# The Spread of Connecticut River Hydrilla Continues: Interstate Movement Likely

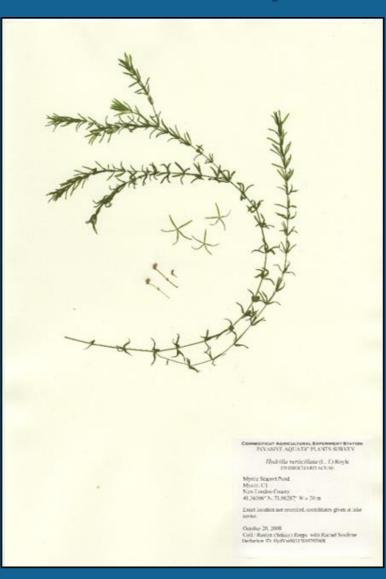
Gregory J. Bugbee
Office of Aquatic Invasive Species
Connecticut Agricultural Experiment Station



### **Monoecious Hydrilla**

- Whorls of 5
- Less robust
- Tubers
- Less turions





### **CT River Hydrilla**

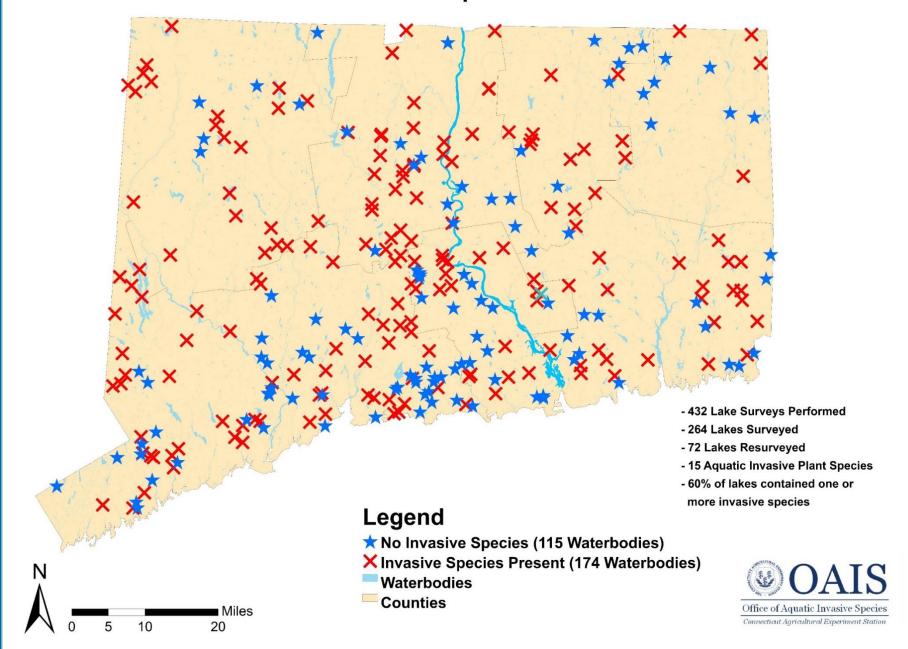


- Whorls ≥ 5
- Very robust
- No tubers
- Abundantturions

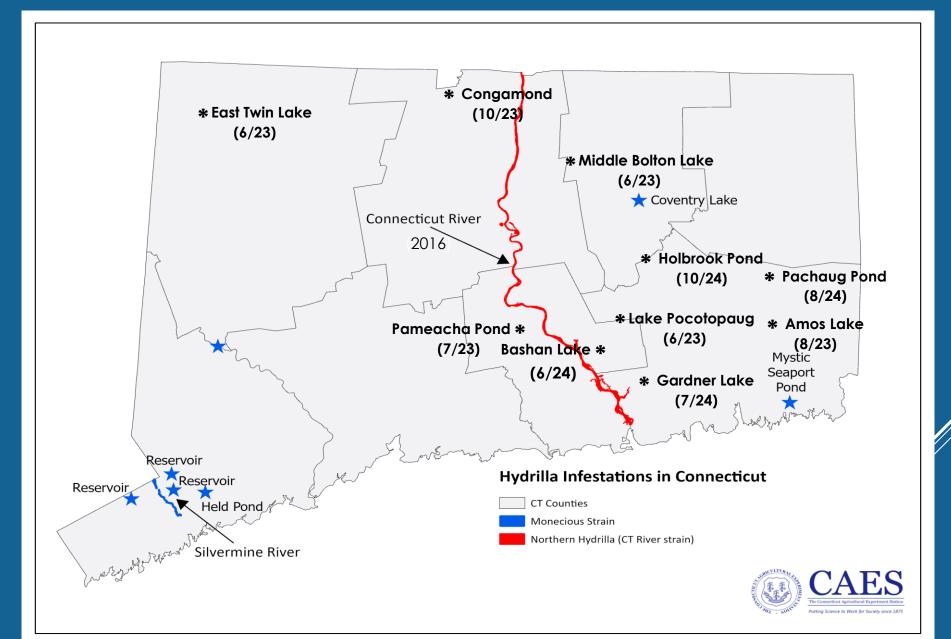




### **Locations of Invasive Aquatic Plants 2004-2024**

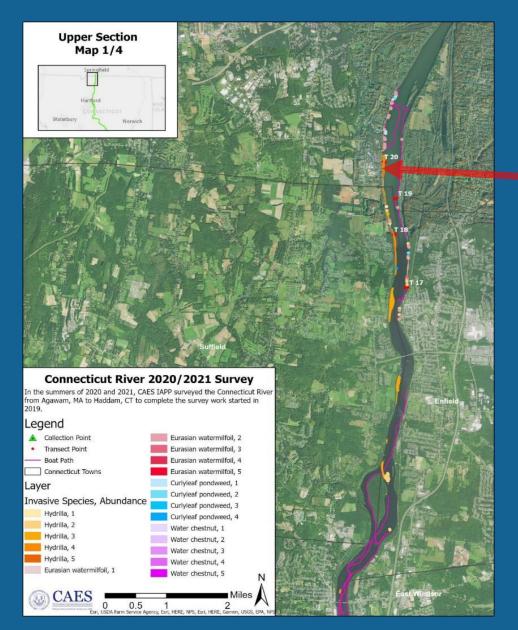


### CT Hydrilla Detection Timeline





### CT RIVER HYDRILLA HAS NOT MOVED NORTH

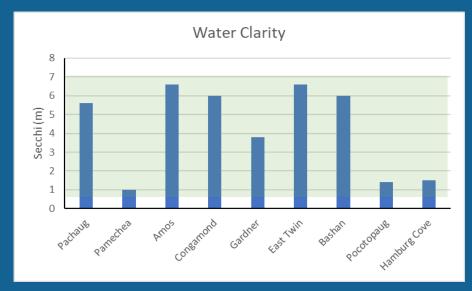


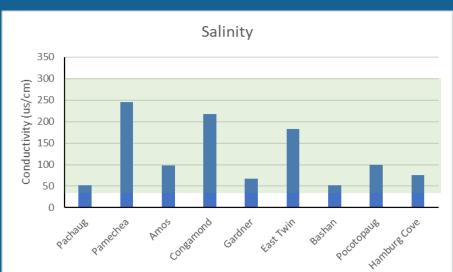


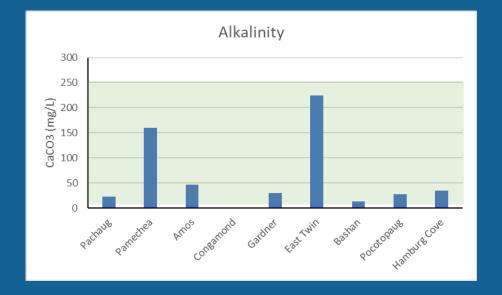


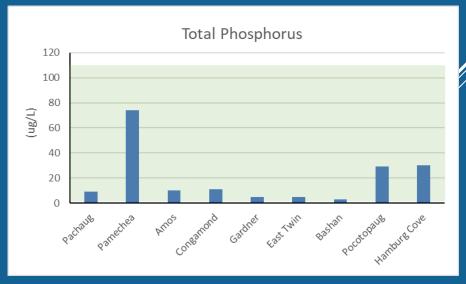
### Hydrilla Infestations are Not Affected by Water Chemistry

(Green shading = CT Range)





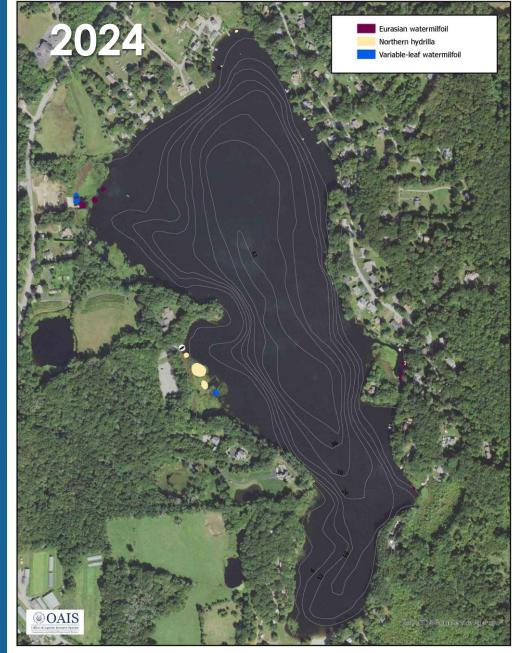






## **Amos Lake**





# MOVEMENT BY WATERCRAFT



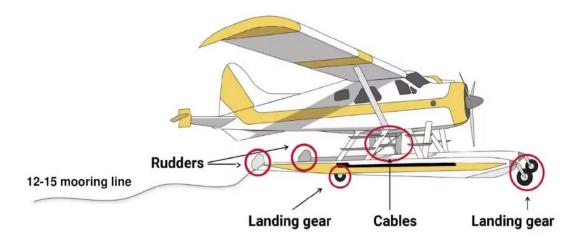




# SEAPLANES



### SEAPLANES AS A PATHWAY FOR AIS SPREAD

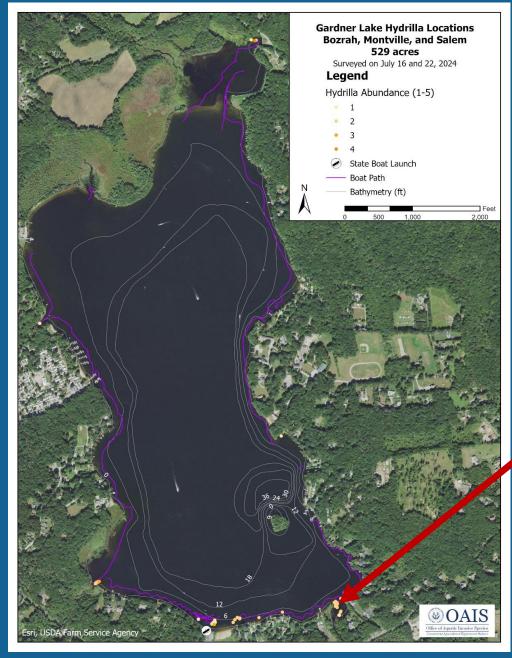


- Construction factors: floats
- Operation factors: taxi, moorage, landing, takeoff
- Survivability of AIS under various conditions













### **Winter Drawdown**

- Plants must desiccate or freeze
- Sufficient drawdown level
- Nontarget damage
- May not work under best case scenarios





# "First, Do No Harm"

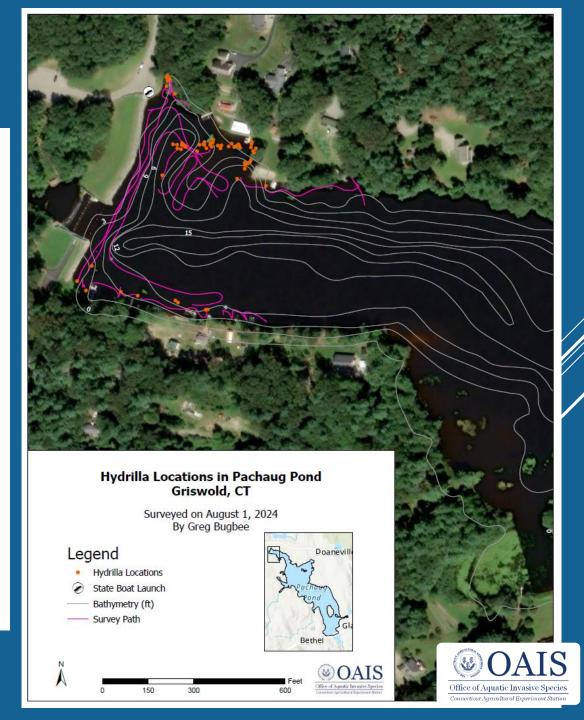




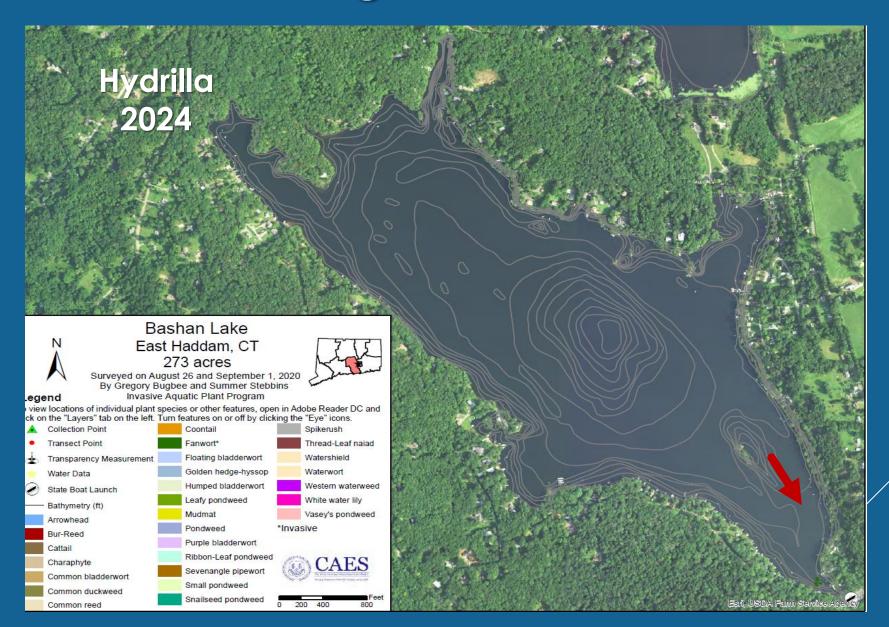
# Ultralow Grass Carp Stocking Leveraging Feeding Preference

#### Table 1. Crass Carp Feeding Preference

Order of Preference	Common Name	Scientific Name
1	Hydrilla	Hydrilla verticillata (L.f.) Royle
2	Muskgrass	Chara spp.
3	Southern Waternymph; Southern Naiad	Najas guadalupensis (Spreng.) Magnus
4	Brazilian Waterweed; Brazilian Egeria; Brazilian Elodea	Egeria densa Planch.
5	Watermeal	Wolffia spp.
6	Duckweed	Lemna spp.; Spirodela spp.; Landoltia spp.
7	Azolla; Waterfern; Mosquitofern	Azolla spp.
8	Pondweeds	Potamogeton spp.; Stuckenia pectinata (L.) Börner; Zannichellia palustris L.
9	Coontail	Ceratophyllum demersum L.
10	Torpedograss	Panicum repens L.
11	Cattail	Typha spp.
12	Crab's-claw; Wateraloe	Stratiotes aloides L
13	Watercress	Nasturtium spp.
14	Eurasian Watermilfoil	Myriophyllum spicatum L.
15	Tapegrass; American Eelgrass	Vallisneria americana Michx.
16	Parrotfeather	Myriophyllum aquaticum (Vell.) Verdc.
17	Waterhyacinth	Eichhornia crassipes (Mart.) Solms
18	Waterlettuce	Pistia stratiotes L.
19	Waterlily	Nymphaea spp.
20	Spatterdock	Nuphar lutea ssp. advena (Ait.) Kartesz & Gandhi

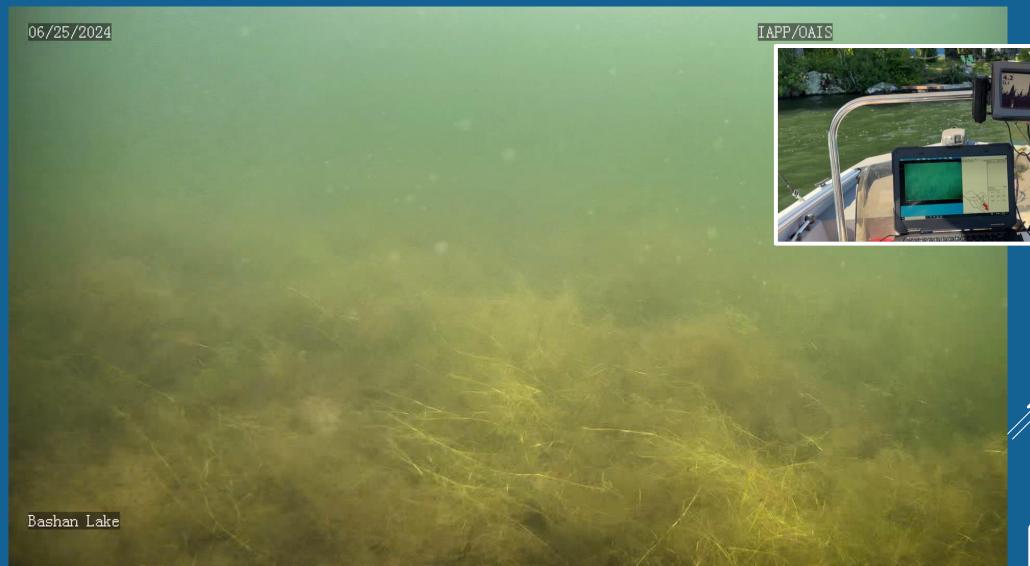


### Hand Pulling Pioneer infestation





### Bashan Lake, East Haddam





### Bashan Lake, East Haddam







### Bashan Lake, East Haddam



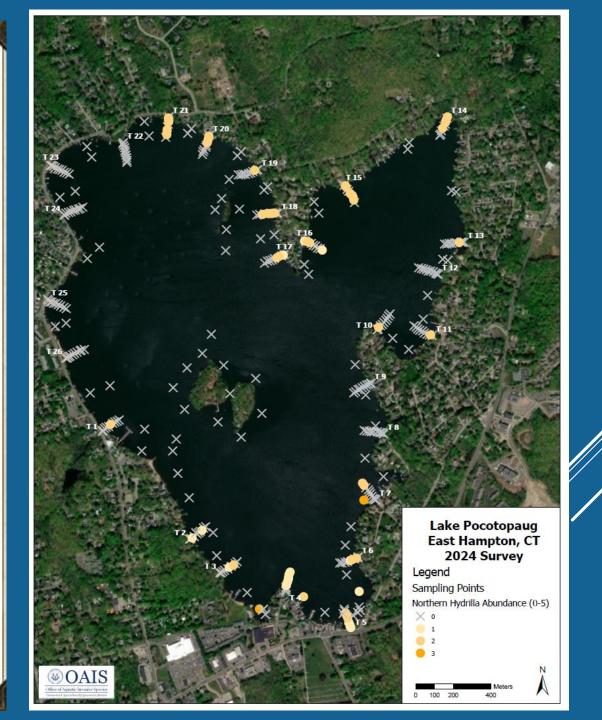
### "TAKE A RAKE TO THE LAKE"

Hydrilla Raking Contest! Sunday, September 22<sup>nd</sup>

### **RULES:**

- Harvesting of Hydrilla can begin at sunrise on Sept. 22nd and must come from Lake Pocotopaug.
- 2) Collected Hydrilla must be in trash bags no larger than 45 gallon size or a container approx. 19Lx14Wx14H for weighing purposes on a scale. Harvested Hydrilla not in proper bags or containers will not be accepted.
- 3) Weigh-in will occur between the hours of 12pm-4pm on Sunday Sept.22, 2024 at Sears Park. Only one delivery to the weigh station of collected Hydrilla is allowed.
- 4) Judges will collect names, addresses and record weights. All decisions by Judges are final.
- 5) Three prizes will be awarded of 1st place \$500, 2nd place \$300 and third place \$200. Prize winners will be announced at 4:15pm on the 22nd, unless other arrangements are made. In the event of a tie weight, prizes will be awarded to the first recorded person/group. Prize checks will be mailed to the winners within (5) days.
- 6) The Conservation Lake Commission and Friends of the Lake reserve the right to publish names and pictures of the prize winners

For more information email <a href="mailto:ryenkner3@comcast.net">ryenkner3@comcast.net</a> or call Rob Yenkner 860-638-9874















Total = 2770 lbs.

Highest = 703 lbs.

Lowest < 10lbs.

"EVERYONE THAT TOOK PART AGREED THAT IT WAS WONDERFUL EXERCISE"



### **Wethersfield Cove**

Treated with Diquat - 2022, 2023, 2024\*





### **Benthic Barriers**







### Acknowledgments





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Peter Aarrestad – CT DEEP

Rhea Drozdenko – Connecticut River Conservancy

**Tyler Carlson** – Innovative Mosquito Management





















# QUESTIONS?

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