Massapoag Pond

Town of Tyngsborough
Town of Dunstable
Town of Groton

2023 Treatment Proposal

Prepared for The Lake Massapoag Rod and Gun Club

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MDAR CC-0037221
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Thank you for your continued interest in All Habitat Services' aquatic plant management programs for Massapoag Pond located in Tyngsborough, Dunstable, and Groton, Massachusetts. We are pleased to offer the following management plan for your consideration.

The initial treatment plan will proceed slightly different than the 2022 season, where instead of 35 acres, approximately 53 acres of littoral zone will be treated within the main portion of the pond. We will also include the 18-acre cove located within the Town of Groton to our treatment area this year, increasing the total treated area to 71 acres.

Scope of Work:

Chemical control of Curly Leaf Pondweed using registered aquatic herbicides is necessary to mediate interspecific competition in the aquatic plant community. For Curly Leaf Pondweed, we recommend the use of Diquat at a rate of 2 gallons per acre for effective treatment. After initial treatment, it is recommended that the area be monitored for regrowth of invasive species. Evaluation of the need for retreatment will be conducted after the surveys.

Diquat is a foliar contact herbicide that disrupts regulated cell growth within green plant tissues. Absorption and herbicidal action are usually quite rapid with effects visible within several days of the application. For best results, applications should be conducted when water temperatures warm to about 60°F. Dense vegetative growth may require more than one application to gain control. Retreatment, if necessary, may be applied on 14-21 day intervals.

Water Use Restrictions:

Following the use of Diquat, be aware that the following water use restrictions apply: 3 days for dining, 1 day for livestock watering, 3 days for irrigation to turf and landscape ornamentals, 5 days for irrigation to food crops and production ornamentals. There are no restrictions on swimming and fishing. It is also in best practice to use a conservative approach and avoid use of the area during and directly following treatment application.

Shared Contractor/Client Responsibilities:

It is understood that you will assist us in complying with the following:

- Client will provide certified abutters list for notification; AHS will notify all abutters.
- Client will comply with Order of Conditions and local requirements.
- AHS will electronically notify Massachusetts DEP and Massachusetts Division of Fisheries & Wildlife within 24 hours of the proposed treatment application date(s).
- AHS will provide notification signage for client to post at the property announcing treatment dates and noting the temporary water use restrictions 48 hours in advance.
- Client will enforce compliance with temporary water use restrictions
- While no fish mortality is anticipated as a result of a pond treatment, in the unforeseen event fish do die, All Habitat Services shall not be held liable for the loss or damages.

Cost and Payment Schedule

We have provided separate costs for each aspect of the treatment. A 25% deposit is due upon acceptance of this proposal. An invoice for the balance will be submitted at the completion of the treatments. Payment, in full will be due upon receipt of the invoice.

Cost of Proposed Services for Massapoag Pond	
Cost for Plant Survey, Mapping, Annual Reporting to Tyngsborough, Dunstable and Groton Conservation Commissions, and Preparation and Meeting Appearances Before Tyngsborough and Dunstable Conservation Commissions.	$2,500.00
Cost for Legal Notification	$250.00
Cost for MA DEP License to Apply Chemicals (WM-04)	$500.00
Mobilization/Demobilization	$1,200.00
Cost of Tribune® (Diquat dibromide) Herbicide Application $205.00 Per Acre (treatment area is estimated at 71 acres)	$14,555.00
Total Proposed Management Cost 2023:	**$19,005.00**

All Habitat Services will obtain a Mass DEP License to Apply Herbicides to the Waters of the Commonwealth in compliance with Chapter 11 Sec. 5E and coordinate to gain all necessary state and local agency approvals. Vegetation management services will follow all protocols established in The Pesticide Program by the Massachusetts Department of Agricultural Resources (MDAR) Division of Crop & Pest Services. Proper notification of treatment(s) shall be made with the necessary MDAR and Mass DEP agencies. Public notice in compliance with the Massachusetts Division of Fisheries & Wildlife as well as with MDAR will be made within 24 hours prior to the treatment(s). We will provide all chemicals, labor and equipment for the application as requested. Specific, mutually agreeable date(s) for this chemical treatment will be scheduled with you in advance. The application will be performed by All Habitat Services, LLC's MDAR licensed applicators, in accordance with the product label and the Mass DEP Aquatic Pesticide License. All Habitat Services, LLC will post the shoreline with printed signs announcing any temporary water use restrictions immediately prior to treatment in compliance with the General Conditions of the License to Apply Chemicals for Control of Nuisance Aquatic Vegetation with Mass DEP. All Habitat Services, LLC carries workmen's compensation, liability, and property damage insurance, which will remain in effect throughout the duration of this Agreement.

We hope this management plan meets with your approval and please feel free to contact us if we may be of further assistance to you.

Best regards,

David Roach MDAR CC-0037221
General Manager
All Habitat Services, LLC