Twin Lakes Association

TLA Memberhip Meeting

June 13, 2026

June 13 Membership Meeting Agenda

• Welcome	Grant	05 minutes
• Lake Management Updates	Russ	10 minutes
• Lake Health Initiatives	Jackie	10 minutes
• Budget and Finances:	Grant	10 minutes
• Endowment Introduction	Bill	10minutes
• Lake Patrols	Off. Begley	10minutes
• Aquatic Invasive Plant Id	Madeline	20 minutes
• Dates to Remember	Numerous	10 minutes
• Directories/wrap up	Grant	05 minutes

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West Twin Tape Grass Control Initiative

To address the growing impact of *Vallisneris americana* (Tape Grass) in the WT rowing/boating lane, the following is being implemented for the 2026 season:

- The TLA will continue to direct all treatment activities on West Twin and utilize the town harvester in August/September for biomass collection
- In addition, the TLA has partnered with The Salisbury School(TSS) and the following work streams are underway
  - A new harvester arrived at TSS and operator training occurred this week
  - The TLA has budgeted $25K for the 2026 season to cover TSS costs for West Twin harvesting *Vallisneris* in July prior to it setting seed. Costs for the town biomass removal at the end of the season are separate and budgeted
  - Expenses will be tracked and the TLA will reimburse TSS for actuals
  - No homeowner-specific projects will be undertaken

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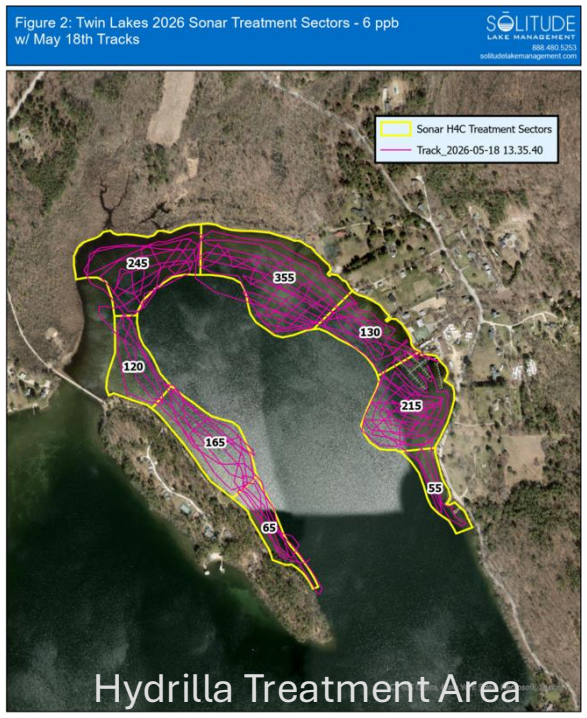
2026 Invasive Plant Management

18 May treated



18 May initial treatment
8 June 1st booster
29 June 2nd booster
20 July 3rd booster

The year on a chart

- *April: Initiated WQ sampling scheduled Monthly thru November*
  Initiate survey for invasives curly leaf pondweed
- *May: Spot-treated curly leaf pondweed in "boating lane" on West Twin/Middle*
  - *Initiate SONAR treatment of hydrilla in East Twin east bay*
- *June : Whole Lake comprehensive plant survey #1*
  Hydrilla Booster treatments #1& #2 in East Twin east bay
  Treat Eurasian milfoil as required
- July: Whole Lake species survey/hydrilla search #2 by boat and scuba
  Hydrilla Booster treatment #3 in East Twin east bay
- August:
  Whole Lake species survey #3 including snorkeling
  Diver search of all East Twin for hydrilla escapes
- September: survey Sonar treatment area assess hydrilla, native, protected species
- October: Whole lake survey #4 document hydrilla regrowth and late season natives

Green = Complete
Blue – Underway

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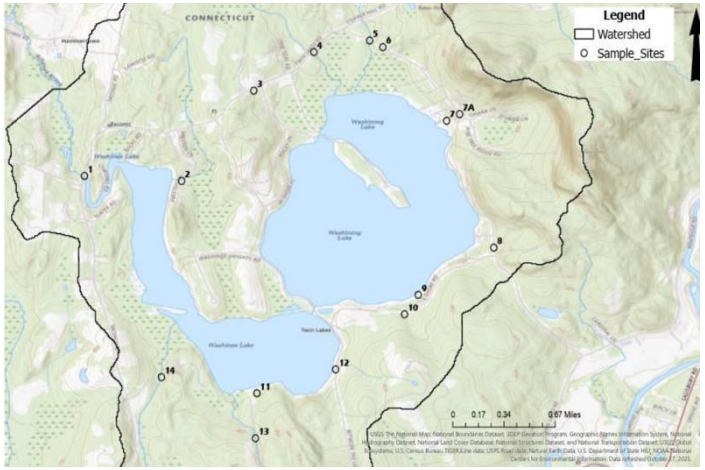
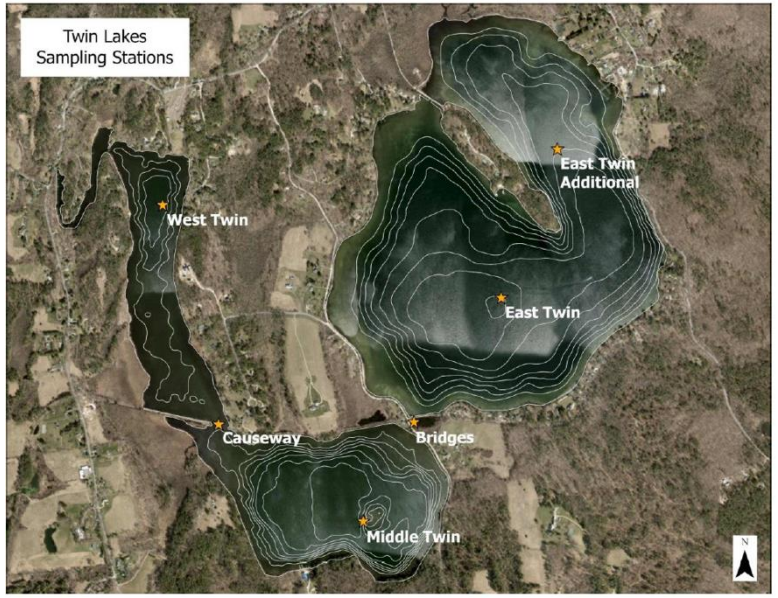
Water Quality –*Beyond Invasives…*

While water clarity is excellent, ongoing studies show signs of stress building in the lakes



- **Twin Lakes Watershed Study (HVA)**
  - Multi year testing of inflows to the lake from 12 unnamed streams (8-10 wet and dry sampling events per season)
  - 2025 data show:
    - Stormwater-driven pollutant inflows
    - Nutrient and bacteria concerns in some tributaries
    - Riparian and localized stream stability issues
    - Risks associated with aging, undersized or poorly maintained septic systems



- **Monthly Water Quality Testing (NEAR)**
- Multiple parameter in-lake collections monthly
- Expanding data collection locations in 2026
- Multiple years of data indicate :
  - Lake system is accumulating nutrients, mainly phosphorus
  - Late season oxygen depletion at depth

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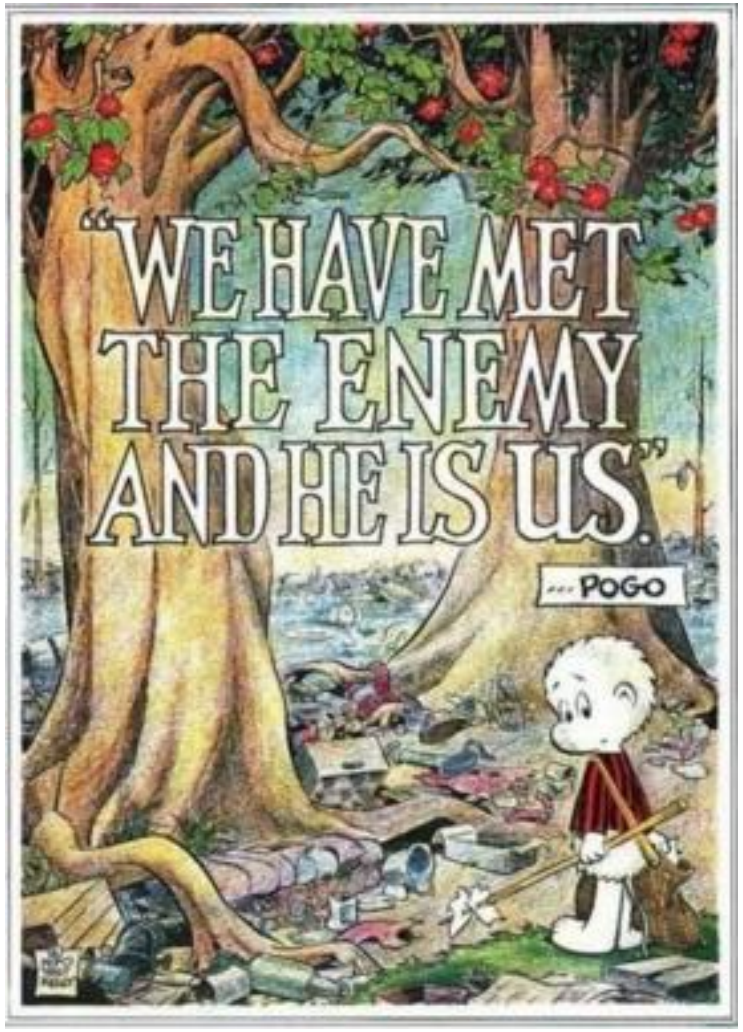
So, where are we at?



Here are the facts….

- No one factor can fix accumulating nutrients
- Climate factors are outside the watershed and our control
- But many smaller knobs are available within the watershed to landowners
- Only collective action will slow these processes

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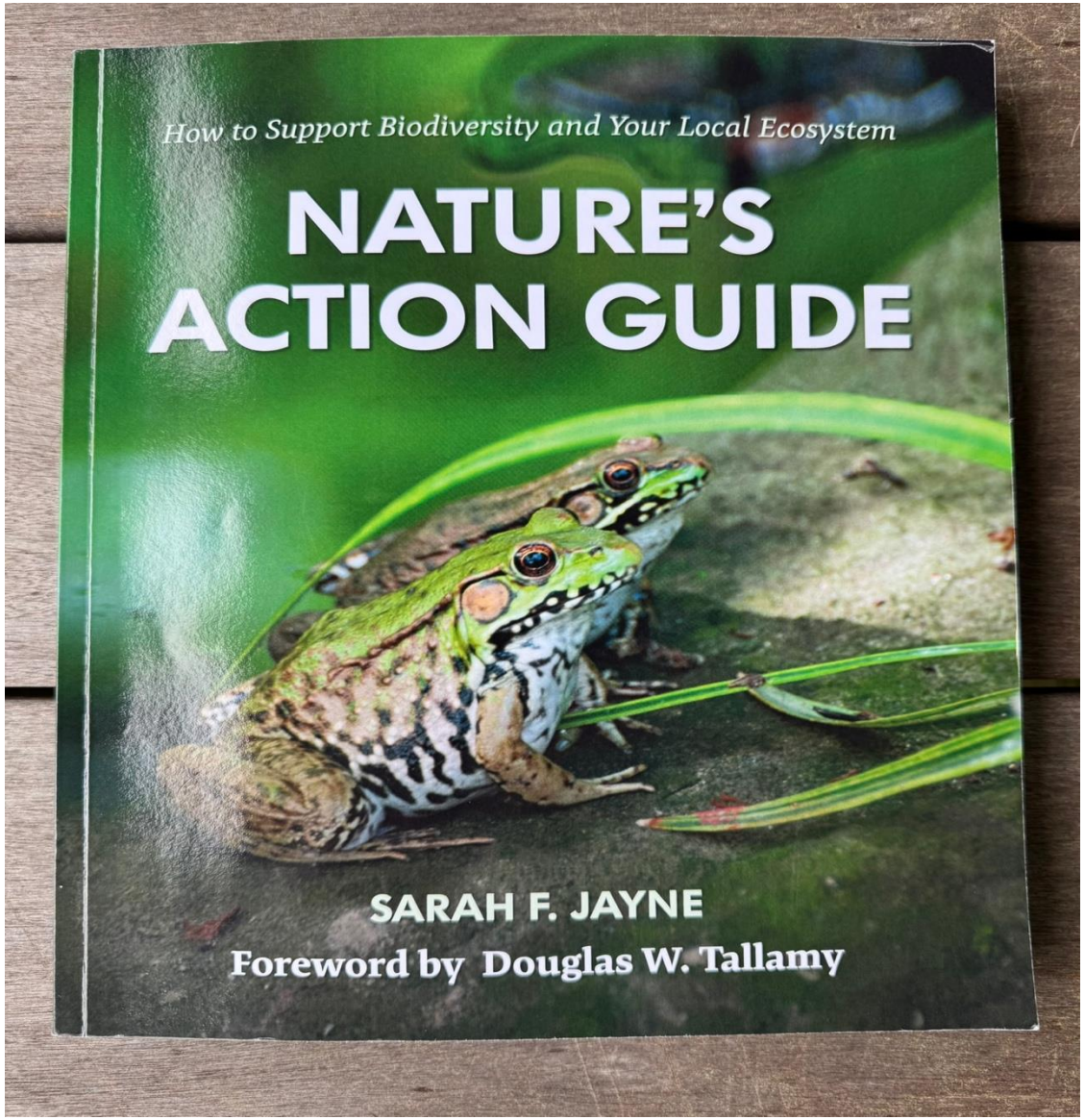
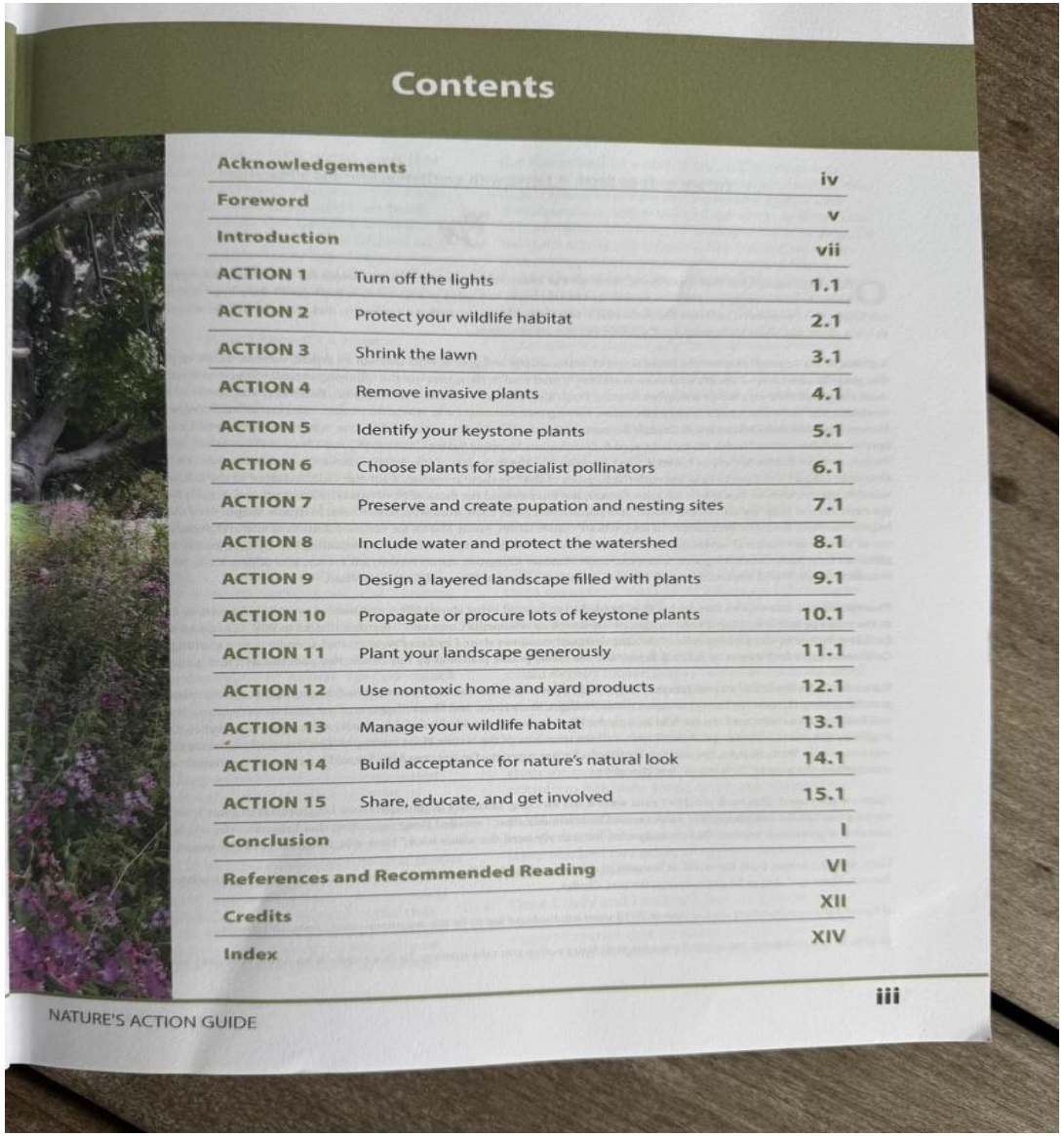
Lake Health Initiatives: Nature's Action Guide





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Lake Health Initiatives

- **The TLA recommends the following as a start…**

  - **Turn off the Lights**: Many animals and insects depend upon the dark nights to thrive. Lights can be harmful to these species and interrupt the natural daily rituals of life.
  - **Remove invasives and Expand Natural Shoreline Vegetative Buffers**: Invasive plants negatively impact the natural environment. Removing and replacing invasive species with native cultivars is important for enhancing animal habitat while filtering harmful pollutants. Eliminating manicured lawns to the water's edge and returning a sizeable portion of lake front to a more natural state is critical for lake health.
  - **Pump Your Septic**: Well-maintained, functioning septic systems are fundamental to maintaining water quality. Septic systems should be **pumped at least every other year** by a qualified contractor
  - ***Using Nature's Action Guide as a resource, determine what you are going to do to help protect Twin Lakes!***

Collective action is essential

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Projected 2026 TLA Budget is Similar to 2025

Estimated TLA Budget for 2026

- TLA Projected Expenses
  - Solitude: $ 200,000
  - NEAR: $ 150,000
  - Admin/Other: $ 20,000
  - Monitors: $ 30,000*
  - Watershed Study: $ 50,000**
  - WT Harvesting: $ 25,000***
  - Biomass Removal: $ 25,000***
  - **Total: $ 500,000**
- Projected Income:
  - Dues & Donations: $ 325,000
  - Town of Salisbury: $ 75,000
  - Grants: $ 100,000
  - **Total: $ 500,000**

*Paid from town budget TL allocation
**1/2 paid from Bates Grant
***Paid from WT Earmarked Account

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The TLA is in a strong financial position for 2026

- YTD May 2026, the TLA has received $49,424 in donations and $97,231 in grants/other income for a total income of $146,656.
- Total Expenses YTD May are $97,433 of which 98% are for lake management expenses
- Bank balances as of May 31, 2026 total $723,327, as shown below:

Checking/MM:	$ 271,955
Earmarked:	$ 113,685*
CD's:	$ 337,687

*West Twin Harvesting and Biomass Removal ($95,675) Legal ($3,891) Bates ($13,850)

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Grant programs have been incredibly helpful to the TLA!

Grant Status Update

- **Since 2023, the TLA has been awarded $311,000 in grant funding!**
  - In March 2026, the TLA was awarded another CT DEEP AIS grant for $75,000!!!
    - The contract is signed and expenses will be submitted quarterly
  - A new Federal (USACE) funded grant program will be launched this fall. CT grants will be managed through CAES. The TLA intends to apply for funding through this new source for 2027
  - The TLA will continue to apply for grants through other sources like the Bates Foundation

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TLA Fundraising

- Thanks to the generous response of TLA members, a robust grant process and support from the Town of Salisbury, the TLA has been able to raise over **$1 million** to fight hydrilla in the last three years. This is nothing short of amazing
- However, the TLA spends what it raises each year to fund its initiatives
- In 2025, the TLA had 242 donors, the median donation was $100 and the average $1318. Please reflect upon what it costs to protect our lake system when considering your donation!

Please give what you can. Thank you!

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A look to the future…a TLA Endowment Fund

- It is time to look to the future to put the TLA on a more sustainable financial footing:
  - We propose establishing an endowment that will be managed via an investment committee composed of select board members and qualified TLA members at large
  - An Investment Policy Statement is being developed with the assistance of outside legal counsel
  - **This is a long-term initiative, and the focus going forward will be on planned giving to the TLA, which will be discussed in greater detail at the August Annual Meeting**

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Over time, what could this mean to the TLA?

- Let’s look at the income generated from a $1 million fund beginning in 2016 through the present
  - We modeled a fund invested in the Vanguard Wellington Fund, one of the oldest balanced mutual funds in the United States
    - Approximately 65% equities / 35% fixed income
    - Focus on long-term growth and income
    - Common benchmark for retirement and endowment-style portfolios

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Here is what could have happened based upon actual returns

- Initial investment: $1,000,000
- Ending value (no withdrawals): $2,229,609
- Ending value (5% withdrawals): $1,405,210
- Total withdrawals received (5%): $584,952
- Principal was preserved over the analysis period despite annual distributions.

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And on an Inflation-Adjusted basis…

- Assuming average inflation of 2.5% annually:

- Nominal ending value (5% withdrawals): $1,405,210
- Inflation-adjusted ending value: $1,125,191
- The portfolio generated significant cash distributions while maintaining substantial purchasing power.

The fact is, the cost of managing Twin Lakes will remain elevated past the hydrilla threat. We need a more sustainable financial model to continue to do the important work needed to protect the lakes. An endowment is part of a multifaceted fund-raising plan.

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Lake Patrols

- Trooper Begley and Dan Janco

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Madeline Watts, Research Technician I, CAES

Maddie Watts grew up on the shores of Lake Erie in Pennsylvania and graduated from Lehigh University in 2024 with a B.A. in Earth and Environmental Sciences and Environmental Studies. She joined the Connecticut Agricultural Experiment Station's Office of Aquatic Invasive Species, where she has spent the past two years as a Research Technician focused on *Hydrilla verticillata* biology and phenology, including growth studies, turion dynamics, treatment timing, and herbicide effects on native plant communities.

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Office of Aquatic Invasive Species

Aquatic Plant ID

Madeline Watts

Office of Aquatic Invasive Species
Department of Environmental Science & Forestry
Connecticut Agricultural Experiment Station

CAES
The Connecticut Agricultural Experiment Station
Putting Science to Work for Society since 1875

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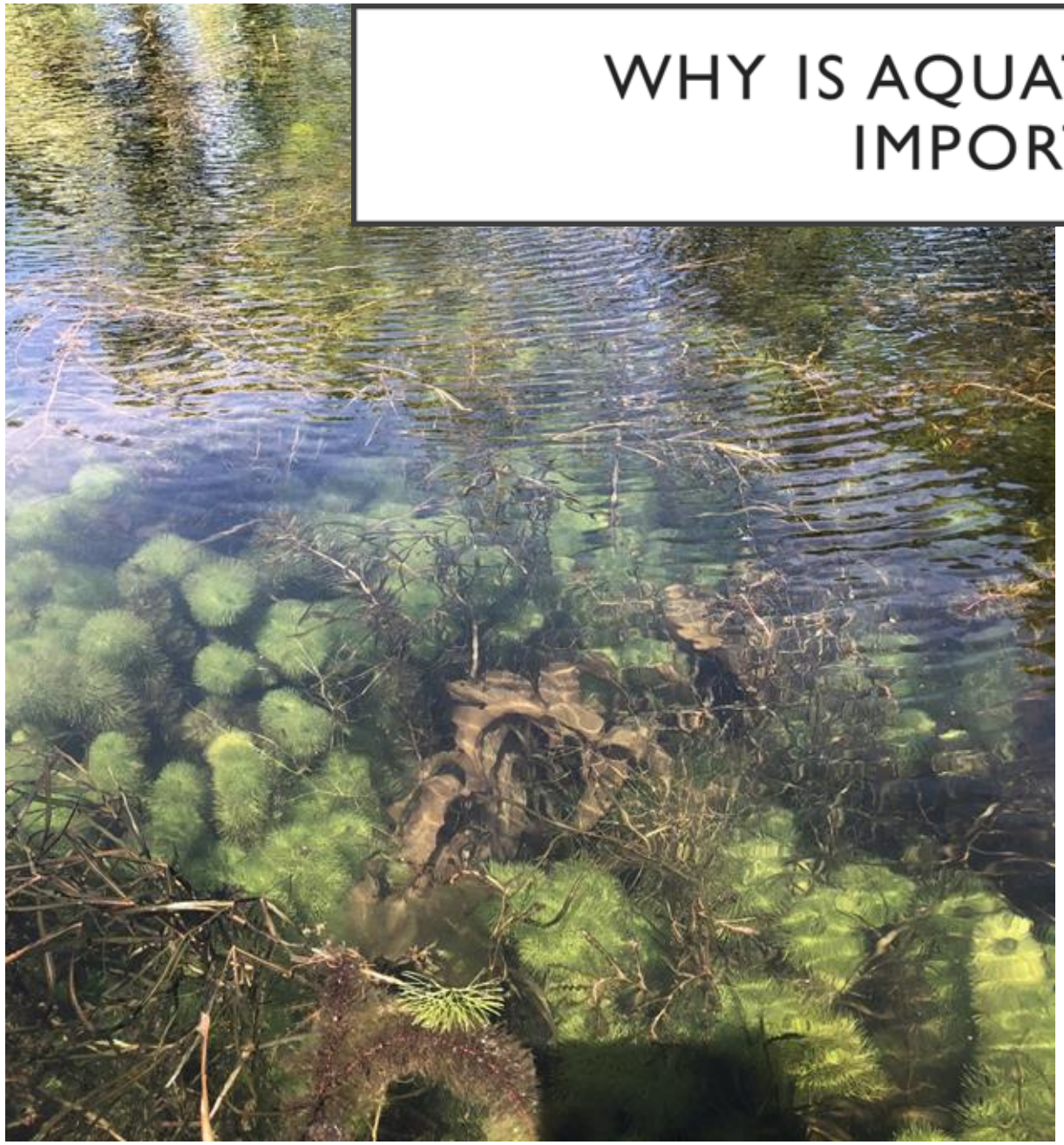
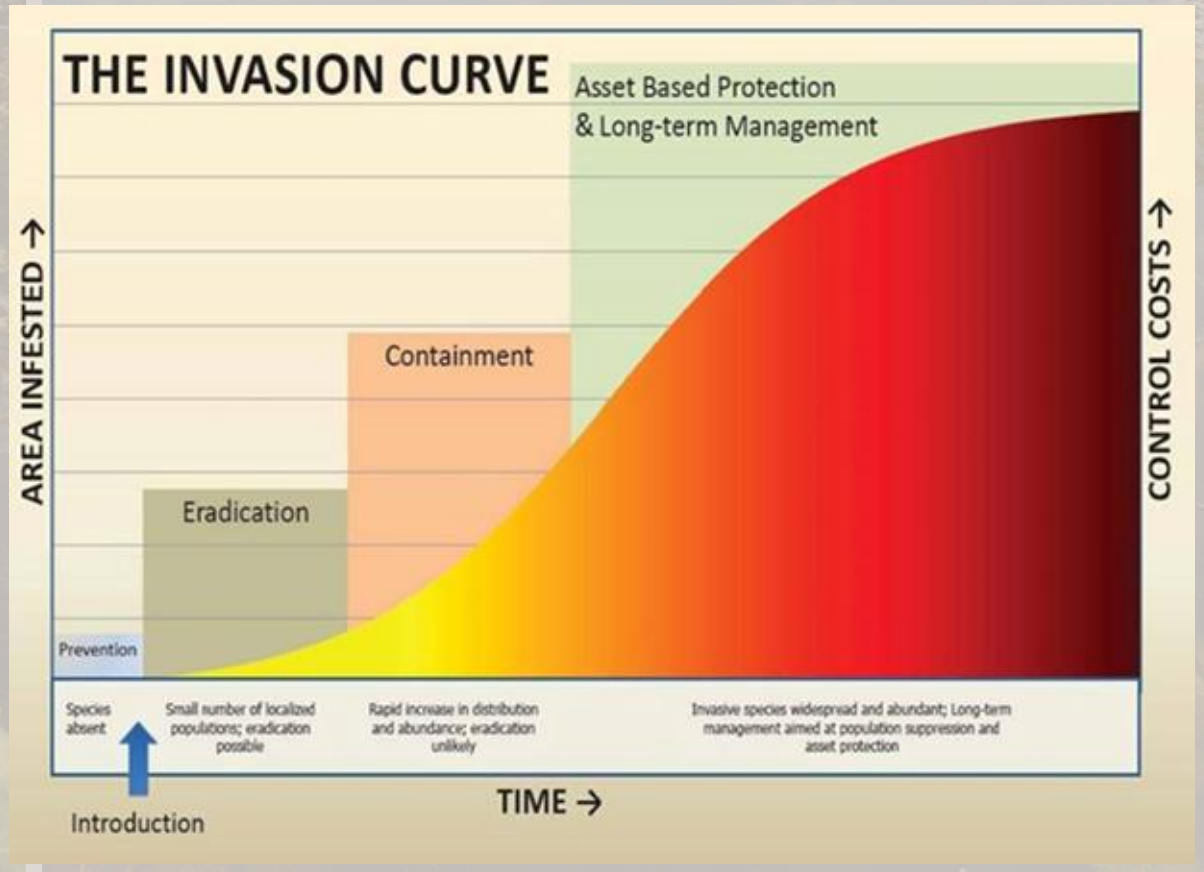
WHY IS AQUATIC PLANT ID IMPORTANT?



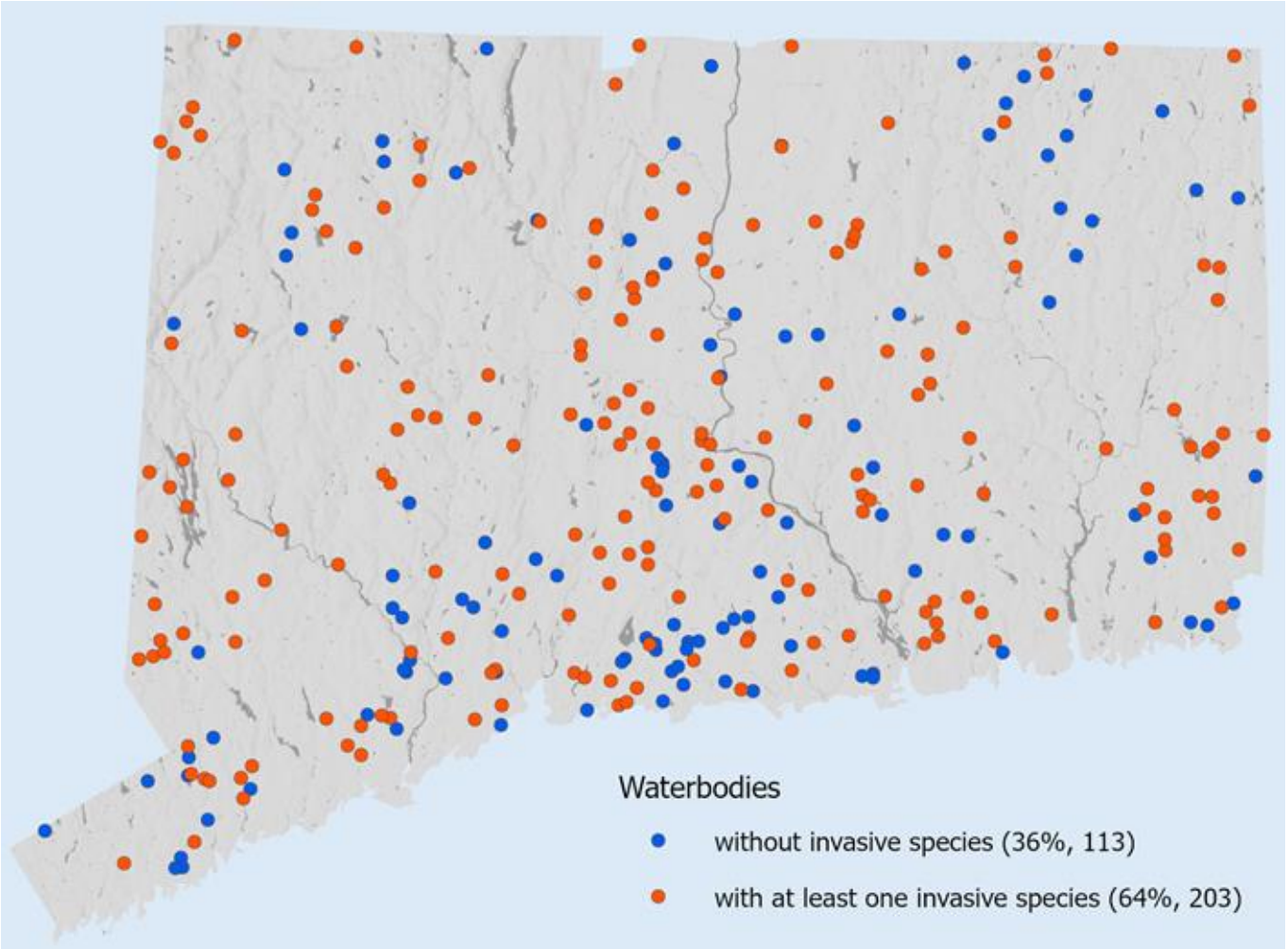
WHY IS AQUATIC PLANT ID IMPORTANT?

The quicker we identify an invasion, the easier and cheaper it is to manage.



State of the State

- Approximately 60% of CT waterbodies have at least one invasive species
  - 33% in MA
  - 12% in VT
  - 1% in ME



INVASIVE

Curlyleaf pondweed
Potamogeton crispus
48 Waterbodies

Fanwort
Cabomba caroliniana
42 Waterbodies

Eurasian watermilfoil
Myriophyllum spicatum
75 Waterbodies

Variable-leaf watermilfoil
Myriophyllum heterophyllum
58 Waterbodies

Water chestnut
Trapa natans
36 Waterbodies

Minor naiad
Najas minor
54

Northern Hydrilla (CT River)
Hydrilla verticillata ssp. lithuanica
12

Wandering Hydrilla (Monoecious)
Hydrilla verticillata ssp. peregrina
9

Whorled Hydrilla (Dioecious)
Hydrilla verticillata ssp. verticillata
0

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Curlyleaf pondweed
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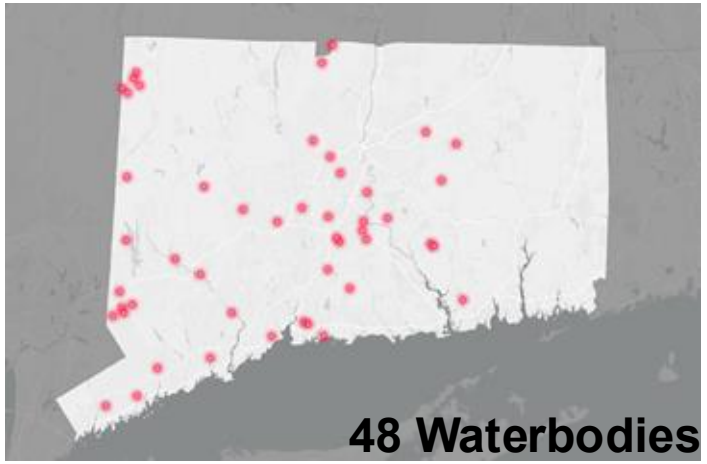
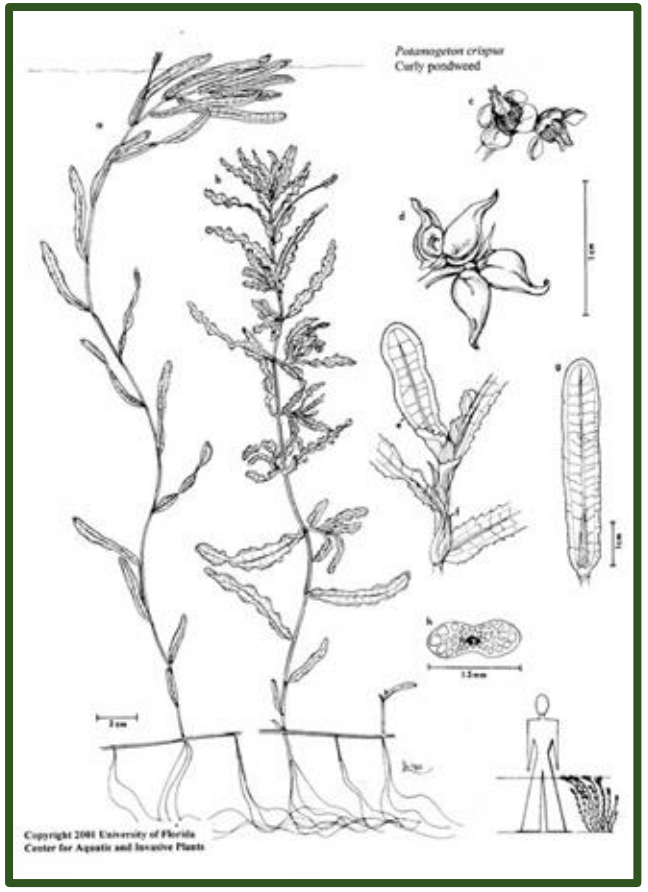


Key Info:

- Introduced to CT in 1943
- Annual, sprouts from turions
- Fully grown in May/June, dies back midsummer



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Curlyleaf pondweed
Potamogeton crispus

Key Features:

- Wavy, lasagna-like leaves
- Leaves alternate, no petioles
- Brown turions, like small pinecones

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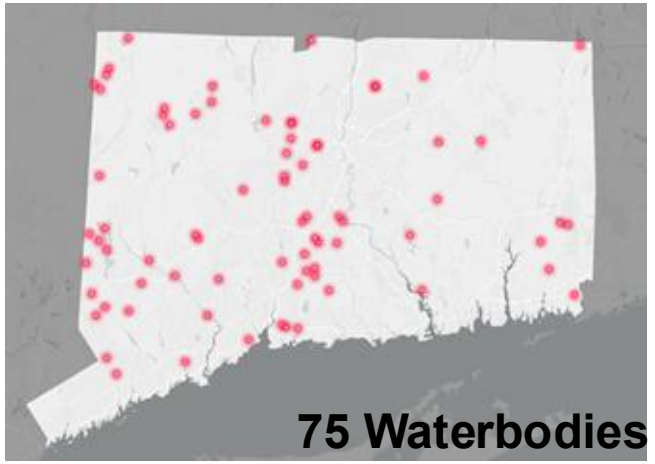
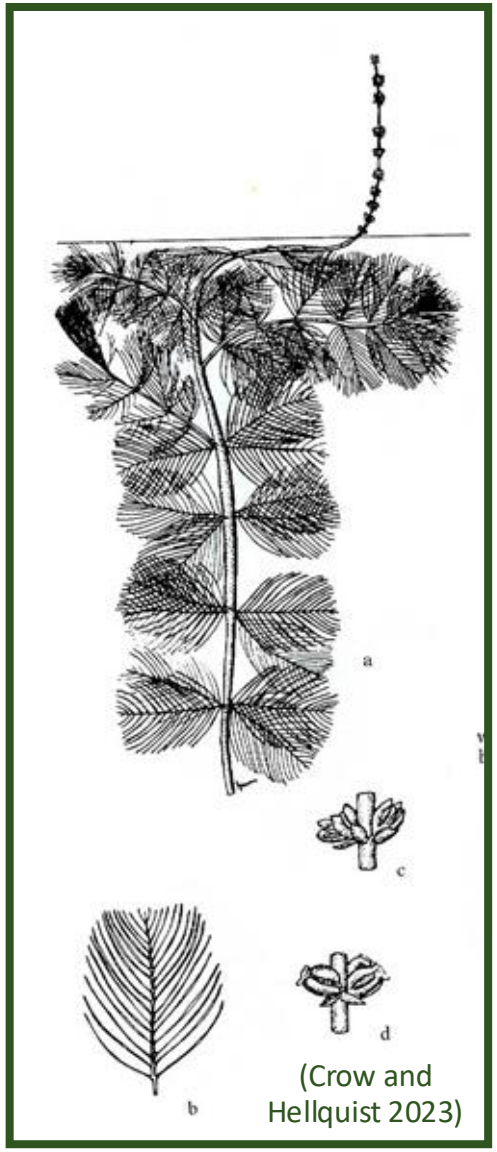
Eurasian watermilfoil
Myriophyllum spicatum



Key Info:

- Introduced to CT in 1979
- Most common invasive aquatic plant in CT and northern U.S.
- Spreads through fragmentation



(Crow and Hellquist 2023)

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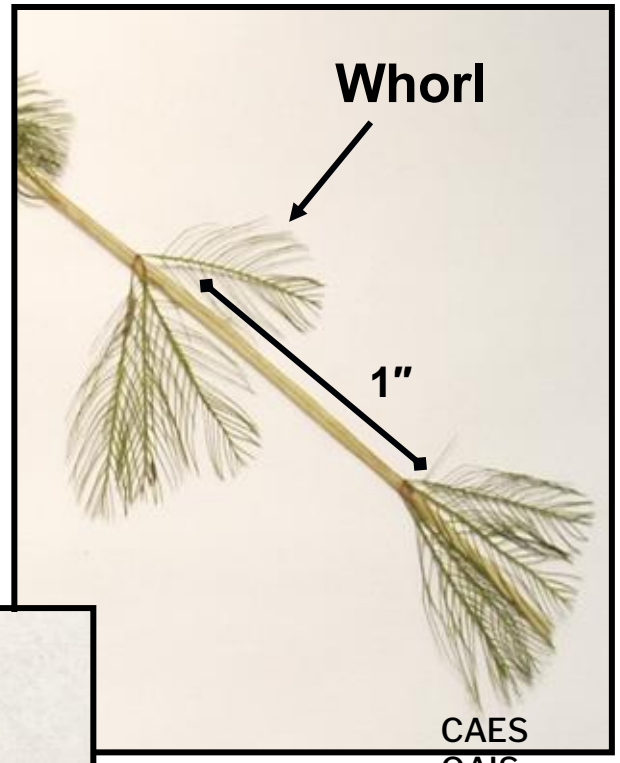
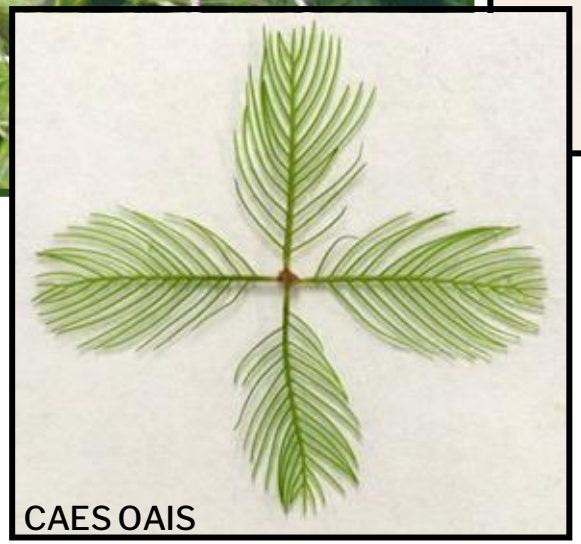
Eurasian watermilfoil
Myriophyllum spicatum





Key Features:

- Thin flower spike
- Rectangular leaf
- Leaves > 1 inch apart
- ≥ 12 leaflet pairs

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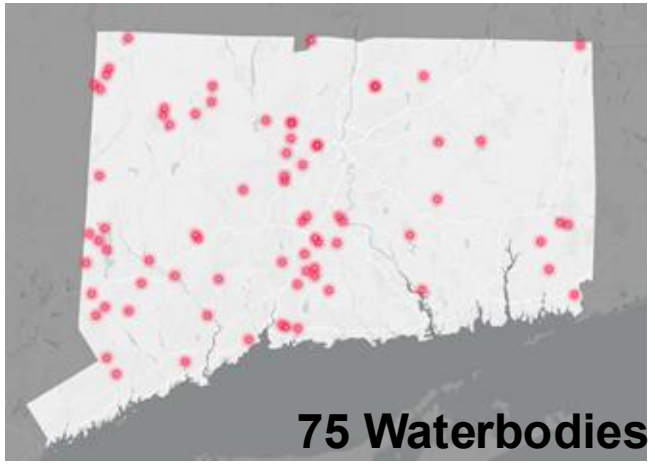
Eurasian watermilfoil
Myriophyllum spicatum



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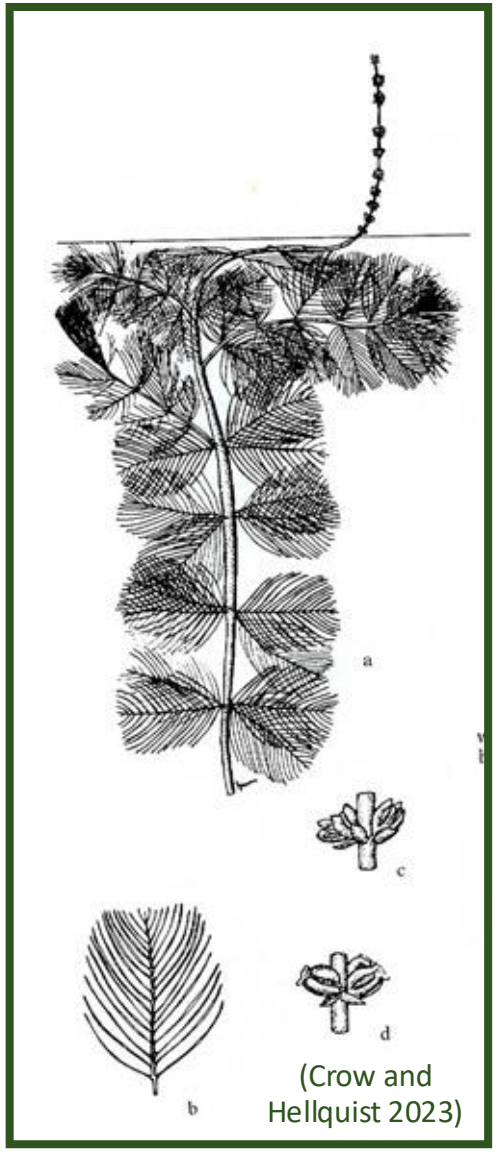

(Crow and Hellquist 2023)

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Eurasian watermilfoil

Myriophyllum spicatum

- Thin flower spike
- Rectangular leaf
- Leaves > 1 inch apart
- ≥ 12 leaflet pairs

Fewer leaves, more leaflets

Variable-leaf watermilfoil

Myriophyllum heterophyllum

- Thick flower spike
- Triangular leaf
- Leaves < 1 inch apart
- ≤ 11 leaflet pairs

More leaves, fewer leaflets

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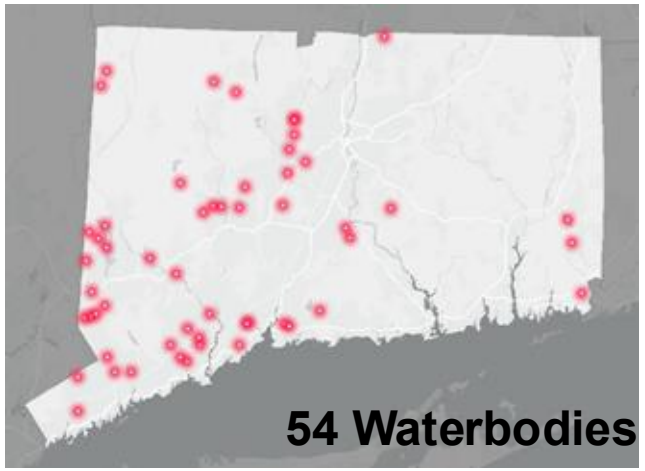
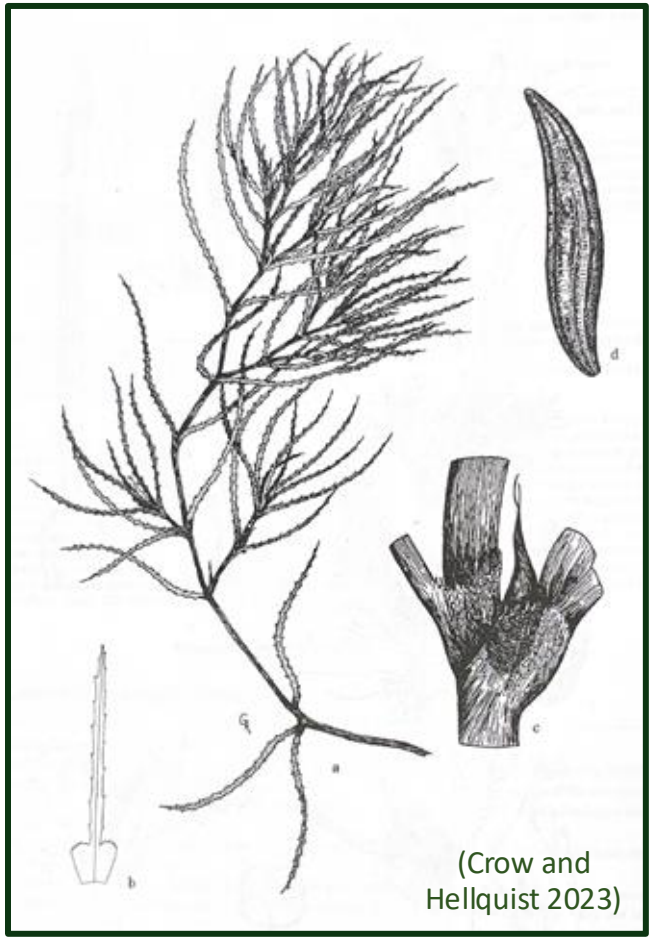
Minor naiad
Najas minor



Key Info:

- Introduced to CT in 1980s
- Does not create surface level mats
- Grows densely along the bottom
- Annual, reproduces via abundant seeds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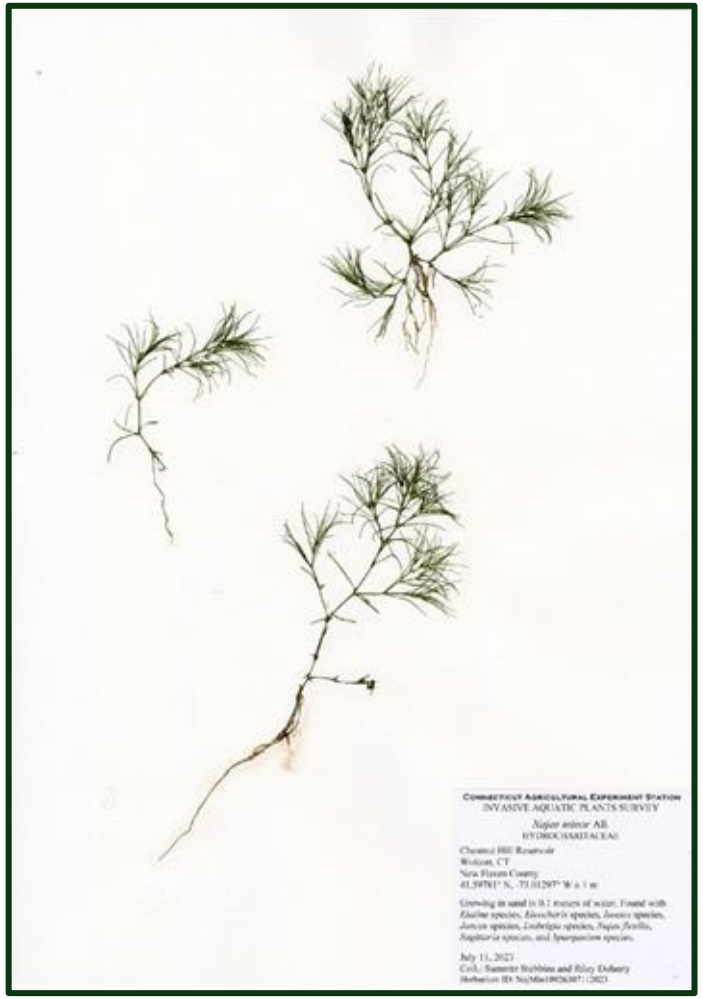
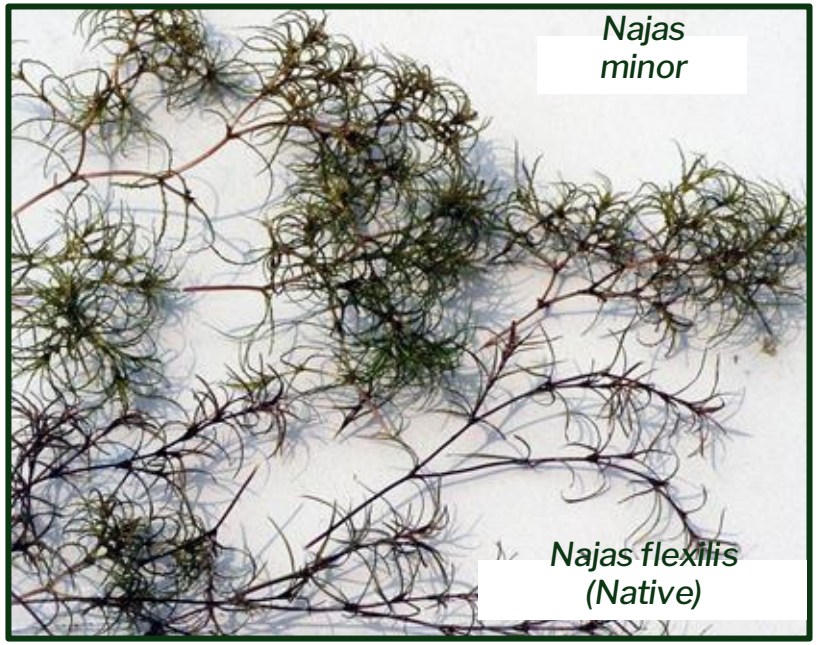


Key Features:

- Opposite leaves
- Small teeth visible to the naked eye



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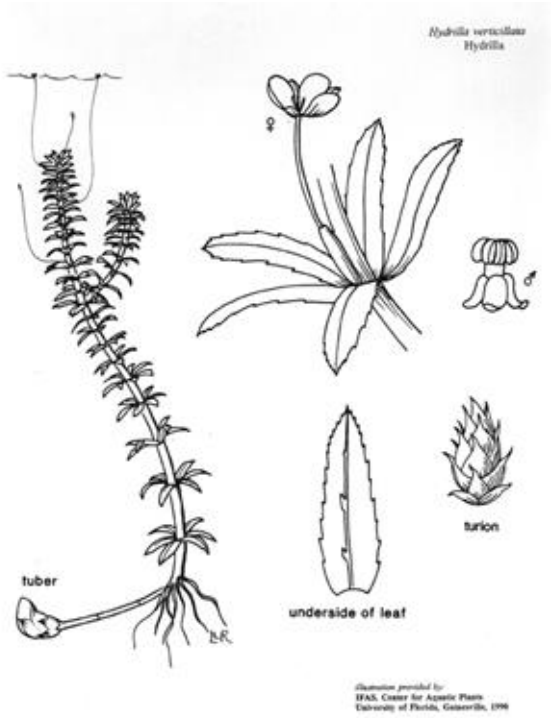
Hydrilla*
Hydrilla verticillata

*Three different subspecies

Key Info:

- Introduced to CT in 1989
- Spreads through turions, tubers, fragmentation
- Commonly confused with native waterweed



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Hydrilla
Hydrilla verticillata

Key Features:

- Whorls of ≥ 5 leaves
- Submersed plant
- May have turions or tubers

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The Three Subspecies

Monoecious
(Wandering)

9
waterbodies

H. v. ssp. *peregrina*

Dioecious
(Whorled)

0
waterbodies

H. v. ssp. *verticillata*

Connecticut River
(Northern)

12
waterbodies

H. v. ssp. *lithuanica*

e Subspecies

Monoeci
(Wanderi

ioecious
Whorled)

Connecticut River
(Northern)

H. v. ssp. *peregrina*

H. v. ssp. *verticillata*

H. v. ssp. *lithuanica*

Three Subspecies

Monoecious (Wandering)

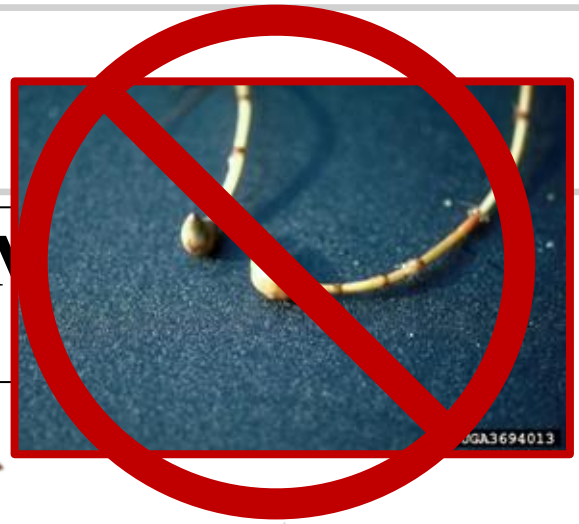
H. v. ssp. *peregrina*

Dioecious (Whorled)

H. v. ssp. *verticillata*

Connecticut River (Northern)

H. v. ssp. *lithuanica*



Connecticut River
(Northern)

H. v.* ssp. *peregrina

H. v.* ssp. *verticillata

H. v.* ssp. *lithuanica

Wandering Hydrilla
"Monoecious Hydrilla"

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

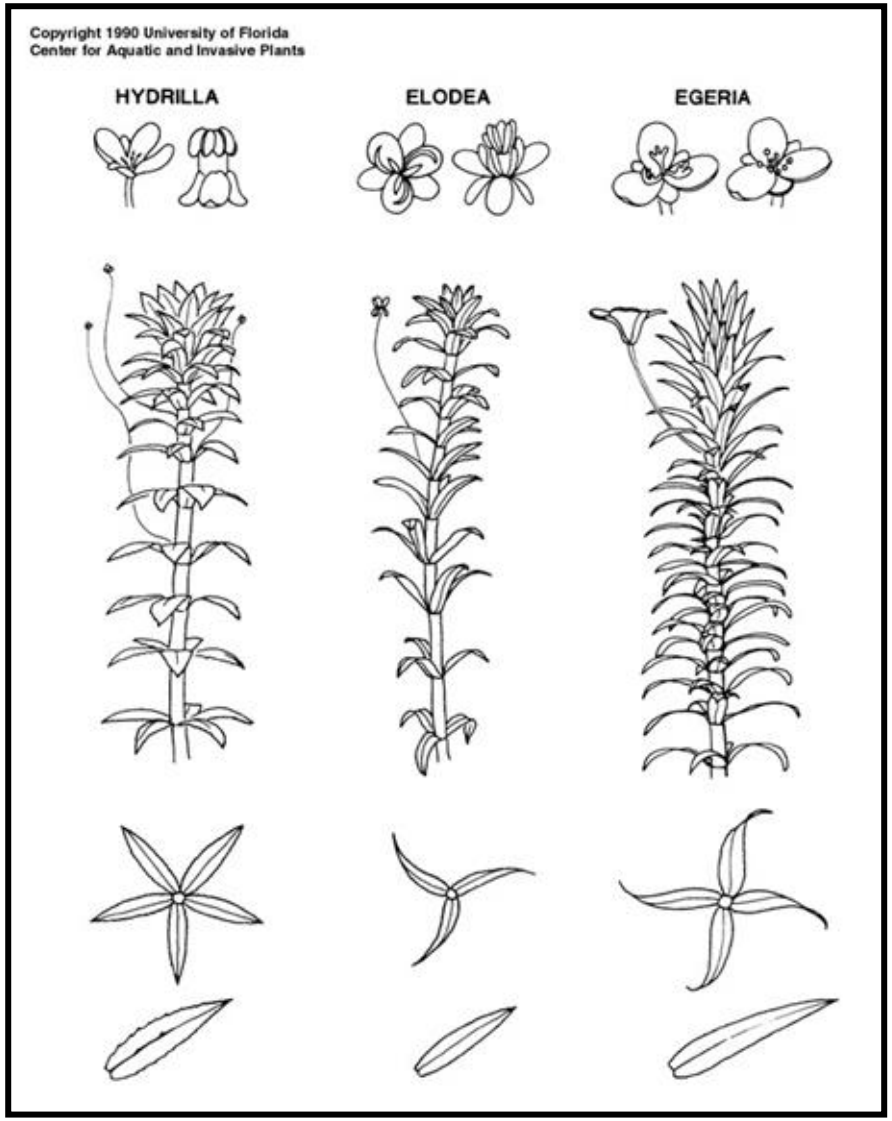
Hydrilla verticillata* ssp. *peregrina

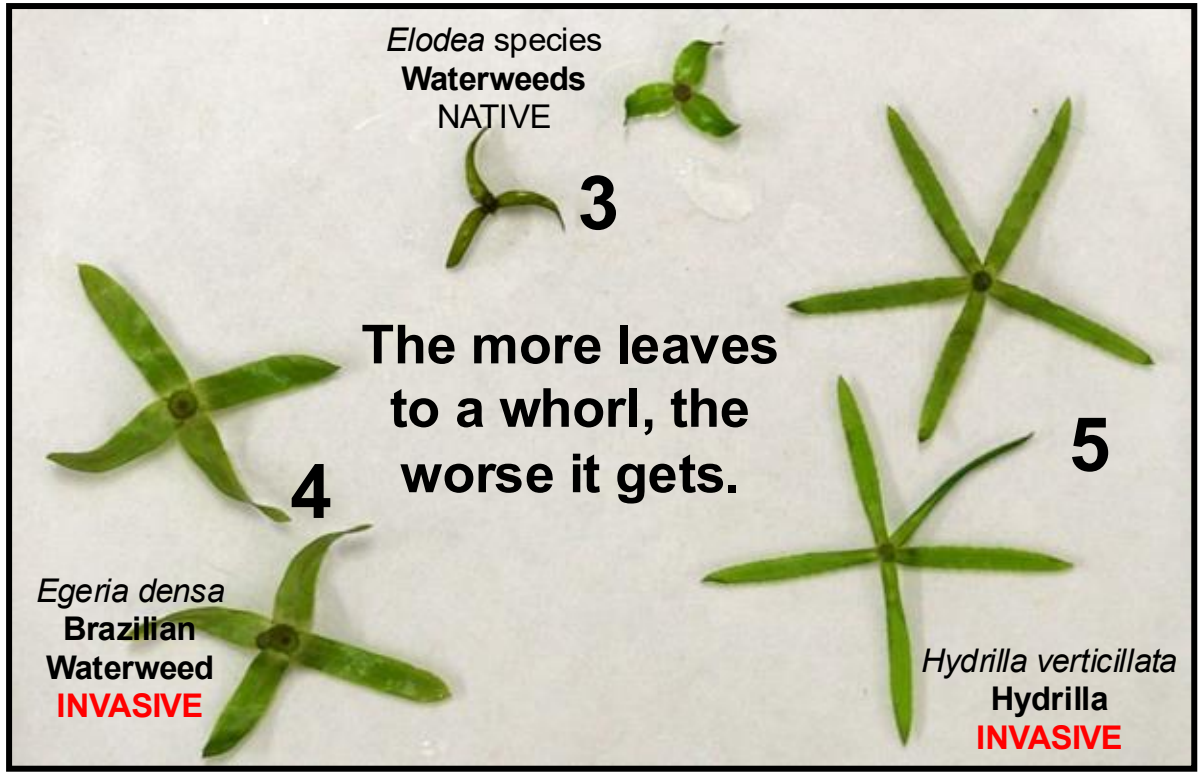
Northern Hydrilla
"CT River Hydrilla"

- Whorls ≥ 5
- Very robust
- No tubers
- Abundant turions

Hydrilla verticillata* ssp. *lithuanica

Native vs Invasive





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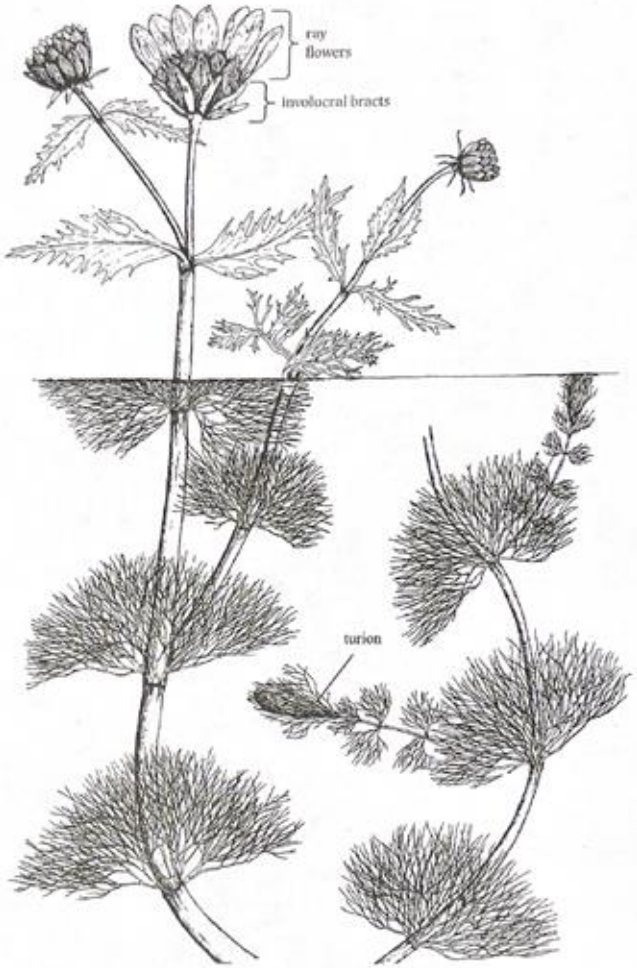
Water Marigold
Bidens beckii



Key Features:

- Special concern species
- Opposite leaves
- No petiole
- Often rooting at node

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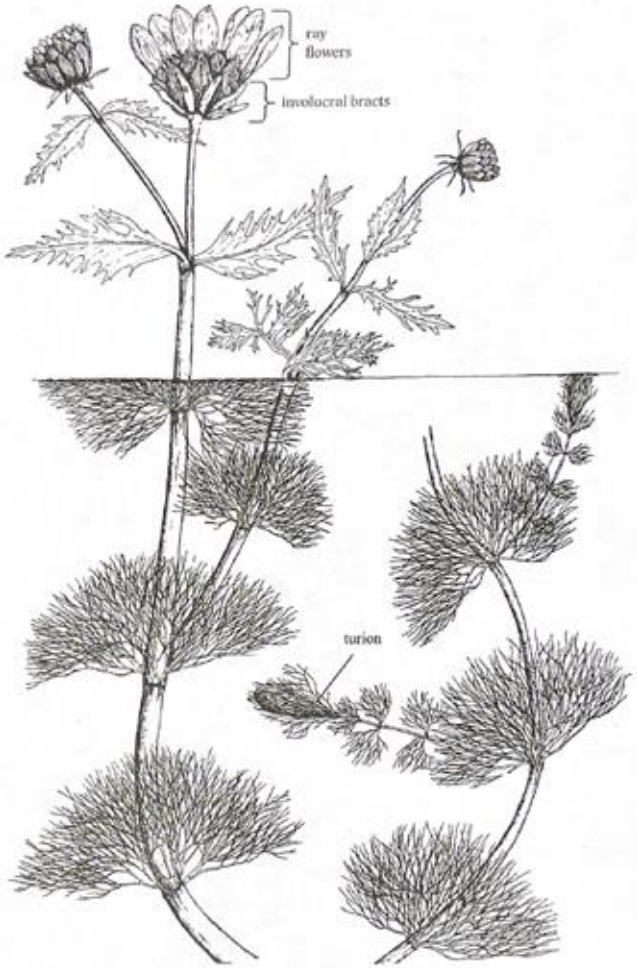
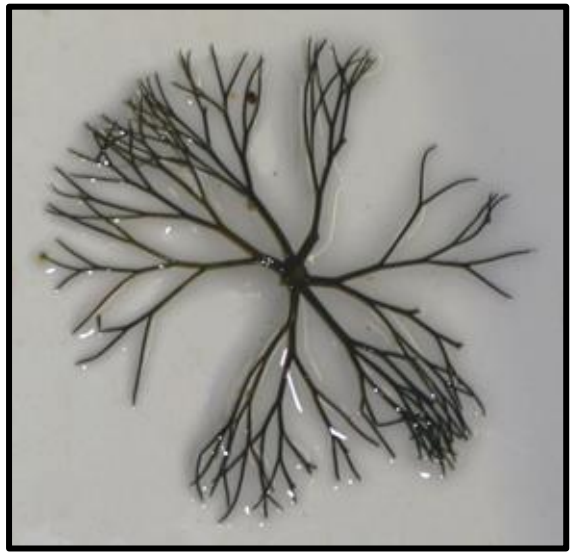
Water Marigold vs Eurasian Watermilfoil

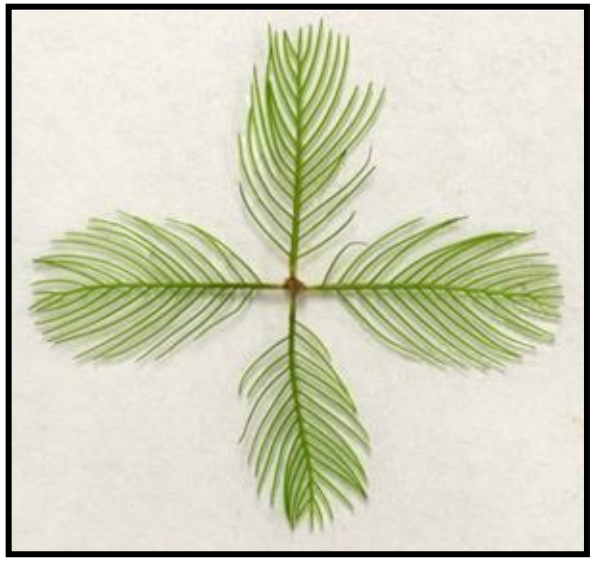
Bidens beckii vs *Myriophyllym spicatum*

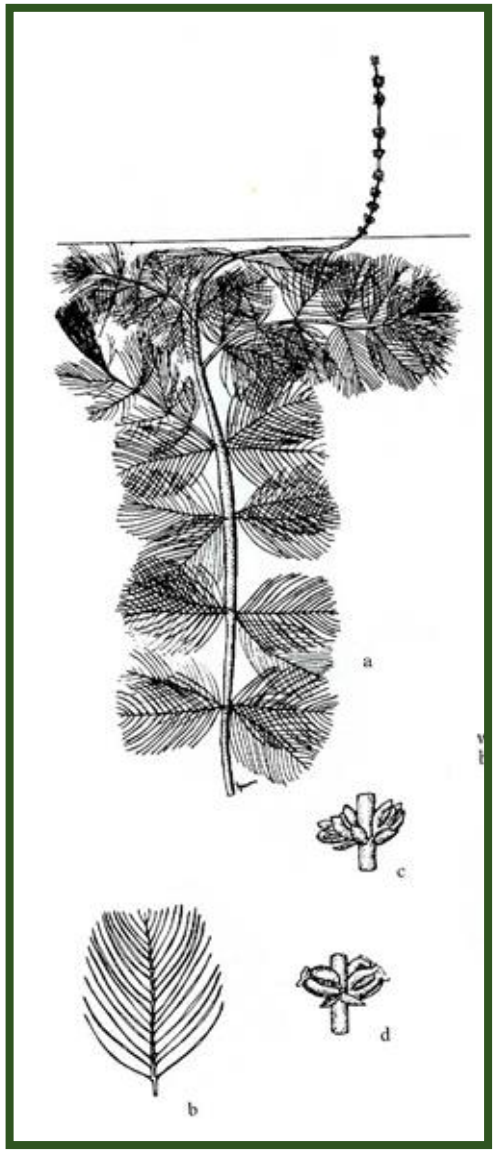


NATIVE



INVASIVE





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Identification Resources

iNaturalist

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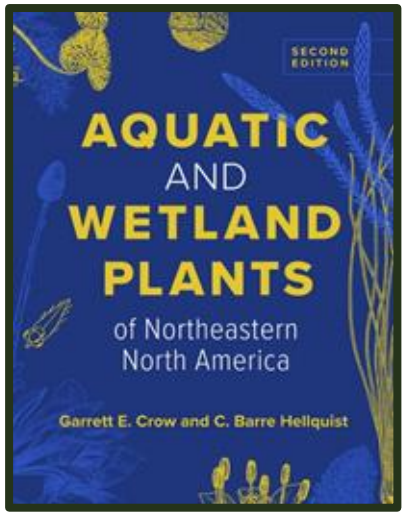

inaturalist.org
- Post Photos of Plants
- AI & Community ID

portal.ct.gov/CAES-OAIS
- Bring us a sample!
- Web App
- ID Guide
- Herbarium

https://uwpress.wisc.edu/books/5921.htm
The Big Book of Plants

Dates and Items to Remember:

- Hazardous Waste Collection Day
  - Saturday June 20th, 9am-12 pm
  - Falls Village Public Works
- Fourth of July Boat Parade
  - Meet in the NE Cove of Twin Lakes at 2:45 pm. Decorate your boat!
- Annual Meeting and Twin Lakes Day
  - August 8, Camp Isola Bella
- Pick up your 2026 directory
- Buy a copy of Nature's Action Guide and use it!

Twin Lakes Association

Enjoy the summer!

Twin Lakes Association