciding, and all that stuff. So it comes back to this person, this young person that wants to farm that can ease their way in. That's why I would like them to be within a 25 mile radius of here so that it can be an easy commute. Because I can't hire them full-time yet, and they're not going to be able to plant the trees, clear the land, etc. if they need [full-time] income to live on. So it has to be a transitional sort of thing where they're easing into it and I'm becoming the part-time help. Then we sit and argue because I'm telling them what they should be doing, and they might have a degree in forestry and "You don't know what the hell you're talking about, old man."

Electa: Now are these trees old also?

Carl: These have all been planted; these are maybe about 10 years they were planted since I retired. This is the second rotation on it, so the soil is a little better than under the power line there.

Electa: Did you do this? This flattening out, leveling of this land.

Carl: Actually, yes. I buried a lot of stuff; the rocks were pushed over in here.

Electa: It looks so familiar. You just see this over and over again near a wetland where a farmer at some point – including the 19th century, some of them – has plowed as far as he could and just put all the rocks along the edge to demarcate and get the most out of the property.

Carl: I had a young person here who's an Extension Agent in North Carolina, but grew up in Groton. And he was wondering about the possibility of making a pond there for irrigation for, say, strawberries, or something. I mean if communities want to keep their farms where a living can be made there has to be some compromise on things like [creating new ponds] at the state and local level. I understand where the conservation commission is coming from – "Well we can't let you do that if we can't guarantee that's still going to be a farm".... Well on the other hand, I'm not going to promise this is going to stay a farm unless...

Electa: You have access to what you need?

Carl: Exactly, and how do you bring the two together? I have 133 acres here, I genuinely believe a living can be made. But I have not sat down with any farm planners; I have no sat down with any financial planners to see exactly what needs to be done because the state doesn't do anything like that. There was an organization that I made contact with that actually came here. And for \$6,800 dollars they believe they can find a successor. Well, I'm not paying \$6,800! So I don't know.

•••

Electa: I'm really surprised that how little deer damage there is.

Carl: Well the coyotes might have something to do with it too. There are a lot of coyotes around here. I hear them almost every night.

Electa: Before we go any further, tell us what's ahead.

Carl: Well this is an area that I have just repaired. I spent probably \$25,000 or \$30,000 dollars to get it ready. There are 6 acres back here.

Electa: And you had to build this culvert too, right? The roadway, here?

Carl: Well there was kind of a culvert here, but if people are going to drive back here to cut their own tree I had to do something. There are 6 acres back here approximately, and the idea is to have 3 rotations back here.

Electa: So you said basically 2 acres per rotation?

Carl: Or 2,000 trees is what I'm looking at, I may have to do a little more clearing. These are Norway spruces; they're not the most popular tree. It is the tree they're putting up at Rockefeller Center.

Electa: And they smell good.

Carl: They do. And the white pines ...these here, most of those are going to come out after the sale; they're too big.

Electa: Really?

Carl: Yeah, but you see if I did roping, I'd need the white pines. But again it comes to I'm one person, and I can't do it.

Electa: Now was the ground like this? You did this just recently right?

Carl: This was all cleared probably 20 years ago, just this area here and this area over here. Sorry soil. And you can see there, that is planted in 100% clover.

Electa: Are you thinking there's going to be more honey out there?

Carl: We'll probably put more bees out there, but Al Horton is 65 and wanting to cut back. Got to have that young person, and no one's wanting to help with that.

Electa: This would be a great place for an agriculture internship program.

Carl: Yes, and I don't rule that out at all. I'd like to have an intern who would be interested in taking the place over.

Electa: Well I understand, but I'm just thinking short-term here. Now I'm looking at the pine trees and between the pines are stumps. Are those the previous rotations?

Carl: Those have already been cut; this is the first rotation here.

Electa: Ok, selected. And the stumps can just stay there and do their thing?

Carl: Well when I compost this, they'll all be taken out and we'll be starting over new. And you can see by these trees here how sorry the soil is. They're yellow, they're just nasty looking trees. Scrawny looking. The soil across the house is better, and there is a difference in the trees. It only took me 25 years to find that out.

Electa: And there are the stone walls again. On the top of the ridge.

Carl: Yep, on the other side of the wall, that used to belong to the Fitzpatricks also. And James Jr. had to sell it to Everett Tarbell and that gave him money to settle up with his three sisters and two brothers.

Electa: So maybe the stone wall dates to the sale to Tarbell?

Carl: Prior to the sale. I would say the stone wall goes back to the 18th century.

Electa: Why, if this was still a part of the family farm?

Carl: Well that's true, it could be late 18th, early 19th. But I think the wall was here. Here's a piece of the Fitzpatricks' farming equipment that was found out here.

Electa: And it's a harrow blade? A mowing blade?

Carl: Yep. I want you to see where a really neat house lot would be.

Electa: We're going to have to think about stopping today, afterwards.

Carl: Ok. So this is the parking area for people that come to cut their tree. It's also a loading area if there's a timber sale that logs can be dragged out there.

Electa: There's a name for that. Stage-

Carl: Staging area.

Electa: Is it staging area? Well, I don't know. Oh this is nice; is that an old oak we're looking at? Carl: Yep.

Electa: Is it still mostly alive or mostly dead?

Carl: Mostly dead. But I think this is awesome, to come up here and cut a tree. To me it is an awesome site to be looking to cut your tree.

Electa: It's not a jagged landscape at all, it's very soft: Hills and valleys, ups and downs, framed by the stonewall and the pine and oak woods.

Carl: I had the opportunity to sell the stone from the wall, some serious money could have been brought in. But to me, it's just... I don't know... it's just very scenic.

Electa: Somewhere in the legislature is a preservation law against selling, well, stealing at least, against walking off with stonewalls.

Carl: But my understanding is that if you own land on both sides of the wall, you can do it. Bob: It's interesting stone, so much flat cleavage.

Electa: It looks like Rhode Island and southern stone is that way too

Carl: Well the thing is, so much of the landscape has been altered now for development and you don't really know. This has not been altered in any way.

Electa: It's lovely. And white birches.

Carl: Landing area, that's the term.

Electa: That's it! Yes, a landing. A timber landing. Thank you, I'm glad you remembered that. And you're right Bob, not "staging,"-- "landing." It's the other end of the process. It is hard to imagine what this would have been like open, I mean right now we're walking across the open space to full-growth pines.

Carl: This would have to have been pasture. Fitzpatrick pasture. In fact, right over there you can see a little, over there to right end of the logs there—that's for cordwood—there was a little bit of a wall there and there had to have been a shed or shelter area for animals.

Electa: Okay. Or a hay barn. Carl: Well that very well could be. Yeah, just s

Carl: Well that very well could be. Yeah, just something where they could come in and get out of the cold or get out of the heat. Where we were, under the power lines, I didn't mention, that is where Samuel Bower's house was. He bought that from Ellis Barron, Jr. Ellis Barron Jr.'s father, Ellis Barron, was one of Groton's original proprietors.

Electa: So Samuel Bower's house was early 18th century?

Carl: Yes, because if my house was built in 1720... Yeah, 1710 I want to say is when Samuel bought it from Ellis Baron.

Electa: Oh, so it was earlier than that then.

Carl: Yes. And when Jarethmael's wife died and he moved here and built my house, I guess he lived with his son Samuel here.

Electa: Is there anything left of that building?

Carl: There was a cellar hole there, and a well hole.

Electa: There are still?

Carl: No there aren't anymore because I filled them in.

Electa: But you know where they are?

Carl: I know about where they are, yes. And the thing about it is, I called the Groton Historical Society about some things, "Oh no, do what you want. There's nothing of any historical value out there." It's all in the center of town, you know?

Electa: How long ago was that?

Carl: About 30 years ago.

Electa: That makes sense. Though that's changed a lot since then, thank goodness.

Carl: Well I hope we don't go too far in the opposite direction either. I mean we've gone from one extreme to the other. So on that respect I'm glad, but I'm the only one that knows it was there. No one else cares even today about it.

Electa: Was it recorded in the archaeological survey that was just done of the town? Carl: My house is not included on it.

Electa: Well you're not an archaeological site, technically, 'cause you're still a standing structure. There were 3 years where they recorded a lot of houses and then just this past year the historical commission hired a firm to do an archaeological survey.

Carl: I don't think they've done their work yet, have they?

Electa: I think they have, but the report hasn't come out yet.

Carl: I was thinking that UMASS had just been recently brought in. I don't know, I know back of Hugh McGovern's house there used to be a sawmill.

Electa: And is he the next one down the road from you?

Carl: [Yes.] We're going to take a right, right here and then we'll cut across the field, go up to the house. I'll show you where the blueberries are. There's more deer tracks right there, some coyote tracks there.

Electa: Oh, that's interesting.

Carl: [I've been meaning to ask, I've been writing a book – all about the Fitzpatricks, and this farm...] Do you have any interest in reading what I've written so far for historical accuracy? I do have a publisher. The Groton Landmark will publish it for me as a series in their paper. Electa: That's great, congratulations.

Carl: And after that they would be willing to work with me to help me find someone to publish it as a book.

Electa: It's nice to have somebody to sort of help you along like that. It's a hard business. Carl: Well maybe the book form, maybe the proceeds could go to Freedom's Way or something like that.

Electa: That would be great.

An ecologist I worked with was commenting that power lines have done something wonderful to the environment landscape of New England. By managing the growth here, they have maintained a habitat that is usually very ephemeral. It's one of those brief stages in reforestation when a field is abandoned. You'll get this shrubby growth but apparently it's an extremely valuable area for small birds.

Carl: See I could plant blueberries along in here, or....

Electa: Is it damp? They don't want damp, they want- what do they want? Dry.

Carl: The blueberries like damp.

Electa: And crummy soil?

Carl: Acidic soil.

Electa: Acidic soil. That's a nice tree, that pine tree. He's been there a long time. I'm surprised you don't have a dog. This looks like Dog Country.

Carl: I used to have a dog, and ... you can see where ATV's come through here.

Electa: Good luck to them.

Carl: Well you can see they've made it through [brush and ditches]. And you know, I don't know how to deal with that yet.

Electa: You're right about the stone and these walls Bob. Are these stone walls typical is most of Groton?

Carl: Yeah, I would say so.

Electa: Really thin, slabby rock.

Carl: And these are the blueberries over here on the right.

Electa: Oh of course.

Carl: They're not maintained or anything because I can't shear trees, cut grass, and all the other stuff. And those are all the Douglas fir growing up there, and that all needs to be heavily composted as well. But I can see putting a pull-out here on the right so that cars can pull in, and put in a couple more rows of blueberries, put in some more rows over there. And that is where a successor and his wife would come in handy. She could take the money from the sale of the picking rows of blueberries.

Electa: This sounds like a sexist division of labor to me. Maybe she could be in charge of the whole blueberry operation.

Carl: I don't know. Bob, help me out here. I may be on dangerous territory here.

Bob: Maybe she likes blueberries...

Electa: [Laughing.] I've given him grief about this for years. It's ok. I don't hold it against you, dear.

Carl. I just want you to know that.

Carl: Somebody came here this summer, and they were [asking who built the walls and I said it was] whoever was farming it in the 1700s, and early 1800s, and that when they cleared land,

they put the wall up. They said, "No, that's not true at all." So I said, "Really? Well, who built the walls?" And they said they were all built by slaves. And I said, "Really??" And he said that's a fact that most people don't know. That if you're farming for a living back then, you needed all the time you had to take care of your animals, to do the haying, etc., etc., and slaves would come and do the work. "Well, how do you know that?" And he said, "Well, how many big boulders do you see in any of the walls? It is all easy stones to pick up."

Electa: Nonsense! That's not true. Well, I mean, it may be true in Groton. I haven't spent any time looking at Groton stonewalls.

Carl: Well, I know, and this is a good example, and most of them can be picked up by one or two people. It wouldn't take an oxen or a tripod to move them.

Electa: That's true, but look at the ones underneath.

Carl: Yeah. Yeah.

Electa: You know, further down.

Bob: The stones generally got to that location pulled by oxen on a drag. They weren't carting one stone at a time.

Carl: Well, that's a good point too. Yeah, so I don't know but I just thought that it was very interesting that he was making that point. And he had to have done some study to come up with, you know, that theory.

Bob: My specialty is a little bit south of Boston, and maybe I am doing an illegal translation, but the slave population wasn't that big.

Electa: Was extremely small.

Bob: What slaves there were, tended to be household personnel, rather than farming personnel. Carl: Well, Lieutenant John Woods, that's what his slave was all about. He ran away, and when he ran away, he stole all of John Woods' clothing and took his clothing with him.

Electa: Wow. That was smart.

Carl: And he [John Woods] advertised in the newspaper, 'if this slave is seen, return him'. Electa: 'And here's what he might be wearing'. Now, what about the walls here by your house? Carl: I built those. There was a wall in back of the south ell. It had caved down and rather than rebuild it, I left the stones there, or most of them are left there, and I brought it out a little further so I could put shrubs there, rather than just having just weeds, and stuff. Electa: Yes, mmmh.

Carl: And I could get out there easily enough with a weed whacker and cut stuff down. Electa: I love your monster rock there. The glacial erratic in your side yard. Carl: Yeah.

Bob: In the 18th century there was a large transient laborer population in Massachusetts. They were local people who had been squeezed out of land ownership as the family farms were divided among generations.

Carl: Yep.

Bob: And they wandered from farm to farm. Sometimes they'd stay for a season; sometimes they were just there for the harvest or a particular project. But, there was *lots* of labor floating around, looking for something to do.

Carl: Well, that's another chapter that I want to get into. I know that the Fitzpatricks, they boarded people here, 'cause I found that on the census records there were people living here that their name wasn't Fitzpatrick. Well, they had to be laborers.

Electa: And/or relatives. Did you determine whether any of them was a relative? But you're probably right about the laborers.

Carl: I am certain they weren't relatives because I looked at the genealogy. Or they could have been cousins or something from Ireland.

Electa: Is that part of the barn? Excuse me for interrupting.

Carl: Yes. That's all the foundation, I don't know whether you're familiar with the barn in Dunstable on [Rte] 113. God, I can't think of their name. Big barn. And it was very comparable to the barn that was here. I mean this was three stories and a big cupola on the top. Electa: Neat. So second-half-of-the-19th-century barn.

Carl: I'd say about 1870 or so.

Electa: Scientific-farming barn. Big-dairy-herds barn.

Carl: Yeah, 'cause that's when James, Sr. sold 45 acres to some people, and I'm sure the reason for selling that 45 acres is because of the iron ore that had been there. Easy stone to crush for ballast between rail ties. And he sold it for \$3000. And when William Wharton bought it, he paid \$200 for it. So what James got \$3000 for, later sold in the 1920s, or whatever, for \$200. Bob: [Hard to hear] Going back to the names of census, it comes to mind that particularly in the 1920s to 1930s new immigrants from Ireland probably would have sought shelter, if that's the right word, with sympathetic parties. So if you came from an Irish family..

Electa: Interesting.

Carl: Oh they were Irish names, there is no doubt about that.

Bob: They could be just new immigrants who had been passed along to a friendly face to get on their feet.

Electa: Well, this has been an incredible morning. Thank you. We've learned a whole lot; *I* have learned a whole lot.

[final wrap-up conversation cut off as recorder runs out of battery]



Jodi Gilson J. Gilson Greenhouses 20 Dale Lane, Groton

Notes are combined from three conversations between Jodi Gilson and Electa Tritsch; 12/16/10, 1/26/11, and 6/15/11.



December 16, 2010: "One-season farming used to be enough, a living, but not any more. The price of everything has gone up so much. For 16 years I could make a living on a 14- to 16-week season, wholesaling, but especially with the rise in fuel costs I can't do that anymore. I could go back to teaching, or being a librarian, but I really like doing this, and I think it's important."

Jodi runs three huge polystyrene greenhouses which she keeps in operation throughout the year, relying as much as possible on solar heating, supplemented by internal heaters designed to warm only small tented areas that function as greenhouses-within-greenhouses.

"I started with just herbs, then added lettuce – greens – then other ethnic vegetables that went with the herbs. I'm having to go into food production – restaurants are asking for produce. Now I'm sort of an ethnic vegetable specialist. Food is going to be big for me in the next five years. It takes a lot of planning though. It will be okay if I think of food production [as distinct from herbs] as a second or third business. There are a lot of different growing issues, like learning how to protect certain crops."

In 2010 Jodi began a winter CSA (November – March, Thursday & Sunday) at her greenhouses, an experimental version with shares at \$100 each, and customers can choose to take only the products they want – the price gets deducted from their share balance "but at least you don't need to take cabbage all the time, if you don't want to." The winter CSA includes her produce and that of other local farmers, local cheese and meats "including produce from some of my own customers when I run out."

During the winter she is working with two part-time help.

Question: can you tell me about the Groton Farmers Market? Beginning in 2010 the market started opening in late May, rather than end of June as many others do. It continues to operate until Columbus Day unless the weather is too cold.

During our late January conversation I asked about the impact of this winter's heavy snows on her buildings. She had lost one section of roof, ripped apart by the weight of snow. "You know," she said, "there's a certain amount of damage control you can do, and a certain amount of just wait and see. Spring <u>is</u> coming."

The following week when I arrived for a face-to-face interview, the site was deserted, an orange traffic cone at the end of the entrance walk with a hand-lettered sign <u>TOO DANGEROUS</u> DO NOT GO IN GREENHOUSE. The roofs of all three buildings had collapsed in a twisted heap of framework and torn sheeting. But even before the month was out Jodi's son Will, a Boston chef and restauranteur, had arranged a foodies' fundraiser dinner to help with spring's rebuilding and Jodi was about to defy her own sign in search of small seedlings she was pretty sure would still be viable in the wreckage.

The dinner raised enough money to cover the costs associated with tearing down half of one of the three damaged "gutter" greenhouses, clearing space for a new, compact and sturdy "hoop house" that would hold her spring renewal crop. A site check in May introduced me to the team of greenhouse builders – two men who had razed the old and had just completed the hoop framework for a new building which would be covered in tough polyethylene by next week's end.

June 15 we check again, and find Jodi fielding calls from customers at the end of a greenhouse full of young vegetables. She fills in some background and offers a quick update as her hand clutches the portable phone that needs her attention. A greenhouse worker patiently maneuvers around us as we always seem to stand where she needs to move in the tight area that is this season's growing space.

Past and present: Jodi's business was originally called Gilson Farms; now J. Gilson Greenhouses. In addition to the greenhouses she operates on her 45 acres, she rents the area where she once grew Christmas trees to two landscapers and an arborist. The Carlisle arborist



grows large ornamental trees on the lot, while the landscaping firms – in addition to sharing trailer-office and machinery parking space – stockpile logs and stumps waiting for processing by the large chipper that looms over the area.

Much of Jodi's business is provisioning restaurants, but she has also established an unusual form of CSA at the greenhouses. She describes it as "farmers market style", with grass-fed beef and other, secondary agricultural products in addition to the vegetables and herbs she grows on site. Shares in the CSA come in \$100 increments, and members spend down their money as they choose, purchasing only what they want.

Following up on her observation that one-season farming is not enough any more, Jodi has also worked out a mutually beneficial arrangement with the New England Forestry Foundation. She leases a parcel of managed woodland behind the Groton School, selling as Christmas trees the small evergreens that grow there. The result: income for her – and renewable woodlands in accordance with NEFF's farm-friendly management policy.

George and Debbie Kirk Kirk Farm 21 Wyman Road, Groton

On April 16, 2010 Marge Darby, director of Freedom's Way National Heritage Corridor, conducted an audience-participation interview of George and Debbie Kirk of Kirk Farm, 21 Wyman Rd, Groton. The following November 23, Electa Tritsch and George Moore had a follow-up conversation with Mr. Kirk as part of the Groton Agricultural Survey. The following pages include notes from that and subsequent conversations, interlined with an edited transcription of the April interview. Some interview questions have been rearranged in sequence for consistency. Groton Survey segments are in italics.



Kemp-Kirk Farm buildings, ca. 1910

The Wyman Rd. farm was built by great-grandfather Kemp in the (late?) 19th century; grandfather born here, had 9 dairy cows, flock of chickens. House was expanded along whole rear in 1936. Original barn burned in 1972 (cause unknown); present barn built 1986. Much of original property boundary was marked by stone walls though "a lot of stone has been 'removed' from the walls over the years."

His grandfather bought the farm at 401 Nashua Rd (now Mendenhall) in the late 1920s. The barn on that farm started out at Massapoag, but was torn down and moved piece by piece over here. George was born there in 1944.

Meanwhile his aunt, Bertha Frances Kemp, had taken over farming the Wyman Rd. homestead farm – "she was the only one of a big family who wanted to farm, so she stayed." George started working for his aunt (here) at age 5, making 25 cents a week (ca. 1949). Soon he was driving the horse and buggy door to door in town selling vegetables, though this only lasted about another 3 years. By the time he was 9 he was paid \$3 a week to milk the cows twice a day. His aunt had a herd of 14 milkers, about 600 chickens, and a 100' x 150' vegetable garden. Then in 1967 the milk buyer suddenly required she provide 2000 pounds of milk every 2 days in order for them to continue doing business. "That's when she stopped farming – all of it."

Bertha Kemp with sister Ethel



George: 1965-66 my aunt ... went out of the business at the age of seventy-six.

Marge: Rather than add [more milk cows].

George: Kinda, yeah. But, she had made a living her whole life on fourteen cows and four hundred chickens and then one day they said they weren't picking up the milk cans anymore.

Marge: And that had to do with the distributor then. George: Right. Oh, right.

Marge: Was that a local distributor or was that somebody else? George: I don't really... Old man Livvy is what we used to call the man who picked it up. He had knots in his knees, and everything else, but it was his last day at work too, 'cause he was put out of business. That's all he ever did.

Marge: So you never went any further to explore the possibilities of continuing with that kind of farming.

George: Well I did, I did. Well, when I first I got out of the service I did talk with my aunt about going into [dairying]. I wrote in to the state and the state said if you have enough money to go into farming you have enough money to stay out of farming. Back then it was just a little small farm and nobody wanted to be attached to it. We weren't even thought of as a farm and it wasn't until – I'd say about ten years ago – that they realized that Kirk Farm is something ... now it's turning around, more people going into farming.

Audience: Can you talk a little bit more about the activities you were doing in agriculture as a child, and was this on your aunt's farm at that time or did your parents have the vegetables in production as well? Especially the door-to-door sales and maybe a little bit more about the varieties if you can recall what type of vegetables you were selling at that time.

George: Mmmm. Well the varieties, there used to be a Gentleman Jim corn. There were no bicolor corns. It was all yellow corn. And well, compared to today's corn it was tasteless. And we had Chippewa potatoes, that was the baked potato. On my aunt's farm, it was plowed with a tractor. We used a horse for cultivating and hilling the potatoes. We used to use the tractor for haying but then we went out with a horse and wagon, getting all the scatterings. Now people just leave them on the field until next time around. The milking was done 4:30 in the morning and 4:30 in the afternoon. It's funny because the farm's always been in Groton, but yet the Groton people wouldn't come. So we used to go to Pepperell with the vegetables back then. We had routes and people actually wanted us to go more routes and we had a Democrat Wagon⁶. And it was just a small probably 300x100 foot garden; 300 tomato plants every year. But it was a completely different lifestyle then. Audience: What kind of tomato plants and what other routes did you have?

George: She used to grow Morton was the big one. We used to get 39 cents a dozen for sweet corn. And I sold it at Counts, which was my uncle's at the time, and people then wouldn't want to buy it because they'd rather buy it at the First National or the A&P store 'because it tasted better'. Well, it was the same corn, but it was just a day older because that was what was left over from the day before, that we sold to the store. [laughter] And they like that better than the fresh right off the cob. People have always been a little fouled up.

Audience: What kind of root vegetables did she grow?

George: We grew carrots, beets, turnips - all that stuff.

⁶ a light, horse-drawn flatbed farm wagon

George worked at Gibbet Hill 'with the cows' for 8 years around the time he was in high school. Gibbet Hill had 3 barns, one at right angles – one is now a restaurant and the big 2-story one [the one at right angle], now torn down, had hay above and animal pens below.

The family sold part of the Nashua Rd. farm (10 acres now Mendenhall) for his sister's inheritance. George wanted to stay on the farm. What made him want to stay? "I always loved working with animals and stuff..."

Audience Question: [what is farm address?]

Debbie: Wyman Road. It used to be Kemp's Road until they changed, because there was two Kemp's in Groton and that was maybe twelve years ago.

Audience Question: George when you got married Deb was already a farmer in Nova Scotia. Where did you two tie up and did you grow up on a farm?

Debbie: I grew up on a farm in a small sense. We lived at this place with a couple of brothers who had an orchard and we, you know, picked the apples and stuff like that. But I met George when he was working part time at his uncle's garage in Pepperell, Kemp's. And that's where I bought my gas and got my car fixed and that's where he saw me. So that's how we met in '71. He's definitely the farmer.

George & Debbie Kirk have owned Kirk Farm since 1972 – 38 years. He started farming doing dairy replacements and beef, but "you take a 2-day-old calf and raise him and feed him for 2 years and you may get \$25 more than you paid for him." "Somebody suggested vegetables, so that's what I did. I don't even like vegetables....Well, maybe a few...."

Marge: Do you do all the work yourselves or do you have other people who help? George: We hire. We hire.

George had 2 cute college girls working for him summer 2010 – they had volunteered the previous year, then came back because they couldn't find other work: "You're the only one who will hire me." Both good workers tho one hated getting her face dirty. "Girls work better than guys do"

He would hire Jamaicans if he could afford them. Fairview Orchard (O'Neill) gets worker permit, provides housing, some of men work at other farms. "Jamaicans work better than Puerto Ricans". But migrant worker regulations require hiring Puerto Ricans if available, over Jamaicans. Conversation with one Jamaican this summer: 'I been here 20 years. I do the work of one man. I don't do the work of two men.'

Audience: You talked a little bit about help on the farm do you use any migrant help? George: No it costs too much. You have to pay their way here; you have to pay to keep them. It averages – and I only got this at the [Nashua River] Watershed, they had a thing on CSAs – and it averages out to \$14 an hour by the time you get done. We had a girl come this morning from Somerville applying for a job for \$8 an hour. Audience: So you're trying to use locals? George: We have to go out and bring them in. Nobody around town wants to. And then we tried hiring boys but farming is a woman's thing. All our good help are women. The boy put in 3 ½ hours and that's all I could take.

Marge: Oh, that's all you could take?

George: He went home for lunch and came back 3 ½ hours late. I've always said that if there's a man out there that wants to work on a farm, he's farming already somehow.

If he could afford it, Kirk could use help from late March through mid-November.

George & Debbie's 2 sons moved away from home as adults.

George: One of them is a lieutenant in the Nashua fire department. He has a trucking business and a hay business. And the other one owns and runs Kemp's in Pepperell and is a mechanic and they both make—they've made more money so far in their life than in their father has in his life. Debbie: And he always told them that he may not teach them anything but he would teach them how to work. And they both are excellent workers.

George: I did that.

Debbie: But unfortunately they didn't want anything to do with the farm once they got older. They worked very hard while they where there but they didn't want any part of it once they got old enough to go out and decide what they wanted to do. But, our oldest boy—the firefighter—he lives right next door to us and is into keeping his part of the land in hay. So in a sense—farming. And he comes down and helps out sometimes. And our youngest boy Josh, the one that has Kemp's in Pepperell, he does mechanic work for us on the tractors and George will call him and say that this is going on and that is going on and he comes and repairs.

Audience question: So your sons, they basically didn't want to go into farming because they didn't see a future in it. Do you feel that certain types of farms can survive in New England or this area on a small scale?

George: On a small scale like ours it would be tough. I've never, in all the years we have been going I've never made a dollar yet. We've made just enough to keep going. We've sold house lots and we've managed to farm, through them. But, now with Farmers Markets, we thought this would be a good boom, but [it turned out not to be.] It's like the CSAs. I was the first one in Groton. Now there are seven or eight. It's almost as if somebody sees you might make it, they're gonna try it. Debbie: You make enough to, you know. You pay your help and pay your expenses. He says we don't make a good dollar, but yet...

George: It's a good way of living.

Debbie: You make the money enough to pay your bills.

George: You have the freedom that everybody else doesn't have, you get up in the morning, I mean, you go to work 'cause you want to, not because you have to punch in or you're gonna get fired. But if you don't go to work every morning [he chuckles] ...then you're in trouble too.

Audience: George, are you still planting the same varieties of seeds, or are you doing herbs, or gardening with historic varieties?

George: It's mostly the stuff that we used to grow when I was young. ...We used to go door-to-door when I was five years old in a horse and buggy. People wouldn't eat those vegetables today. It's completely changed. The heritage type vegetables are nice, but they want the stuff that's been doctored up and been changed.

Audience: They want their vegetables to look pretty?

George: Yeah. That's what it comes down to. True organic vegetables, they aren't pretty looking at all and the people don't want to pay the cost of growing them. And like last year with the [tomato] blight we lost 2,000 tomato plants in one day. And this year we're gonna have to spray them and they have organic methods of spray. but with the organic system the spray hurts the applicator operator, not the people eating the tomato. With the conventional, the operator isn't hurt, it's the

people that eat the tomato that get hurt. It's, you know, so it's safe to be commercial, not good to be organic.

? Are you an organic farm?

George: I have to say I 'farm on organic and sustainable principles." I was certified organic for three years; whole lot more paperwork. Every year they'd come out and come down to the field just long enough to get me and we'd go back up and go over the paperwork but they never looked at the crops. Why is that? I asked them. And their answer was that the 'organic movement was built on the integrity of the farmer.' I could have gone down there, fertilized with all sorts of bad stuff, sprayed with more, then gone back and written it all into the paperwork that everything I used was organic and just fine. Never tested the soil. Never tested the vegetables. Just a lot more book work.

George:....And the year I gave it up I said to them I can do one thing in the field and another thing on paper and they said, 'that's right. It's built on the integrity of the farmer.' And I said, I guess I don't have to pay for my integrity. So now we're looking into certified naturally grown. It's a lot like the organic in one part, but the other part is that farmers are inspecting farmers, so there's a little more to it. And it doesn't cost any money. That's a good thing.

The farm:

16.5 acres total now; did have 45 acres plus the Nashua Rd. farm; sold the other farm's 10 acres to Mendenhall, and the rest as house lots to make ends meet.

"All good farm land in Groton goes to houses."

And there are more bugs today.

- Farm pond enlarged 10 years ago; just recently installed small windmill to draw air into the pond during winter, to avoid winter kill of the bass and catfish.

- 6 acres fenced cropland

- 8 +/- acres hayfield

- farmers are allowed to shoot deer in summer if they are in the crops; red tailed hawk whose territory includes Kirk's telephone poles keeps down mouse/vole population. Peahens allowed to roam through cropland – they don't like vegetables, only bugs whereas chickens will pick at vegetables.

- "I'd pay \$50 bounty to anybody who'd bring me a coyote – live. Woodchucks are the real bane – can't keep them out any way."

- Kirk also raises fainting goats; has baby chicks and 5 laying hens [and the rabbits]

Audience: How many acres do you have?

George: We are down to 6½ [in crops], but when I was farming conventional I had 25 acres of vegetables and the largest compost pile in the county. But now we are down to 6½ due to, you know, there's no weed control except pulling them out and cultivating.

Audience: So any volunteer weeders are welcome?

George: Yeah. [general laughter]

Audience: How do you cope with the loss of 2,000 tomato plants in one day? How do you deal with that kind of stuff?

George: I don't know but last year that wasn't the only thing. We lost 7 complete plantings of broccoli, 6 plantings of cauliflower.

Audience: A planting, how much is that?

George: Oh, maybe a thousand or 1,500 plants each time. We lost – well, we planted beans in April. We covered them a couple times with Reemay⁷ and we picked them in August. And that's not bad for 50-day beans! Last year was a total, total wipeout really, for the farms. We weren't the only ones by far. If you use chemicals they help—big time. They protect the plants under stress, from the bugs. Every year they are coming out with more things in organics. But we use Entrust on the potato beetle. No commercial insecticide will touch that bug, the Colorado Potato Bug. But an organic one will wipe it out completely, just because the other one [was used for] so many years. If we have another year like that this year, there'll be a lot of farms that won't make it. Because they were devastated last year. But, it'll be the organic not the conventional.

Audience: Have you been able to get anything in the ground [yet this year] with all this water? George: No! I still have plastic in the field from last year. I never got it out. When I got my potatoes dug the snow came the next day and I've still got water on the field. The garlic is up. I've got my peas already to transplant. Because almost everything we grow is transplanted; grown in the greenhouse and then transplanted into the field. And they are sitting out there waiting for the. Audience: How much are they going to set you back now. How many weeks?

George: Well, so far the peas were supposed to have been in this week. But that will give us a 2week jump on everybody else anyways. So, we'll just end up coming in the same time as everyone else. You try, everybody tries to be the first one.

Debbie: If it comes off warm, they'll probably catch up.

November 2010: All his rabbits died from the heat this summer – very sensitive to heat. Turned big overhead fan off; went to get them food; came back – 'oh, you're dead....'

This summer [2010] crops were terrible. Planted 500 lbs. seed potatoes, got about 40 lbs of "nothing'. This all despite irrigating constantly, from the first. Mice ate the beets. Crows ate the cucumbers.

Late vegetables in farm stand included: butternut and patty pan squash, yellow and red onions, garlic; eggs in the refrigerator.

Audience: Do you find with farming you have a chance to ever get away and have a vacation? Debbie: We don't like vacations.

George: I got bored on our honeymoon. [Laughter] What do you do, you know? I read 5 books. Debbie: His father was from Maine and they used to go 2 weeks in the summertime to Maine and he couldn't. 'course this is from his mother telling me I didn't know him then but she used to say he couldn't understand why he had to leave the farm to go to Maine for 2 weeks on vacation. So we don't like vacations.

George: Nope! Always something to do.

Audience: When did you get involved with CSA and how is that working out for you? George: Like I say, a friend of mine, Bare Hill Farm over in Tyngsboro was in the same position as I was. He tried to set up a roadside stand at his house and nobody came. And, you know, he tried the CSA. He worked his way up to a good one, so I copied his methods. And we peaked at 50 and this year we're at 17. And like I said I was the first one in Groton and now everyone and his [brother are doing it in the neighborhood]. I never realized that there were so many farmers in Groton. There are only so many people that are gonna go for a CSA., and when everyone starts [doing the same thing] it makes the group smaller.

Audience: Can you just tell us a little bit more about CSA's – how they work, when people might sign up for them, some of the benefits, how much it might cost somebody?

⁷ polyester row covers

Debbie: It starts out with an application and they have to have their money in usually by, or we do anyway, by the end of March, first part of April part of it and the other part they can send in by the end of July. And, it's basically to give the farmer upfront money so if you're buying seeds and fertilizer, or even help come springtime working in the greenhouse or whatever. And they pick a day which they want, we used to have 2 days; this year we are only going to do 1 day. Last year it was either Monday or Thursday; this year it's just going to be Monday. And they come between 3-7. And in the morning George and the help go out and pick whatever is ready. And bring the shares in to be washed, into the washroom. Not washed that you can put it on your table but washed that you get the feel for it. But you still have to bring it home and wash it for yourself to get all the dirt off. And then it's put in the farm stand. And they come between 3-7 and pick up. We have a list on a board telling them what they are getting. For example, we'll say in mid-season when there is a lot of stuff coming they might get two heads of lettuce and a bunch of kale, broccoli, tomatoes, green beans, onions, garlic. Swiss chard too, several kinds of [squash], umm-what else is there?-beets, and when the potatoes come in. We try to offer corn a couple times a year, through the summer. And they check their name off, and they can go, like I said, out and pick their fresh herbs in the back in the herb garden and go pick the cherry tomatoes. And that runs from the middle of June until the middle of October or until frost. If we get an early frost, which some years we've gotten frost about the first part of September. And that's basically it. We try to give them [asparagus too at] the beginning of the season because we have an asparagus bed and by the time the CSA starts, the middle of June, that's coming to the end because that starts the first of May. But we usually try to give them all asparagus and the first pick up day we always give a dozen eggs. And then, from then on they can buy the eggs from the refrigerator. But I think the people that are a part of it really do enjoy it and in fact, a lot of them have told George that it's like getting a gift 'cause they don't know what's inside until they get there.

Audience: Can I ask roughly what does this cost and are there different levels like if someone has 6-person family—6-member family—as opposed to 2-member family, are there different levels that somebody can buy into?

Debbie: No. There is only one level, and this year it is \$600. And we do tell people if they say, "There is only 2 of us; what do we do? There is too many vegetables." And we tell them, "Do you have a friend or neighbor that you would like to share the share with?" And if they do, then just one comes and they take it home and share it with the other person. We don't split the share. They come and pick it up and have to do the splitting.

George had first CSA in Groton, built it up to 50 subscriptions – only had 17 this year. "The year we had 50 members we were closer to making a profit – I think I made \$1,000 profit or something that year." There are now 6 other CSA's, though Gibbet Hill didn't make it through the year.

Groton Local Community Farm didn't last more than a couple of years – Groton people said they were too far out of town. Said same thing to George about his farm stand, although he has CSA members willing to come from as far away as Pelham NH and Ayer.

"One of CSA problems is that, no matter how much you explain this is a way to <u>support</u> local agriculture, most members expect more, cheaper, and more variety than at the supermarket."

2011 update: The Kirks offered half shares in 2011; that summer had 55 CSA members of whom 33 were $\frac{1}{2}$ shares.

Marge: Do you have a website? George: Yes. yep Marge: Has that been advantageous? George: Yes, we have had people from California call us, you know, email us. My son gave us a website years ago and we've had it updated. You know, you wish you could get out to more places. But sometimes it doesn't work – all the new stuff. What we always try to do is get the people to come <u>out</u> to the farm. And once they come out there, they feel better about it. And they go out and walk around. Like our CSA, the people can come to the farm anytime they want, picnic, walk around. A lot of the farms you just go there pick it up your stuff and leave or they bring it to a drop-off point. We have people in Boston that want us to haul stuff into Boston. I wouldn't drive into Boston myself let alone get somebody else to do it. [laughter] That's not my way. One step out of the farm and that's delivering, to me.

Marge: Do people do their own picking at all or you don't let them do that?

George: Well, we have cherry tomatoes they can go and pick.

Debbie: And we have a raised herb garden out back that they can come and pick from. George: But people are funny with the tomatoes. We always put in about 100-150 cherry tomato plants. And they will come up and say 'they aren't in'. So you go down and look and right here where it begins, they're picked clean. 15-20 feet down you can pick a bushel and not move. You know, 'there aren't any'. People are funny.

Audience question: So how many farmers markets do you do now?

Debbie: Ayer and Groton...and he does Pepperell. So we do three.

Audience: I'm curious about your participation in the farmer's market side. I see you in Ayer and I see you in Groton and I wonder if it's a good use of your time. Is it a moneymaker for you? Are there other benefits besides financial ones that make you want you to continue going to them? Debbie: One benefit is I love talking with people as customer and seller and just casually chatting and stuff and being able to provide them with good fresh stuff. And is it worth it? I really feel that it is. I think that we do fairly well at both of the markets that I go to. Pepperell that he went to last year wasn't as good. But I think that it needs just to build up because it only has been, what? 2-3 years that it has been there. So I just think it needs time for people to know that it is there—to come to it. But, it definitely is a good thing, I think.

Audience: Is the traffic increasing at the Ayer market?

Debbie: Hmmm. I think you see a few new faces but for the most part its regulars that come every week. [We'd] like it to build up to be more. There's a chance that there might be another vegetable farmer there this year. We heard from the grapevine that they might go. I think I would be good because I think the more that are there, giving people more variety, I think the more people will come. But I do like being there selling to people.

On farmers markets: need to charge high prices to recoup costs (cf: eggs cost about \$3.80 per dozen to produce, due to high feed cost for small farmer, so have to sell for \$4.00). Some vendors charge less than cost though, to be sure to sell.

Opposite end of cost issue spectrum is the seller who undercuts everybody else, or who has wider variety of produce than anybody else, because he goes to Costco or someplace and buys product, then repackages and sells as his own – "Costco farmers".

"It's not like it was in the old days. In the old days you let the corn guy sell corn...you sell what you grow....I'm the fool in the group – I don't make any money. It's hard to figure out a price – we can't compete with supermarkets. Have to emphasize fresher, tastier."

George wonders if there are regulations in Groton governing farmer's markets? Marblehead and other towns used to require that a certain percent of a vendor's goods had to be his own produce. Thinks that has gone down now to [lower] percent. Audience: I have bees and so I know a lot of people that do bee keeping. And I hear a lot of people complain that we lose bees and I think it's partly stress because of the chemicals that are used for farming. That's one of the reasons it's attributed to. Do you notice anything on your crop besides your crop related to bee pollination? Or doesn't it affect you that much?

George: We have bees ourselves, and you notice that honeybees don't do that much pollinating for vegetables. It's yellow jackets and bumblebees and wasps because – you take a squash flower: at night it closes up, so you open it up, you won't find a honeybee in there. It's all the others. But there is definitely something out there that is killing the bees because every year I seem to lose one hive and we only have 2 to start with. We don't use anything that is harmful for the bees and even when we did, we always sprayed at night when the bees were in, so.... It looks better when you spray at night, because people don't say "What's he putting on your field?"

Debbie: But we don't do that anymore.

Audience: Something that we haven't talked about: Are you running kind of a "Cuban" enterprise, in the sense of the equipment you are keeping—1955 Chevys on the road and tractors and farm machinery? Are you still investing in new equipment, new technology of any kind, tools? Or are you still using turn-of-the-century cultivators?

George: Well, [chuckling] basically on the cultivation, we are old. We have a '54 International and a '48 Cub that we use. And we just got a grant where we are going to be able to upgrade some of the equipment. But the equipment is so much more expensive today to replace. For example, I have a 47-horse tractor that in 1957, when it was brand new, it was worth \$3000. To replace that tractor, it would cost me at least \$48-50,000. Everyone says that a Lincoln costs a lot of money. Well, you ought to get an old tractor! It's gone... you just can't figure out where they get the prices. You know, it's not there. I mean, it's a big chunk of cast iron granted, but, it's a

Debbie: But some things have been upgraded because when we first started, we used to plant everything by hand, transplant everything by hand. And then, how long's it been? 5–6 years ago? George: Yep, we go the waterwheel...

Debbie: We got the waterwheel transplanter...

George: Which is made on cave man technology. Why nobody ever thought of this before – because this is cave man style. You have a wheel with something that makes a hole in the ground and it dumps water in it and you put a plant in it. And you sit on your fanny doing it. You know. Today, we are sending rockets to the moon and this is the best we can do? It still requires people. Debbie: But it's still a lot easier on the body than being down on your hands and knees. Digging a

hole with a little shovel thing. Now the water wheel makes the hole in the ground and there's a big barrel on it filled with water and fish fertilizer and it goes along and makes the hole and you set there and take the plant and put it in the ground. Much easier. And fun.



Kevin and Christine Lindemer Whitney Farmstead 227 Boston Rd, Groton

Farm tour Nov 23, 2010: Kevin Lindemer, George Moore, Electa Tritsch; follow-up conversation Feb 28, 2011: Christine Lindemer and Electa Tritsch



Lindemers bought property 14 years ago; are not full-time farmers. He has own energy research & consulting firm; she is author and runs an editorial services business.

Property is approximately 17 acres; lots of pasture land but not all in current use. The previous owners, the Kuipers, maintained a flock of sheep and also boarded goats for someone else.

Jack Petropoulos (W. Groton) – he & Kevin swap equipment, help each other out – "farmer helping farmer"; Nelson McCormack did the landscape reconstruction around the barn and orchard – Kevin describes him as a "bulldozer artisan".

They maintain a herd of Belted Galloways – nine this year. In late November there are 6: 3 brood cows and 3 calves born in May. Another 3 steers were grazed separately & fattened over summer; recently slaughtered. The cattle are grass-fed but Kevin also feeds them a bit of grain every day to keep them friendly – alfalfa from George McGovern in Dunstable.

The Lindemers grow heirloom apples on a piece of land they reclaimed. When they bought the property there were old orchard trees in place but the hillside was completely overgrown with bramble and the trees were judged too old to be useful – cut and replaced. The orchard was restored with all new saplings of old varieties, planted two trees of most varieties; four rows total.

Apple seeds never breed true, so each tree has to be grown from a cutting grafted onto hardy root stock. Different varieties are affected by different blights.

Whitney Farmstead is bordered on the north by O'Neill (Groton Fruit Farm) orchards. They benefit from the proximity: Sean O'Neill sprays the Lindemers' 4 rows of heritage apple trees when he sprays his own family's large commercial orchard. Chris noted that commercial orchards never plant "standards" any more all dwarf or semi-dwarf varieties instead, due to higher labor cost to harvest taller trees. Lindemers' present orchard has plastic irrigation pipe – used on young trees but not needed for established ones. Orchard is mowed when grass = 6-8" high – maybe 6x per summer except in drought like this year (2010).

Original varieties, planted in 2003 included Roxbury Russet, Cox Orange Pippin (Great Britain), Black Oxford, Blue Pearmain, Sops of Wine (oldest know apple – these trees died), Pomme Royale, Northern Spy, Ashmead's Kernel, Wealthy, Honeycrisp (recent), Akane (Japanese recent), McCoun (recent). Later additions or replacements for trees lost include Caville Blanc and Esopus Spitzenburg ('the best' – Kevin). A number of the trees died and were cut down, but have not yet been replaced.

Apples are sold to two nearby restaurants. They are also sold at Groton and Pepperell Farmers Markets. "When we started, people didn't care about old varieties, but more and more people know about them now, and actually search them out at Farmers Markets."

In addition to the orchard the Lindemers have what they call a family "fruit garden" including yellow cherries, Chapin pears and peaches, and a mixed grape arbor.

Whitney house was built by one of original settlers. Chimney has been dated pre-1690, partly due to the bake oven being located at the rear of the fireplace, a First Period construction technique. It may be closest to original condition of the 5 earliest houses in Groton. Lindemer discovered he is descendant of the brother of the man who built the house, tho Kevin grew up in Minnesota. There are vast numbers of Whitney kin around the country.

The barn:

stone retaining walls, south (downslope) side rebuilt by Lindemers (Nelson McCormack = stonemason/ contractor) to "hold the hill back"; entire barn was ratcheted back upright (upslope) and foundation strengthened/ rebuilt by Jim McCadden. "When we came here this was getting close to a tear-down building."

Major drainage work done upslope from barn – hillside cut back 12-15'; trench w/ French drain installed at level of basement floor, which flows into farm pond ("now more of a frog pond") constructed at E end of barn, which in turn has subterranean drainage pipe that can be emptied onto lower barnyard slope.

Barn is 100' long; according to Lindemer seems to be of-a-piece, 175 +/- years old. Some new support posts in lower level; new roof; new skin on exterior over original siding and Tyvek; new flooring main level.

Bottom level completely reconfigured to a) store equipment; b) feed animals (hay, grain) Real flooring challenge was in whitewashed dairy room (NW corner main floor) – carpenters found 5-6 layers of rotting elm flooring – laid because elm resists damage.

Huge hay tongs still hang in upper level of barn – iron track runs full length of building on ridgepole. Now, during winter, the main floor of the barn may be half full of hay/alfalfa bales. Lindemer finds round hay bales end up with 15-20% unusable.

Small, 2 story high square space on main floor is internal silo with vertical boarding – no sign of moisture any time of year.

Manure is removed to compost pile west of barn, from there to apple orchard, pastures, and garden.

Barn had major nesting colony of brown bats but they developed whitenose disease last winter – only a few returned this year.

Archaeology:

-horseshoes keep popping up wherever he scrapes the soil

- domestic dump uncovered behind barn during drainage work – they kept assorted ceramics.

- no ox shoes found

- no Indian artifacts although his sons kept looking for them

- depressions near (and on) golf course next door are former clay pits – "what we now carefully protect as wetlands and vernal pools"; foundation stones from a 19th century house also on property near road.

- 2 cisterns found – one beyond west end of barn had (metal) piping running into basement. Backhoe dug up pipe during drainage work – water gushing out from cistern – but never any sign of water in basement despite apparent lack of shut-off. Other cistern upslope from house, brick & stone 12' deep, plastic piping used to fill swimming pool that used to be in back yard.

Question: are there major issues you have to deal with here?

KL: not major – golfers knocking down the fence to retrieve balls – then cattle wandering onto golf course. I had to put up a higher fence. Being on the road, too – need good fencing there. Luckily, the cows were born here. They've known their surroundings from birth and are really comfortable here so they put up with all sorts of craziness – people honking loud at them as they drive by....Deer knock down my back fence occasionally. Since our dog died there has been lots of wildlife in the yard. Don't think coyotes would go into the pasture though.

Question: are you associated with Grange, Agricultural Commission, other? KL: When we first came we were too busy; now I don't see any particular benefit to me from joining the grange. We're connected; know some people who do the same kind of farming, share the same concerns....

Comments on farming issues

"Sometimes I think food purveyors say 'locally grown' just to say it, but a lot of their produce isn't very local."

CL: "We're not making a lot of money here – we might do more of this if it were more lucrative. I keep trying to do something else farm-related to make money when there's only one season's income." Chris has been writing and editing books. Her latest, *The Night of Many Lights*, starts on the roof of a barn. *True Cow Tales* is an anthology – written by farmers – which she edited. Her book *Beauty the Donkey-Mooing Beltie* introduces kids to Belted Galloways.

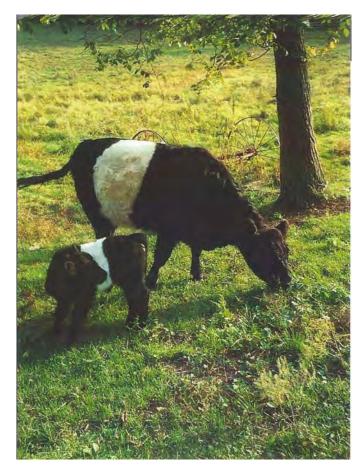
"It's a real challenge to make money as farmers in Groton... [or] anywhere. We can't compete with grocery stores. We have to charge a premium on our products to cover taxes and insurance. Groton farmers are taxed on livestock as personal property; and on farm equipment too."

"You're never going to do anything to make agriculture profitable in Groton" – at least not for more than a handful of people. Agriculture in this town is in transition from vocation to avocation – people do it because they are passionate about farming. So perhaps the real question is how can we make it easier for people to do agricultural activity here?"

• make it possible to use conservation land for agricultural purposes

- adjust Ch 61A legislation to be applicable to smaller parcels
- make rules such as zoning laws more agriculture-friendly.

"We're getting older – middle aged now. None of our children ever liked to work on the farm. What's going to happen to this place down the road?"



Belted Galloways (C. Lindemer photo)

Peter Loudon, Fantasy Acres Linda Staehly, Herbs & Harvest 186 & 174 West Main Street, Groton

Conversations with Electa Tritsch, February 7, 2011



Peter Loudon and his wife live on a 2.5 acre rectangular parcel of land on West Main Street. His rear lot line is Wrangling Brook, and the whole parcel gradually slopes downward from the road to the brook. His house, a small Cape, is dwarfed by an eclectic array of farm buildings behind it, most notably an octagonal wooden barn topped by a cupola. Less noticeable but actually larger is a 44' x 60' pole barn used as a poultry shed, where Loudon raises over a thousand turkeys each year. A processing house, machine storage building, polyethylene clearspan building used for chickens, and a small shop, plus an assortment of sheds complete the grouping.

When the Loudons bought in 1977, the only building was the cape where they still live. The house had been built in 1936 by an uncle of Loudon's eastern next-door neighbor. They named it Fantasy Acres after the popular TV show, Fantasy Island. "This is as close as I'm going to get to Fantasy Island." The land was 70 - 80% wooded with junk pine, and Loudon cut it back over the years until today, the only remaining trees define property boundaries, especially along the brook, or were planted as shade trees, like a handsome maple in the south yard behind the house.

Peter Loudon was born and raised on a dairy farm in Townsend. He wanted to be a vet but the Cornell pre-veterinary program, costing \$3,000 was too much to afford. He taught school, then began working for a printing company where he is still employed full-time, 38 years later.

I asked him if he and his wife had bought their place with the intention of farming. Not at all, it seems. A year after they moved in, Peter built the octagonal barn by himself, as a place for his wife to keep a horse. After that it seemed to snowball. First there was a beef cow "for the house", then a pig; then a few broilers which he took to Hudson to be processed.

Today Fantasy Acres is very much a working farm. Fifty-two chickens, four young pigs, two white-faced Herefords and a young black Angus keep each other company in the barn. The cattle will stay until they reach maturity at 18 months, when they will be sold or slaughtered down the road at Blood Farm. The rest include 1150 to 1200 turkeys a year, bought as [poults] from New Jersey or, this year, from Ohio. Come spring, Peter and his wife will borrow neighbor Linda Staehly's van and drive to Ohio, collect the poults and make the 13-hour trip back in one day, so as not to stress the chicks too badly. When the chicks arrive, they're fed an energizing dose of sugar water, then put on a regular diet of mixed corn, wheat, oats and soy. The feed comes from a grain supply company in Taunton.

By Thanksgiving or at the latest, Christmas, the last of the turkeys will be gone, too big to winter over. Almost all are preordered and picked up fresh just before the holiday. "I prefer to keep my business low-profile. No advertising, that kind of thing. Word of mouth brings in the best customers."

Before the turkeys grow big and take over Fantasy Acres in the summer, Loudon finds time to raise two flocks of chickens, for which he has a standing order of 100 per month, going up to 200 this year if he can re-cover the plastic poultry house (painfully named a 'chick inn') that was done in by this winter's snow load.

There is no secret to keeping farm animals healthy, especially poultry, Loudon insists. First and foremost is cleanliness at all times. This requires cleaning every pen and replacing the bedding sawdust once a week; then the poultry clean themselves with dustbaths. In the course of a year Loudon's farm goes through four 55-foot trailer loads of sawdust – he prefers soft wood, like the current load that was trucked in from Canada. "You can't get any from around here anymore. Townsend's closed; Littleton produces about a teacup...."

In all this activity, Peter Loudon has help with animal feeding for maybe an hour a day. Once a week someone comes in to clean the pens and box stalls. Before Thanksgiving he hires on one or two workers to help process the turkeys and manage the shop that is only open November and December. The rest is pretty much up to him.

Given the fact that he also works a full-time job, I asked him if he ever thought about stopping farming. "I'm not getting any younger. Should be cutting back...." Then he found an explanation that made sense. "Let's put it this way. If I didn't have this," he gestured out back, "I wouldn't get out of bed to go to that," and his head nodded toward the road. He knows the exact day and date when he reaches 40 years at the printing company, when he retires.

The Loudons and their next-door neighbor **Linda Staehly** both live on parcels of land carved out of the property known as the Strand farm in the 1930s. Linda says this was a good-sized farm, with another, belonging to the Allens, east of it. By 1987 when Linda bought her three acres it was owned by Roscillo.

Linda grew up on a farm in Connecticut, adjacent to an apple orchard owned and worked by her father and his brother. "I know about seasonality. Apples have to be picked September, October. You could barely get a word out of my father during that time, he was so busy."

During the 1970s and early '80s Linda managed one of the farm stands along Route 2 in Lincoln. It was close to Route 2 and Boston, and during those days before repeal of the blue laws, Sunday was reliably their busiest day of the week – no supermarkets selling produce that day. The farm stand had acreage where herbs and other plants were grown, but most of the produce came from truck farms in Concord, Woburn, Littleton. "I got to know the farmers; knew where to buy. We'd go out and truck the vegetables back to the stand, helped these farms and provided good – organic in those days – produce for our customers. I felt that what I was doing was important. The problem was that in the end my time was spent almost entirely managing help, and not growing."

"Part of the reason I got out of the farm stand business though, was that I am not an entertainer. Nowadays customers seem to think there has to be a petting zoo, and tastings, and special events...."

Linda moved to Groton in 1987, attracted by the residential/ agricultural zoning, because she knew she wanted to go into greenhouse farming. There was a 1934 house with miscellaneous additions and a derelict barn on the property. But she decided the house was workable, and liked the gentle southward slope of the land as a good greenhouse location. The two original greenhouses she built were subsequently joined by three others, all carefully stepped downslope of each other and covered with highly engineered polyethylene. They all have heat, not always used, and black landscaping plastic on the ground nearby serves as late-spring bedding for trays of herbs, whose places are taken by chrysanthemums in summer. A small barn houses Linda's horse and that of a friend. This year, after 23 years of trying to make the old house work, Linda tore it down and had a compact Cape built to her specifications in its place.

Linda's business, Herbs & Harvest, is strictly wholesale and she says 95% of her sales are during May, when garden centers in Massachusetts and New Hampshire stock up on pots of tender herbs for gardeners. "I'm a niche grower, and that's how I get my foot in the door. When garden centers look to buy, they look for someone who specializes in it. Pretty much all of my business has come from somebody who refers me to somebody who refers me to somebody else." A wide variety of herbs grow in her greenhouses but only a few are grown in large quantity.

Does she feel a sense of market competition with other local herb growers? "There is plenty of business for people who grow good product. The scale of the demand is right for me." Every year, especially during the flurry of activity in May, a couple of people come in to help with the work but their total hours do not add up to one full-time employee. She is quick to acknowledge, however, the ongoing, steady support of neighbor Peter Loudon who had just plowed a broad swathe of snow off her access road. "He is always there. I couldn't do this without him." Otherwise Linda manages the work alone by spreading much of it over the year. "I'm a compulsive organizer," she comments, noting that although it is early February, some of her greenhouses are already stocked with soil-filled pots, waiting for timely seeding. Some herbs can be started early, then maintained at a low temperature to slow their growth, while others are planted in warm environments later in the season.

Linda's years of experience with farmstands and garden centers has given her a long perspective on the business of agricultural retail. "Garden centers are changing the way they operate these days, the way they merchandize. They follow stricter business models now. It

used to be, a garden center was an expression of its owners, their passion. There is less passion, less character now."

other comments, issues

- "To survive, being a farmer - some of them are pretty savvy businessmen."

- "As far as Groton not being farm-friendly – the town hasn't given me a particularly hard time. But I wonder, does any selectman in Groton have an agricultural background, understand what we do? I think the issue is consciousness-raising, as much as anything."

- "When I found out about Groton's residential/ agricultural zoning, I took it seriously, but the land is all valued as if it were a house lot."



John and Laurie Smigelski Excalibur Farm 150 Mill Street, Groton

Farm tour February 8, 2011: John & Laurie Smigelski, Robert Hanson, Electa Tritsch; follow-up April 28, 2011



John Smigelski grew up next door to John Eliades' Top o' the Hill Farm just across the Groton border in Ayer. Eliades had bought his farm in the late 1930s; it included apple orchards, market gardens and he and his sons also worked as truckers moving fruit and produce from other farms. Primarily though, Top o' the Hill was a dairy farm. Smigelski started his career there when he was a kid, making hay, and continued through high school, although the dairy herd was sold in 1964. He majored in dairy science at Delaware Valley College of Science and Agriculture.

Then, when he was a senior, John Eliades died. They had talked some, before then, about Smigelski coming into the family business but nothing had been firmed up. Eliades' son wanted to keep the farm and made a proposal: he and John would go into partnership, with John buying half of all the farm equipment over time, no money down. "The whole cost was maybe \$5,500 – a lot of money in those days. It was a great offer." John and his wife Laurie, also a Delaware Valley graduate in animal husbandry, returned to Groton and began the career they are still expanding: hay making, on a commercial scale.

The hay becomes fodder for thousands of pleasure and competition horses throughout the northeast, a market "huge" now in comparison to what it was when he started out 40 years ago. Current statistics point to the region surrounding Groton as having more riding horses per square mile than anywhere else in the United States, and customers find their way to him. "If you can grow the best product possible, people beat a path to your door. We're not talking bedding hay here."

John and Laurie's niche presented them with an unusual challenge and an unusual opportunity in Groton. To make a go of it, they had to work more land than was possibly affordable to buy. But they provided a form of agricultural activity that was invaluable to numerous large landowners in the town. In return for a land lease – "it used to be just a word and a hand shake" – they would clear a wooded parcel or restore a field to agricultural use.

Preparing a new hay field is a labor intensive process: cutting back invasive hedgerows of multiflora rose, bittersweet and viburnum, removing the weed trees that choke out a field in reversion, rooting out stumps and boulders. Once the space is clear part some of the field may need to be bulldozed to even it out, to accommodate massive having machinery and compensate for drainage problems. It is plowed; the soil is tested; fertilizer and lime added to sweeten the soil. A mix of orchard grass, timothy and brome is seeded in. Finally, if the weather cooperates and the grasses stay healthy, the new hay field will produce 2 to 3 crops a year for 6 to 8 years, before it has to be plowed again. Some years it's not so easy. In 2010, for instance, the summer drought was so severe that their second mowing was down 65% from a normal second crop. As with other kinds of field crops, proper nutrition makes all the difference. In most cases, John explains, the phosphorus level is already high, but potassium and nitrogen need to be added. Potash to provide potassium currently goes for \$600 a ton – only enough to sweeten 10 acres. John is looking into acquiring potash from a biomass plant in Portsmouth NH, as a less expensive option. Nitrogen is the hardest element to control, since it atomizes quickly if not watered into the soil. Biosolids would be a good alternative, John comments, noting that an arrangement with a nearby sewage treatment plant would be ideal.

The Smigelskis' field leases didn't all come at once. Their first rental was an 11-acre Lawrence Homestead field on Farmers Row. Next door to the Lawrences, the Stone family contracted with them to hay 30 more acres. Then the Gundersons nearby. "It's pretty much all word of mouth – somebody knows somebody...."

Our discussion of the Gunderson property raised what the Smigelskis see as a major issue in their business: "An absentee landlord looks at the rent check and thinks the land is worth more than he gets; what he doesn't see is the work involved in pushing back hedgerows for 20 years. He doesn't see the ton of time and equipment needed to get a property up and running."

After that the Groton Conservation Commission leased out 4.5 acre Walnut Run to haying; Jim Western asked them to work his 1.5 acres, and they took on 3.5 acres of the Alcott property. At one point, in one of their few farming deviations, they experimented with growing pumpkins on between 20 and 50 acres in a number of parcels. A major shift in operations took place when they contracted with the Groton Conservation Trust to work over 100 acres of fields at Surrenden Farms, a 340-acre parcel of protected land that runs between Farmers Row and the Nashua River. The westerly portion of the property is managed by the town's Conservation Commission; further east is the General Field, and today they hay 145 acres in that location. Originally they had thought to bid on the Commission acreage as well, but found their dealings with that board so convoluted that "we walked away from that; we just lost our enthusiasm."

Laurie decries some of DEP's protective measures not, she hastens to add, because she is against conservation, but because they were designed by people who "apparently have never been out in a hay field." One example was the guideline that required mowing from the center of the field outward. Its intention was clearly to allow grassland creatures to avoid the cutter blades but John notes that no turtle is going to move fast enough to outwalk the mower. Furthermore, "the equipment is not designed to go the way they want it to go." According to the Smigelskis, the recommended pattern would crush the hay before it was cut, defeating the whole process before it begins. "The real answer," says Laurie, "is to go slow and pay attention. You see a doe out ahead of you, you can be pretty sure there's a fawn somewhere near. So you're careful."

Altogether John, Laurie, and one seasonal hired hand hay about 250 acres of Groton land. In a normal year the fields produce two crops, and about half are likely to produce a third crop as well if the weather is right. The summer of 2010 had little right to its weather. Following spring flooding the first crop was late. Then there were weeks of drought, and the second mowing brought in 65% less hay than the first one. Each crop is at its peak for 2-3 days, the "pre-bloom" stage, when the head is formed but the grains have not yet ripened. That is when it needs to be cut, and for the next 48 hours it dries in the field if the weather is kind, turned over by a massive tedder that can work three rows at a time. Then the crew comes in with two balers and a state-of-the-art "stack wagon". The tedder alone significantly improved production, so that the Smigelskis can now hay up to 20 acres a day, double their earlier limit. It was buying the stack wagon though, John says, that made the biggest difference: instead of 1000 to 1200 35-pound bales made and picked up per day, the new equipment can process 2000 50-pound bales per day, with the whole operation requiring two less crew members than had formerly been needed.

There is more demand for hay than they can deliver from what they grow. When their own supply is depleted they truck in loads from upstate New York to feed the livestock of their 140 or so customers. Those livestock run the gamut, from one horse to 40; a herd of dairy goats; even a single milk cow kept by a family whose 12 children drink the milk. Some of the client relationships go back as far as thirty years.

The Smigelskis' home farm is a 13.4 acre property given over to pasture, a large garden and a farm pond where Laurie's two riding horses can drink. Wooded wetlands cover one end of the property, which backs up to the [B&M] Rail Trail running north-south through town. The narrow, two-story house dates from at least the early 20th century, possibly as early as 1889 when Dennis Coughlin owned the property. A small wooden stable was added about 1950, which still houses hens and horses. A man named Blodgett occupied the land after Coughlin, and the place was bought in 1961 by Dan Sherwin, from whom the Smigelskis bought in 1991. "Here," says John, "we've got the buildings to support the land we work around us." Of the buildings, most vital to their business are the massive pole barn built in 1992 to house over \$200,000 worth of old and new, traditional and highly sophisticated equipment including the 18-wheeler that John uses to haul the New York hay; and the 2000 building called, somewhat misleadingly, the "shop".

"We do everything ourselves," Laurie explains. "We don't contract anything out." And that includes almost all the mechanical work needed to maintain their fleet of equipment. The shop, a two-story pitched-roof barn has radiant heat in its concrete floor and is completely paneled on the interior with wide pine boards. The boards had come almost free, thanks to the Smigelskis' broad network of friends. John let it be known among local arborists that he was looking for logs. Eventually there were enough tall, cut pines in his yard to haul them to the sawmill in Dunstable where they were milled and planed, to find new life as an insulating layer of warm yellow paneling in the otherwise all-business shop. "When I started out Cliff Sherman was my truck mechanic. He knew everything. I just watched....You see how much equipment we've got. At \$85 an hour you can't afford to send this stuff out to be fixed. That's the reason behind building this shop."

While John and Laurie may do everything themselves, they don't *both* do everything, at least under normal conditions. "We work as a team, though," Laurie says. "The two of us run this business." Over the years they have developed a highly efficient working relationship. Laurie tries to explain the sequence. "Let's start from the hay we grow.

- Both of us do field work during the growing season.
- He rakes, I bale.

- I schedule all the deliveries, with several weeks' notice. Usually we don't deliver a whole winter's feed at once; it depends on the customer's finances and the amount of storage they have.
- Both of us do deliveries and sometimes we have a high school kid who helps out in the summer
- I do the books; John tends to the machines."

John cuts in. "But Laurie runs all the trucks. I think of it as her insurance policy; if something happened to me, she knows all the equipment and all the suppliers. She wouldn't have to lose this place in a fire sale just to make it through."

Laurie's ability to run the equipment is useful for more than emergencies. She and John tackle the big jobs like reclaiming fields, together, and they share the maintenance work on the 13-acre home farm. They also share what free time they have. John is a member of Groton's Agricultural Commission. Laurie has been newly elected to a seat on the Groton Park Commission, believing that the commission could use a farmer's perspective on land use.

Do they have any advice for younger farmers?

Laurie is spokesperson. "As a starting farmer, find a mentor to connect with and trust." "That's what Eliades was for me," John adds. "And there's Dan Lenthal from the Natural Resource Conservation Service – he's a wealth of knowledge. Every time a new piece of land comes up I give him a call. 'Hey Dan, we need to do a farm walk....'"

There's a pause, and it seems the interview is over but Laurie is collecting her thoughts. "This is what I want to do," she says. "It's a lifestyle choice."

We go out to walk the land.

other comments & issues

- real estate tax system really penalizes the farmer. Taxes should be charged according to <u>current</u> use, not somebody's perception of "highest and best".

- Massachusetts insists on charging sales tax on anything that is food for pleasure animals – so John has to factor tax into what he charges for hay, even though haymakers from New Hampshire can come across the border and get away without charging tax on what they deliver.

Question: why does Groton need an agricultural commission? The quick answer – "too many yuppies in town" complaining about equipment noise and dust and hours (at mowing time they may begin before sunrise to get the hay in). - "The Right-to-Farm bylaw makes it a little easier."

- Everybody talks about rural character, vistas, "But the vista is a *byproduct* of farming." The estate owner who hires John to rotary mow his land is *maintaining open space*, not doing agriculture. John describes the category as 'passive agricultural land'. Question: so how do you define farming these days?

Answer: "If what I sell is over 25% of what I grow from June through October, then I am a farmer."

- During the spring of 2011 Laurie ran for a seat on the Groton Park Commission, believing that the commission could use a farmer's perspective on land use. She is a strong advocate of retaining the present character of Hazel Grove Park including its use by the Pony Club and the

Riding and Driving Club. The introduction of playing fields immediately adjacent to the trotting track would jeopardize both people and animals. "What would that do to the horses?" protests Laurie, a passionate horse-lover, equestrienne and retired combined driving competitor. "There's no way it would work."



Robert Varisco and Aidan Davin John Crow Farm 170 Old Ayer Road, Groton

Interview May 31, 2011 by Electa Tritsch and Danielle Bryant.

The name of John Crow Farm, like most things done by Robert Varisco and Aidan Davin, is carefully chosen. According to Robert, John Crow moved with his family to the Upper Ohio Valley after the American Revolution. He was killed in a surprise Indian attack while hunting with his brothers, but the Crow family remained in the area, over time developing a large farming operation and a reputation as worthy community members. "Perseverance," Robert observes, "that's what it takes."

Since the start of 2011 the John Crow Farm has occupied 74 very visible acres on Old Ayer Road, each month bringing more activity and variety to what had been a long stretch of hayfield at the base of Hillbrook Orchard. The orchard is still standing though in poor condition, many of its trees either dead or diseased, but the orchard sits on John Crow's back burner. Front and center are the livestock and poultry being raised for meat sold at the farm stand, at farmers markets from Newburyport to metro-west and Boston's South End, and through the farm's meat CSA – one of only half a dozen in Massachusetts.

The list of animals is long and varied, ranging from placid Scottish Highland cattle, bred to graze on available pasturage and withstand tough weather conditions, to South Down and Shropshire sheep. Free-range Rhode Island Red and Araucana chickens wander in and out of the farm stand, providing a treasure hunt for a young helper whose assignment is to find the out-of-theway places where the birds prefer to lay eggs despite wheeled hen houses provided for them. Young White Peking and brown Rouen ducks; turkeys, pheasant and rabbits all have their own cages. A drove of pigs will be at the Groton farm by mid-summer.

Predictably, the cattle and sheep roam sizable pastures secured by electric fencing, where solitary apple trees provide shade and some shelter from storms. Arrangements for the poultry are less traditional, beginning with the hoop houses where day old chicks and ducks – delivered by mail order – spend their first weeks. "You know why we use hoop houses, don't you?" Robert asks. "If they're made right, they're just as good as barns. They're classified as 'temporary structures' though, so you can use them places that wouldn't allow others." John Crow Farm is on land protected by an Agricultural Preservation Restriction (APR) that forbids construction of permanent structures.



When the young birds have grown strong enough to survive without heat lamps and extra protection, they are moved outside to wood-framed pens with chicken wire tops and sides, but no bottom. Each pen sits on a patch of fresh green grass, which is the daily food for the pen's occupants. Every day, sometimes twice daily, pen and birds are moved to another patch, leaving the short-cropped grass to regenerate naturally, manured by the birds who have moved on. In similar fashion the two wheeled henhouses used by the laying hens are spaced a canopy-width apart, providing a sheltered pecking ground between them. As the area is pecked out, the henhouses are shifted elsewhere, giving the birds a fresh source of food and the ground, a regenerative respite.

In due course the livestock will become meat for John Crow's customers, the poultry driven to Westminster Meat in Westminster VT to be processed, and the large animals to LeMay & Son in Goffstown NH. Even the choice of slaughterhouse is not easy. John Crow would prefer to process its large livestock locally – after all, Blood Farm in Groton holds one of only two USDA slaughterhouse grants in the state – but demand is so high that, as Robert puts it (in May), "I'd have to have the cattle there now, if I wanted them processed this year." Conversely, one of Groton's reputable poultry farmers holds a state processing license, rather than a USDA grant, meaning that poultry processed by him may only be sold legally at an owner's local retail operation, eliminating farmers' markets from John Crow's potential sales outlets.

Although livestock raising and poultry farming are not unusual in themselves, the broadspectrum animal husbandry of John Crow Farm is uncommon. The pattern of animal shelters and land use is even more so. But it is the underlying philosophy espoused by the farm's managing partners that puts John Crow Farm in the forefront of farming trends for the 21st century.

Robert is the spokesperson, and his words come quickly as if he has worked them out and refined them over a long period of time.

"Our conception of farming in the United States today is completely topsy-turvy. Farming is a myth – the corporations have hijacked farming –decoupled all the linked elements of the old family farm that used to make it work. We're trying to counteract some of that, do farming the right way, make it sustainable." He backs off a bit from his passionate speech. "We're not fooling ourselves – we can't feed all the people. But we can show the world there's another way of doing



things, and if we do that maybe we can force corporations to rethink the way they are doing farming."

Robert largely credits Joel Salatin with providing his food for thought. Salatin, a Virginia farm owner, is best known for his public espousal of organic growing methods and holistic animal husbandry, as well as direct marketing of his products to local area consumers.

How did all this begin? Were Robert and Aidan raised on farms, like many present-day farmers? Not so. Aidan's parents ran a florist business in Fitchburg. "He grew up with plants, not crops," Robert joked. Even so, Aidan aimed to be a farmer, getting a degree in agriculture from UMass Amherst; then operating a farm in central Massachusetts for ten years before the two met. Robert, by contrast, grew up in the fertile midlands between the Delaware and Chesapeake Bays and his agricultural "training" consisted of long summer visits to his grandparents' farm. His professional life involved resource management consulting. Before the global recession hit in 2008-09 the two fortuitously met, one in mid-divorce, the other out of work – a turning point that led them to form the John Crow partnership and take over a Groton farm also at a turning point.

Hillbrook Orchards had not been in active cultivation for a number of years, but there were a number of things about the property that appealed to Aidan and Robert. Since 1983 it had been protected by an Agricultural Preservation Restriction drawn up by Donald Priest, long known as one of Groton's foremost orchardists. Two years later, in 1985, the land had been bought by the Rosenberger family who at first continued commercial orcharding; later built a farm stand and began a pick-your-own operation. By the time Aidan and Robert started looking, the family trust was looking for an appropriate buyer for its protected agricultural landscape of level hayfields and rolling hillsides.



In December 2010 John Crow Farm entered into a two-year licensing arrangement with Rosenberger Realty Trust, including an informal option to buy if the business, the land, and the arrangement worked out. There is much more to 'the arrangement' however, than a simple one-way agreement between landowner and licensee.

The complex of relationships that exists epitomizes the holistic approach to farming promoted by Salatin and espoused by John Crow. Potager Farm and The Herb Lyceum, run by Groton native David Gilson, have sub-licensed the farm stand operation from John Crow. Potager provides the vegetables and the Lyceum, the herbs and cut flowers that are sold at the stand. John Crow's livestock, in turn, provide manure for Gilson's cultivated fields. And the Rosenberger hayfield, first sown and mowed in the 1950s, will soon see changes as well. David Gilson will be planting five acres of land not currently in pasture to vine crops such as squash and melons – plants too rambunctious for his limited acreage elsewhere in town. Carl Rosenberger is proposing to install a day lily nursery paralleling Old Ayer Road – a scenic draw, as well as a passion of his own. Down the line, some of those hillside apple trees may be restored, while the most decrepit may give way to additional grazing land.

Meanwhile, the John Crow Farm meat CSA opens soon – the first poultry CSA in Massachusetts and one of only six or so meat CSAs in the state where community-supported agriculture began.

Why a CSA rather than straight retail, or even wholesale? It makes the community part of the process, Robert explains. "It makes people participants in growing something during the hard

months of the year," rather than simply reaping the bounty. "We're confident members will more than get their moneys' worth – barring some disaster."

One writer recently said of Joel Salatin, He's not going back to the old model. There's nothing in county extension or old-fashioned ag science that really informs him. He is just looking totally afresh at how to maximize production in an integrated system on a holistic farm. He's just totally innovative.⁸

While it may be true that John Crow Farm is not totally relying on 'ag science', the farm and its owners are relying on even more traditional practices, unpredictably combined with 21st century group dynamics, in an effort to redefine farming. It will not make great fortunes. It may, if successful, provide a living for its farmers and a 'plentiful sufficiency' for its consumers.

And according to my grandmother, "anything else would be a superfluosity."

⁸ Jo Robinson, author of *Pasture Perfect* (2004) quoted in http://en.wikipedia.org/wiki/Joel_Salatin.