

An underwater photograph showing a dense thicket of green milfoil plants in a pond. Several thin, reddish-brown stems with small white flower spikes are visible, rising from the green foliage. The water is clear, and the lighting is bright, creating a vibrant scene.

Turee Pond Variable Milfoil Management

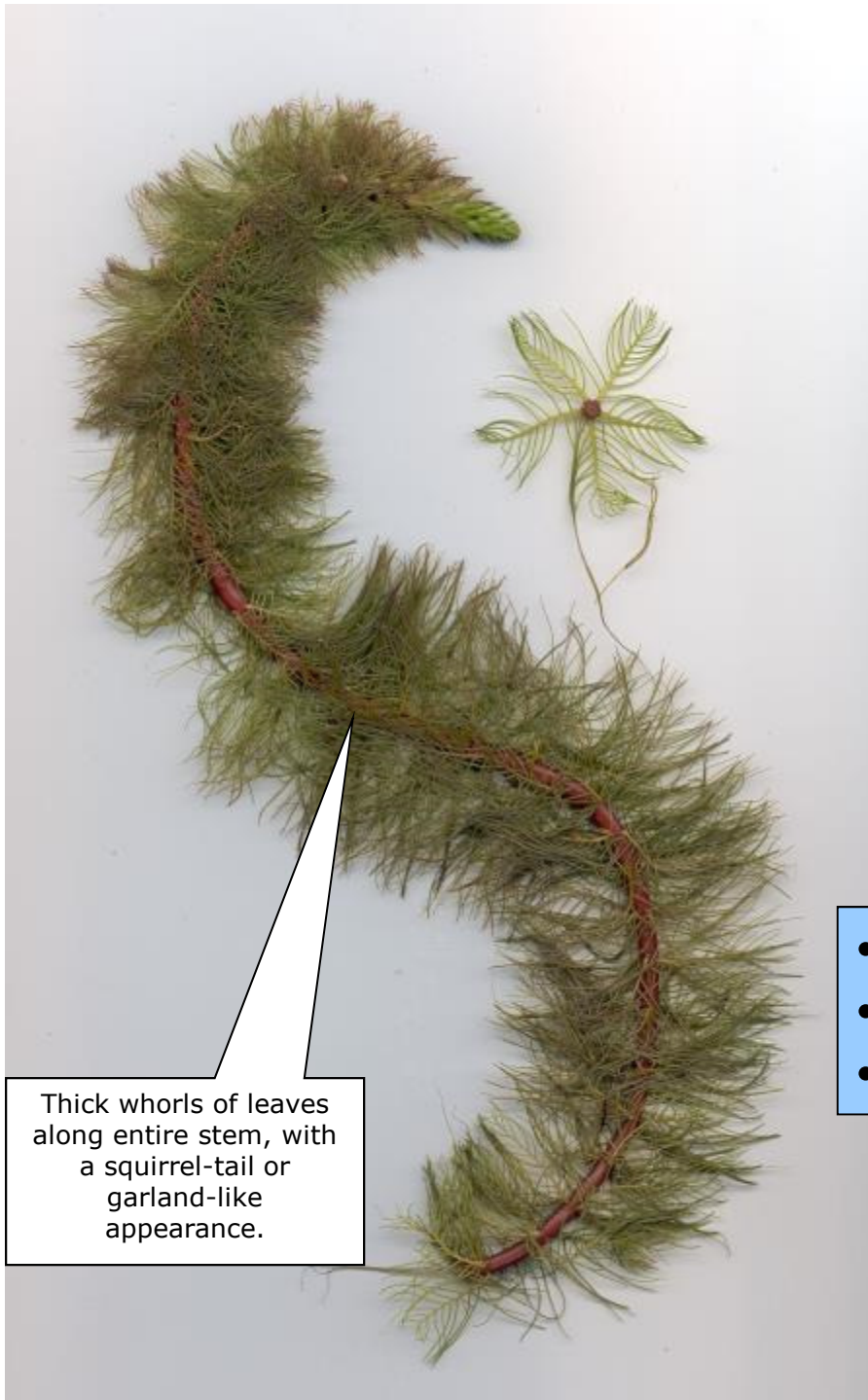
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NH Department of Environmental Services**

Overview

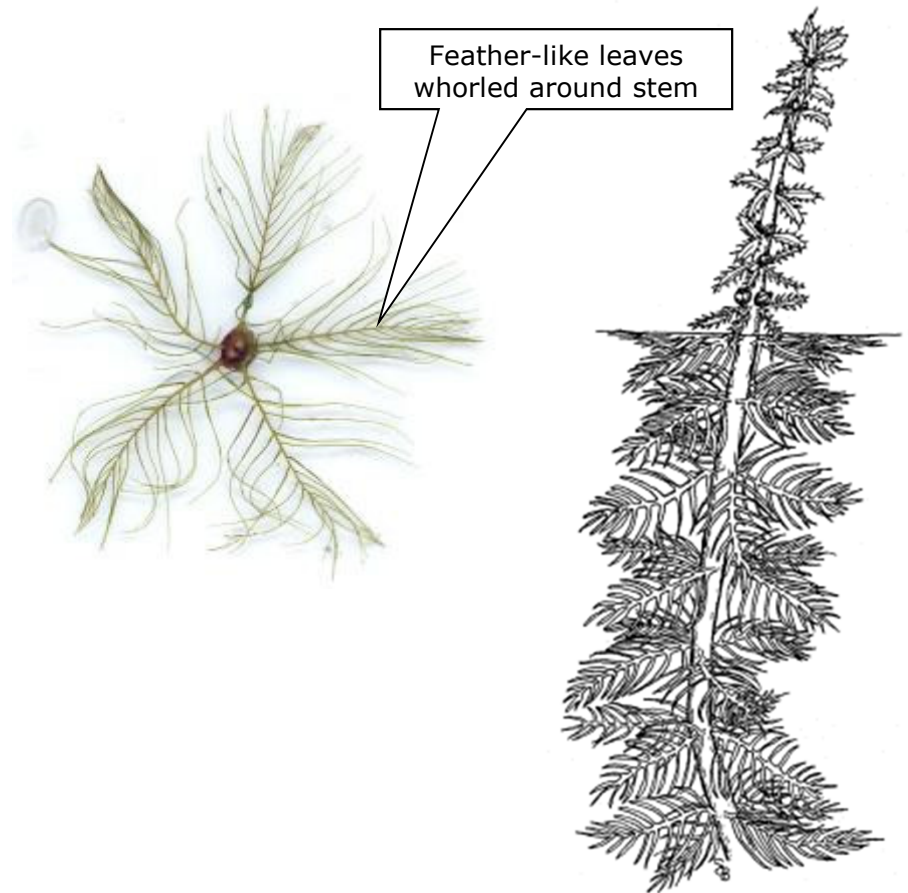
- Variable milfoil
- Variable milfoil in Turee Pond
- Sources of Milfoil
- Management Options
- Long-Term Management Plan
- Next Steps



Variable milfoil in Turee Pond- May 10, 2016



Thick whorls of leaves along entire stem, with a squirrel-tail or garland-like appearance.



Feather-like leaves whorled around stem

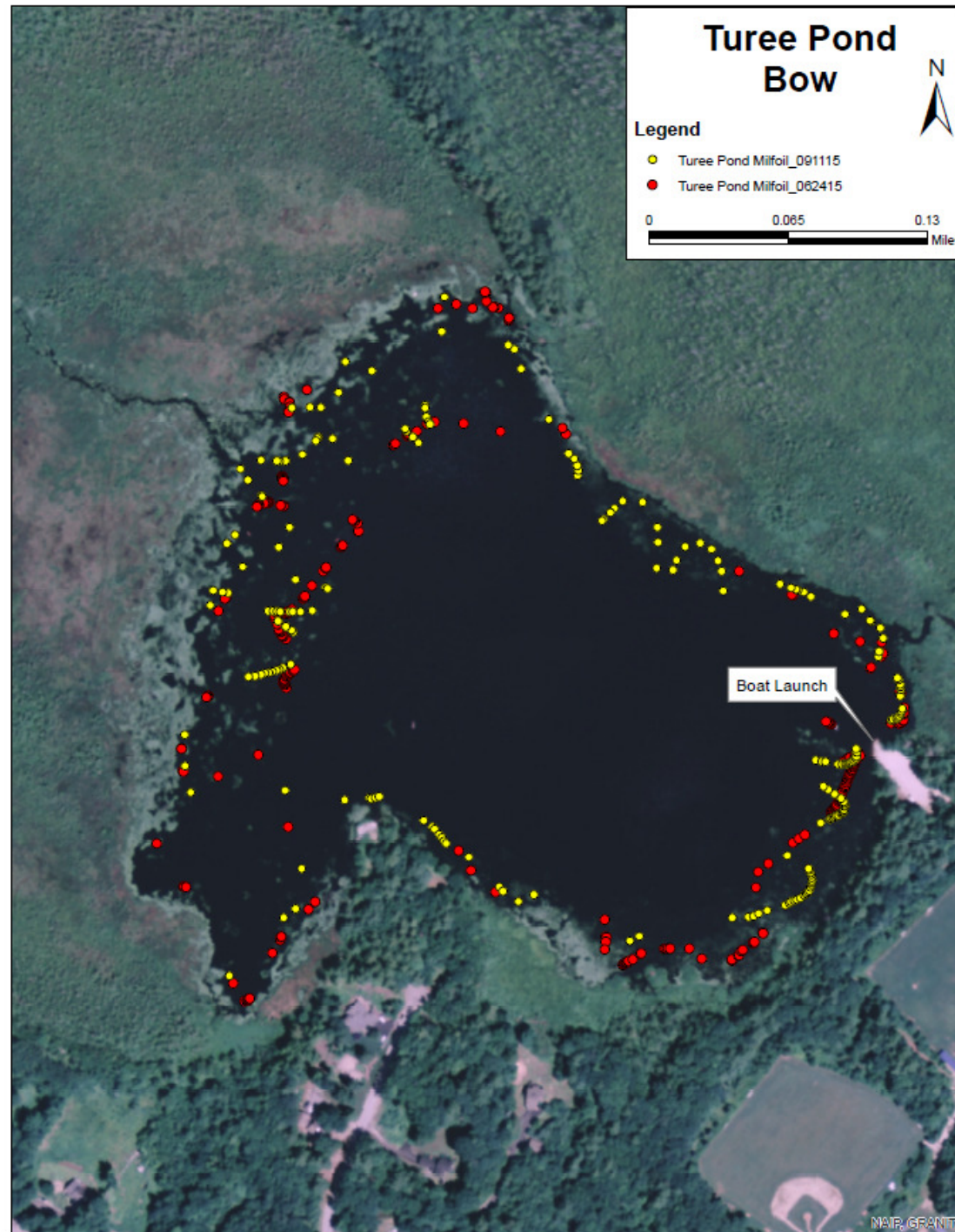
- Variable milfoil- *Myriophyllum heterophyllum*
- Native to southern and central U.S., not to NH
- In several waterbodies in NH



Variable Milfoil in Turee Pond

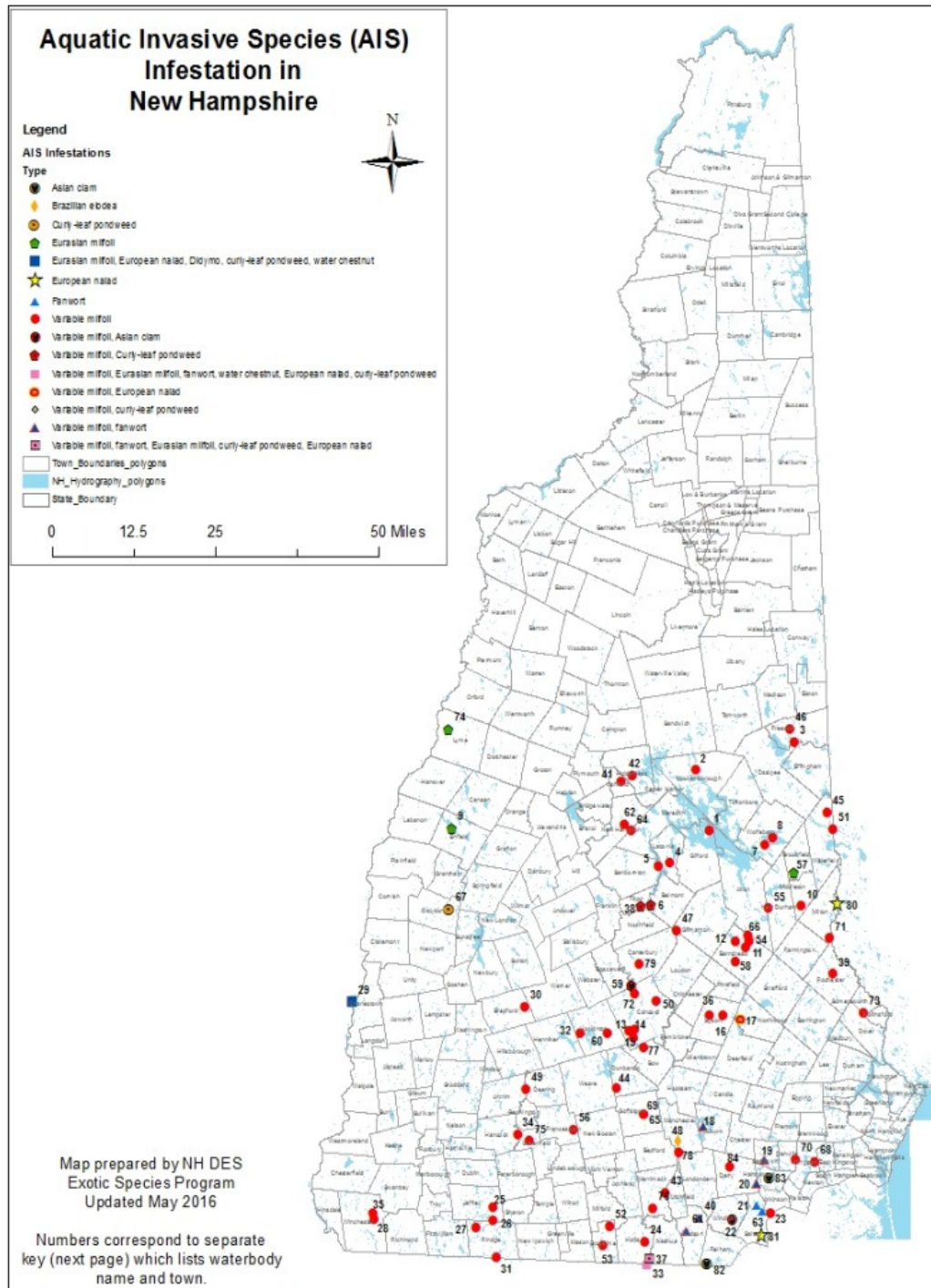


- Variable milfoil first detected during summer 2015 by Sandy Crystal
- Reported to Amy Smagula who identified it as variable milfoil
- Sent for DNA analysis for verification
- Field survey in summer 2015
- Repeat survey in October 2015
- Winter 2015/spring 2016 planning, contracting



Infestations

- 84 Infested Waterbodies
 - 72 variable milfoil
 - 6 Eurasian milfoil
 - 9 Fanwort
 - 5 European naiad
 - 2 Water chestnut
 - 5 Curly-leaf pondweed
 - 1 Brazilian elodea
 - 4 Asian clam
 - Many, many Chinese mystery snails (not shown on map)



Invasive Species Mantra



- Prevention
- Early Detection
- Rapid Response
- **Management**

Management Options



- **Physical control**
 - Hand removal
 - Diver-Assisted Suction Harvesting (DASH)
 - Drawdown
- **Mechanical control**
 - Dredging
 - Hydro-raking
 - Mowing/harvesting
- **Biological control**
 - Using an introduced species to control the milfoil (insect, fish, etc)
- **Chemical control**
 - Aquatic herbicide

Recommended Milfoil Control Strategy for Turee Pond- 2016



- A Long-Term Management Plan was developed for Turee Pond over the winter to guide management efforts
- Spring herbicide treatment using Navigate- June 2nd
 - 2,4-D ester formulation
 - Granular
- Follow-up diving for any regrowth or new growth
 - DES divers for now, contract divers likely in the future


Turee Pond Bow



Legend

-  Turee Pond Phrag
-  Turee Pond 2016 Treatment Area- 30.05 ACRES

0 0.06 0.12 Miles



Boat Launch

NAIP, GRANIT

Additional Actions



- **Weed Watcher training**
 - To increase volunteer survey efforts
- **Lake Hosting**
 - To prevent new infestations of other things, and keep your milfoil out of other lakes

Coming Years



- Management is not a “one and done”
- Continued monitoring, management as needed, and prevention of future infestations
- Grant funds will be available, but only up to a 50% match level, some years less than 50%, so a local funding source will be needed
- DES will work with lake residents and town
 - Five year plan part of LTMP

Year	Action	Responsible Party	Schedule
2015	Variable milfoil growth verified in Turee Pond	DES	June 2015
	Survey and planning for summer/fall milfoil control actions	DES	May/June
2016	Herbicide treatment of areas outlined in 2016 Proposed Control Activities Map in Figure 1	SOLitude Lake Management	June
	Survey and planning for summer/fall milfoil control actions	DES	May/June
	Diver/DASH work as needed and recommended (areas to be determined based on need)	DES	June-September as needed
	Work with town and shoreline owners to form an invasive species group in the town	DES/local entities	Summer/Fall s
	Survey and planning for next season's control actions	DES	September

2017	Weed Watcher training	DES/local entities	May/June
	Herbicide treatment of areas outlined in 2016 Proposed Control Activities Map in Figure 1	SOLitude Lake Management	June
	Survey and planning for summer/fall milfoil control actions	DES	May/June
	Diver/DASH work as needed and recommended (areas to be determined based on need)	Contract Divers	June-September as needed
	Survey and planning for next season's control actions	DES	September
2018	Weed Watching and marking/reporting of milfoil growth	Local Weed Watchers	Once a month from May through September
	Survey and planning for summer/fall milfoil control actions	DES	May/June
	Diver/DASH work as needed and recommended (areas to be determined based on need)	Contract Divers	June-September as needed
	Survey and planning for next season's control actions	DES	September

2019	Weed Watching and marking/reporting of milfoil growth	Local Weed Watchers	Once a month from May through September
	Survey and planning for summer/fall milfoil control actions	DES	May/June
	Diver/DASH work as needed and recommended (areas to be determined based on need and updated survey)	Contract Diver	June-September as needed
	Survey and planning for next season's control actions	DES	September
2020	Update and revise Long-Term Variable Milfoil Control Plan	DES and Interested Parties	Fall/ Winter

Thank you!
Questions/Discussion

