

Hydrilla in Illinois



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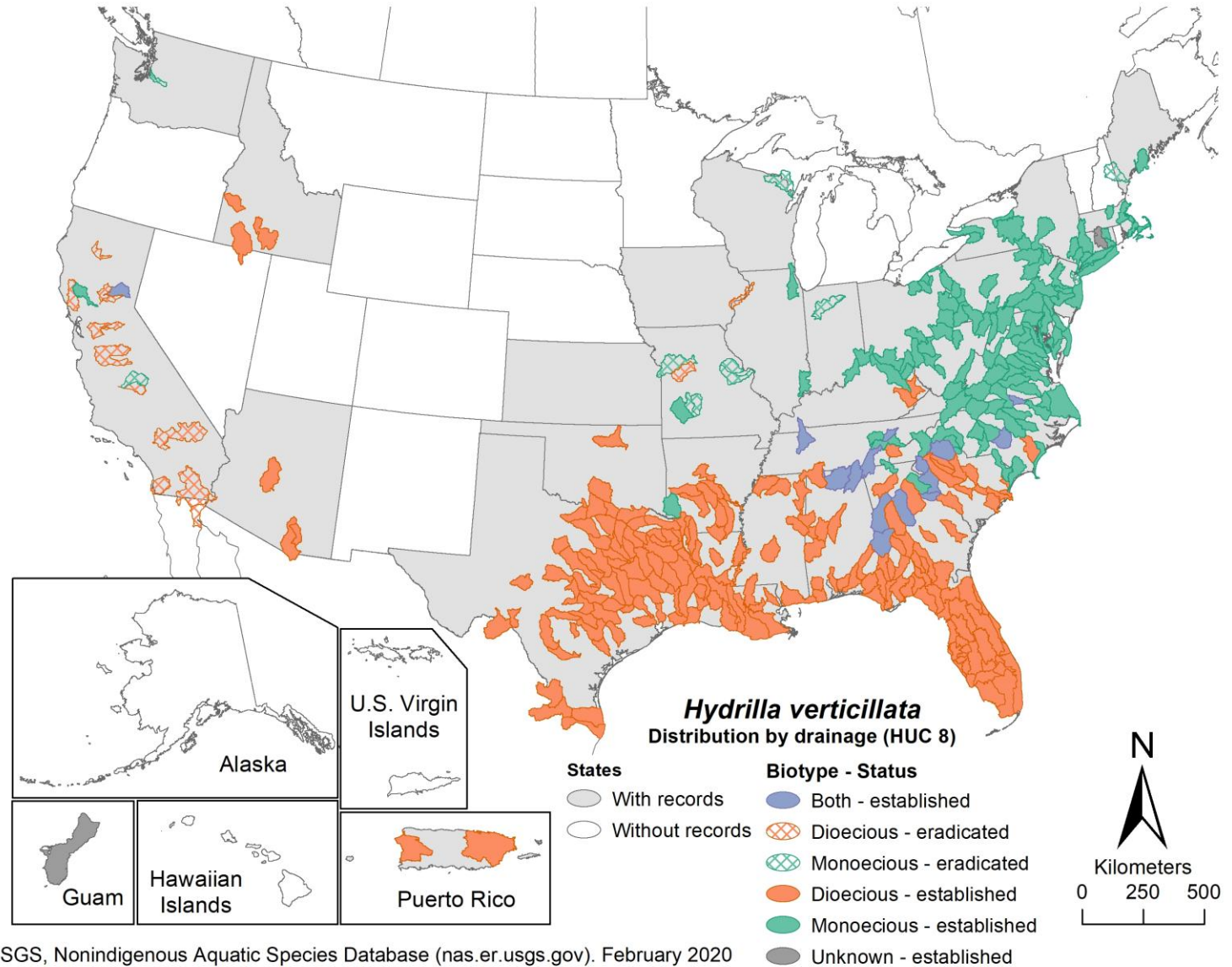
Hydrilla

- *Hydrilla verticillata* is considered the perfect aquatic weed
- Grows rapidly, produces a dense mat of stems that outshades native submerged aquatic plants (1 inch per day, per stem)
- Requires little light to grow
- Millions of dollars spent on control annually in the United States



Hydrilla Range

- Range – large infestations SE united states and NY region – lesser in Midwest but beginning to pop up.
- Monoecious (both male and female flowers on same plant) and Dioecious (male and female on different plants) mostly monoecious in “northern region”



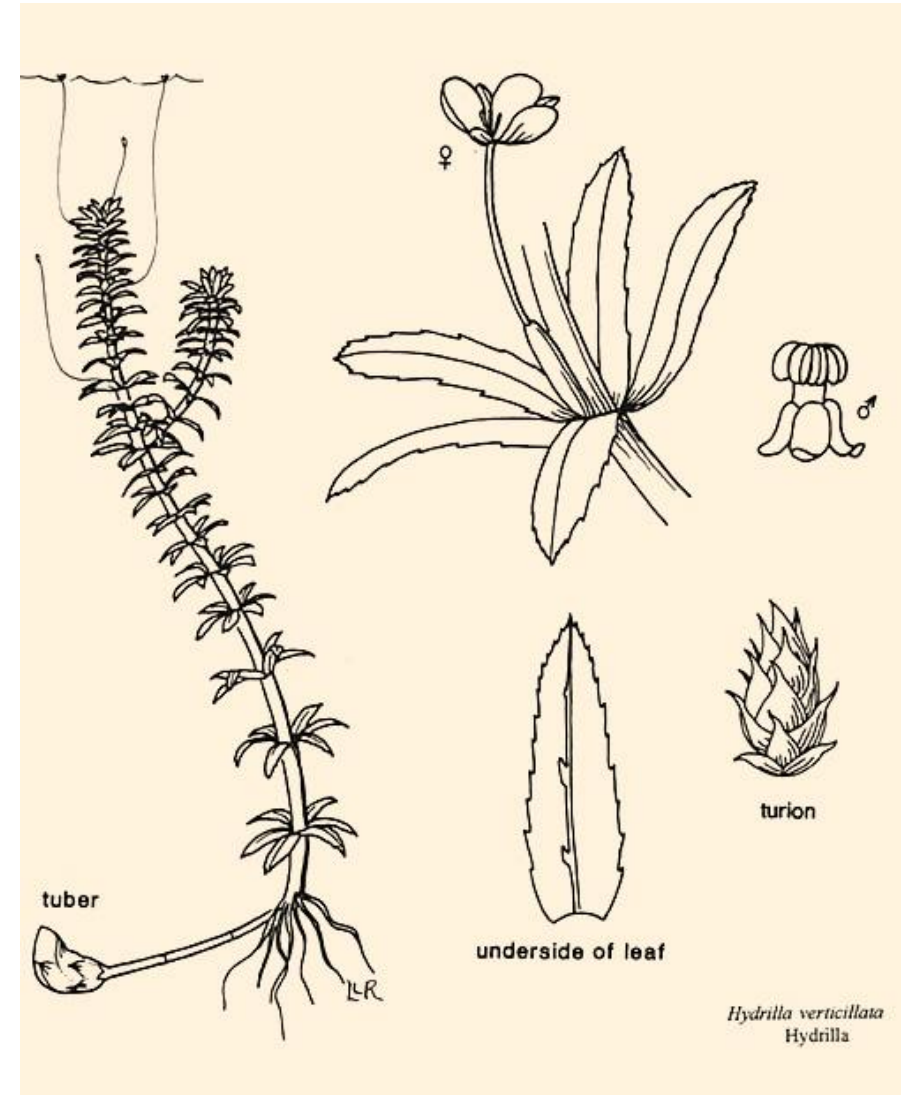
USGS, Nonindigenous Aquatic Species Database (nas.er.usgs.gov). February 2020

Hydrilla





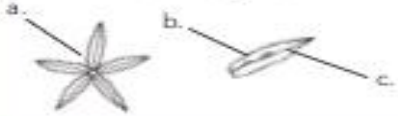




Listed as Federal Noxious Weed

Illegal to buy, sell or transport

Banned in State of Illinois listed as Injurious Species



Hydrilla Identification – and Look A Likes!

INVASIVE		NATIVE
		
<p>Michael J. Grodowitz, U.S. Army Engineer Research and Development Center</p>	<p>Christian Fisher, www.commonswiki.org</p>	<p>Paul Skowinski, Aquatic Plants of the Upper Midwest</p>
 <p>HYDRILLA <i>Hydrilla verticillata</i> INVASIVE</p> <ul style="list-style-type: none"> a. whorls of more than 3 leaves b. leaves often have visibly toothed edge c. leaf vein often has small visible spines 	 <p>BRAZILIAN ELODEA <i>Egeria densa</i> INVASIVE</p> <ul style="list-style-type: none"> a. whorls of more than 3 leaves b. leaves do not have visibly toothed edge c. leaf vein is smooth underneath  <p>Illustrations: Center for Aquatic and Invasive Plants, University of Florida</p>	 <p>AMERICAN ELODEA <i>Elodea canadensis</i> NATIVE</p> <ul style="list-style-type: none"> a. whorls of exactly 3 leaves b. leaves do not have visibly toothed edge c. leaf vein is smooth underneath 

Hydrilla Reproduction

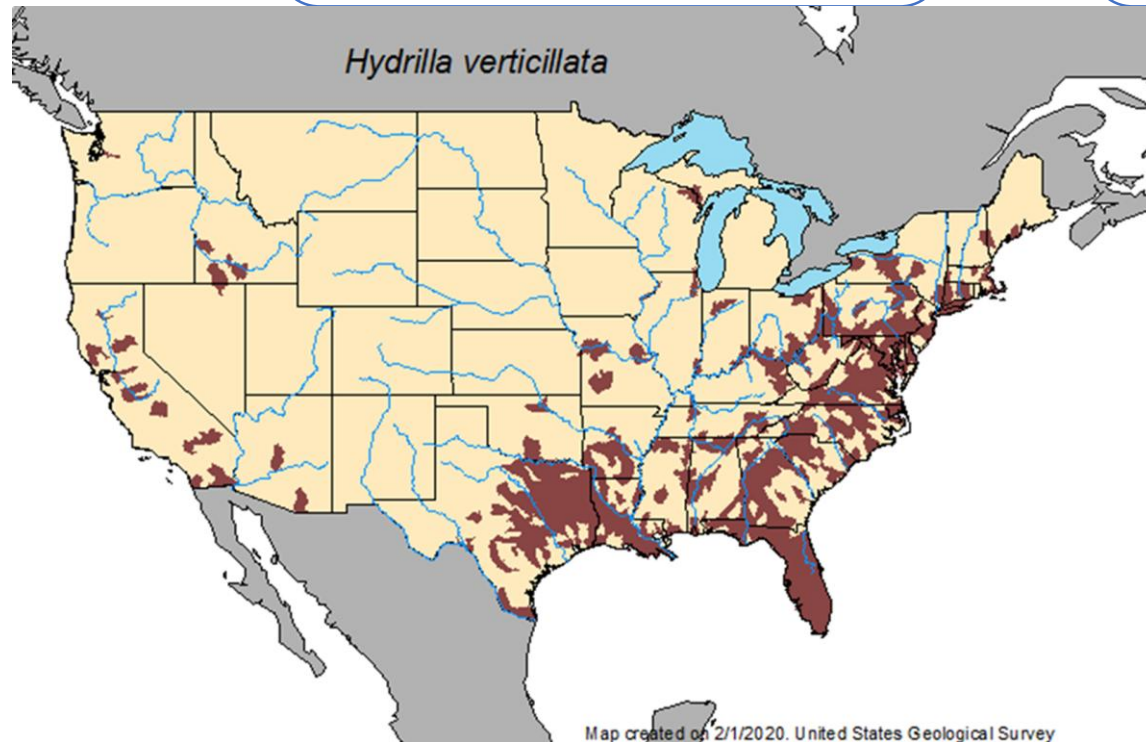
Tubers are produced when they germinate.

Turions

Fragmentation

Viable tubers can persist for 5-10 years

One tuber can produce over 6000 new tubers per m² and several thousand turions



Hydrilla in Illinois

2012 - Illinois Hydrilla Task Force awarded grant from Illinois DNR to produce Early Detection and Rapid Response Plan (completed 2014)

2019 - First infestation identified – small 3 acre detention pond – Lake County

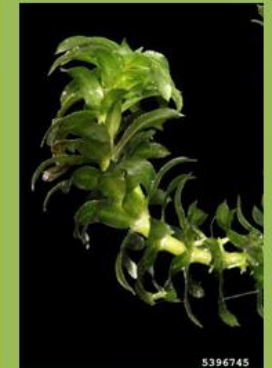
2024 – Large infestation – Ginger Creek, DuPage Co.

July 2014

Early Detection Rapid Response Plan
for *Hydrilla verticillata* in Illinois



Join the Search!



prepared by:

Illinois Hydrilla Task Force

2024 – Hydrilla Found - Ginger Creek – DuPage County

First identified by private lake consultant October 2024.

10.5 acres Hydrilla out of 26 acre lake

Sample verified by IDNR



2024 – Hydrilla Found - Ginger Creek – DuPage County

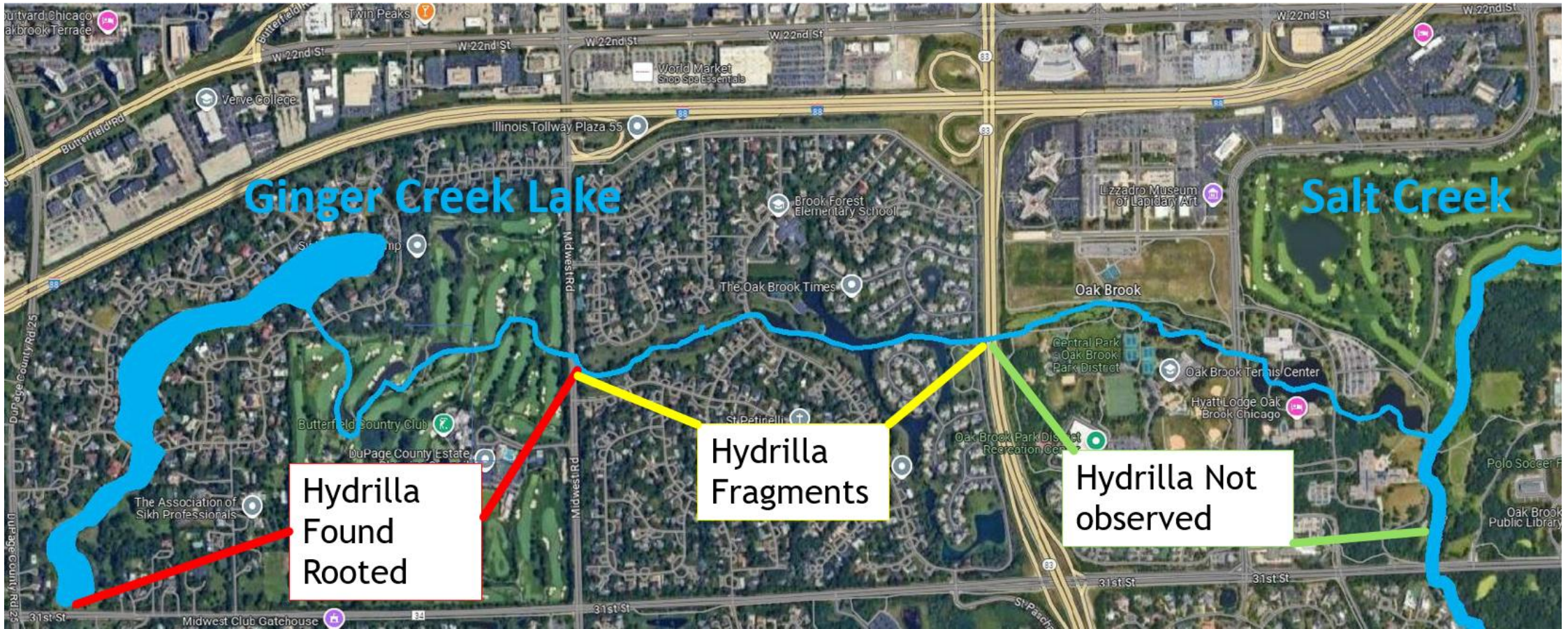
Local agencies monitored downstream on Ginger Creek.

- DRSCW/Conservation Foundation
- Forest Preserve District of DuPage
- Chicago Metropolitan Agency for Planning
- Lake County Health Department
- IDNR
- Illinois EPA

Hydrilla observed downstream of initial lake – spread is larger than suspected originally



Hydrilla Assessments Downstream



2.5 miles from Ginger Creek HOA Lake to Salt Creek

Hydrilla Assessments

IDNR monitored
upstream on
Ginger Creek

Sampling took
place at the
detention basin
north of the I-88
inlet

No hydrilla was
found

Additional
upstream sampling
may be warranted
in 2025 when
temperatures are
more suitable for
growth



Plant rake used in sampling
finds naiad but no hydrilla



Sampling Nov 2024

Outreach

- Communication Outreach will be disseminated to area.
 - HOAs
 - Watershed Workgroups
 - Forest Preserve
 - Village of Oak Brook
 - Property Owners
- IDNR Press Release
- Newspaper and radio segments
- Attended HOA meeting
- Larger area meeting planned early 2025

WARNING! HYDRILLA



HYDRILLA IS AN INVASIVE SPECIES and was found in this waterbody

Hydrilla (*Hydrilla verticillata*) poses a huge threat to our ponds, lakes and rivers. When hydrilla invades an area, ecologically important native aquatic plants are shaded out and displaced by hydrilla's thick mats.

Do your part to limit the spread of this invasive species:

- ✓ **REMOVE** all plants, animals, and mud from equipment.
- ✓ **DRAIN** all water from your boat and gear
- ✓ **DRY** everything thoroughly with a towel
- ✓ **DO NOT DISPOSE** of aquarium or water garden plants and animals into waterbodies.

TRANSPORTZERO.ORG



For AIS laws and questions refer to 515 ILCS Aquatic Life Code; 625
ILCS 45 Boat Registration and Safety Act
IDNR Aquatic Nuisance Species Program dnr.ans@illinois.gov

Outreach

INVASIVE ALERT

Hydrilla Found in DuPage County

Recently Hydrilla, a highly invasive aquatic plant, was discovered in DuPage County. This is the first known occurrence in DuPage County and only the second known report in Illinois. Considered one of the world's worst aquatic weeds, Hydrilla can grow up to an inch per day and form dense mats of vegetation, with negative impacts on boating, fishing, swimming, native aquatic wildlife, and property values. Control and eradication efforts can cost millions of dollars over many years.

State and local agencies are working together to track the spread of this aggressive invasive in our waterways and determine the most appropriate containment and eradication strategies. Be aware that this plant looks very similar to our native Elodea species, but there are a few key features that can be used to differentiate them. Hydrilla has whorls around the stem of more than 3 leaves with often visibly toothed edges. See the back of this flyer for details on identifying this invasive species.

It appears that the Hydrilla found in DuPage County may have been unintentionally released from a homeowner's aquarium or a water garden. Hydrilla is listed as a Federal Noxious Weed, meaning it is illegal to buy, sell, or transport. It is also banned in the State of Illinois. However, it is oftentimes still found in the aquarium and water garden trade.



Invasive hydrilla. Darkmax, CC BY-SA 3.0 via Wikimedia Commons.

Do your part to limit the spread of this invasive aquatic plant by following these actions:

REMOVE all plants, animals, and mud from any equipment that is used in waterbodies.

DRAIN all water from your boat and gear.

DRY everything thoroughly with a towel or heat.


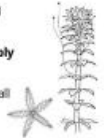




DO NOT DISPOSE of aquarium or water garden plants and animals into waterbodies.



If you suspect you have identified Hydrilla in your waterbody, please notify the Illinois Department of Natural Resources Aquatic Nuisance Species Program at dnr.ans@illinois.gov. For additional information on Hydrilla, please refer to the Great Lakes Hydrilla Collaborative hydrillacollaborative.com

Learn how to ID Hydrilla >>>

Identify Invasive Hydrilla

INVASIVE		NATIVE
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Illustrations: Center for Aquatic and Invasive Plants, University of Florida

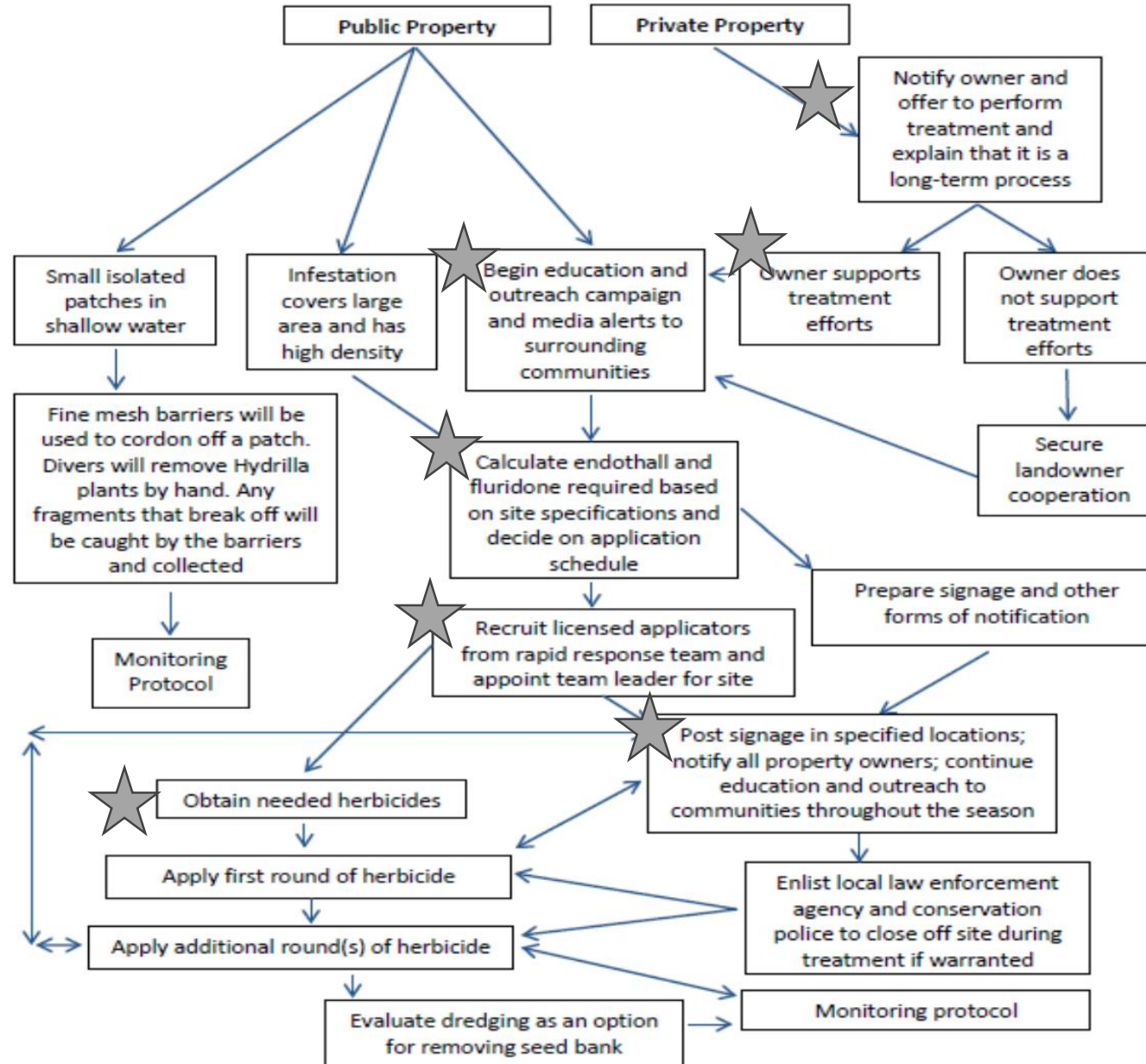
Take a close look at the leaves. Hydrilla leaves have toothed edges and are arranged in whorls of more than three leaves around the stem.



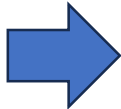
Robert Viskki, Doronikum Kft., Bugwood.org



Illinois Hydrilla Task Force

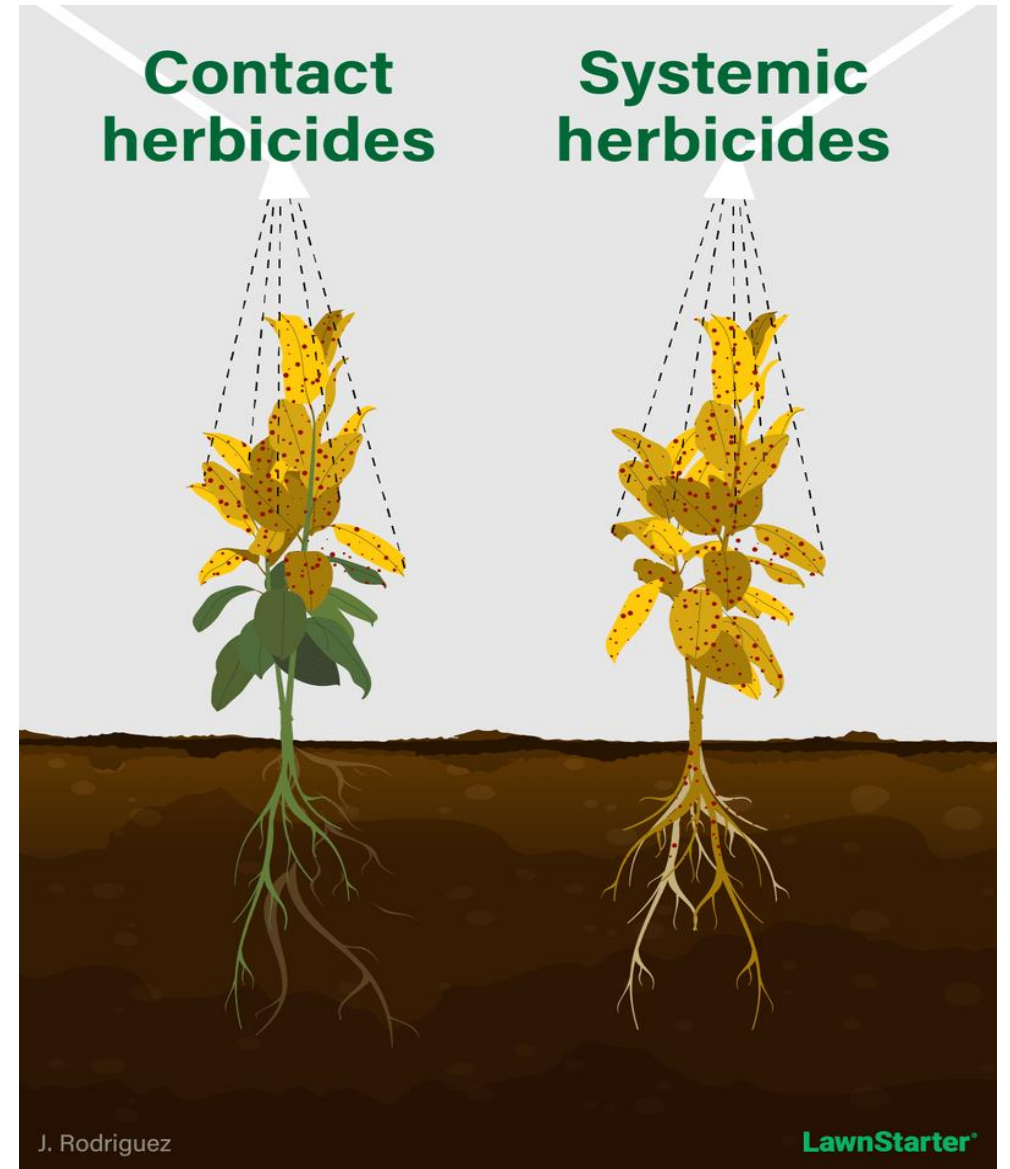


Large Scale Treatment planned for Spring 2025 – entire Ginger Creek section to Salt Creek



2025 Treatment Plan - Product

- Use of EPA registered aquatic herbicide: SonarOne (pellet – slow release)
- Active Ingredient is Fluridone
- Selective Systemic Aquatic Herbicide
 - Herbicide moves throughout plant tissue
 - Product inhibits the formation of carotene and in the absence of carotene, chlorophyll is rapidly degraded by sunlight.
- Used in many other states for hydrilla control.
- Target is 3 ppb. - Fluridone is effective at low sustained concentrations for long exposure time.
- May require additional “bumps” to maintain low concentrations.



2025 Treatment Plan – No Water Use Restrictions

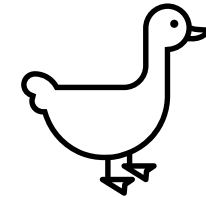
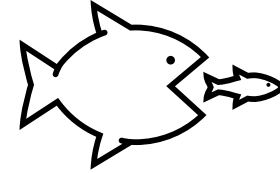
No post-treatment restrictions on water use for:

- Swimming
- Fishing
- Pet/livestock.
- There can be concern for irrigation and newly seeded lawn at concentrations greater than 5 ppb, or water plants with the Solanaceaea family (tomatoes, peppers).
 - We are targeting to stay under that concentration between 2- 3ppb.



2025 Treatment Plan – Exposure Risks

- Fluridone does not appear to have short or long-term effects on fish at approved application rates.
- Has not been shown to pose short or long-term exposure risk to birds or small mammals
- Human short term exposure risk is primarily limited to chemical applicators – may cause eye or skin irritation.
- Fluridone has not shown evidence of causing birth defects, reproductive toxicity or genetic mutations in mammals.
- It is not considered to be carcinogenic, nor does it impair immune or endocrine function.



2025 Treatment Plan – What Will it Look Like

Herbicide Treatment:

- The Aquatic Herbicide will be applied by boat crews and shore teams
- Backpack blowers
- You may see DNR staff and IL Hydrilla Task Force walking around shorelines and or/ on Water!
- Decontamination to prevent spread
- Collection of water samples to test concentration

Aquatic Plant Sampling

- On Boats and along shoreline
- Rake-Toss to determine plant species



Plant sampling—March 2025

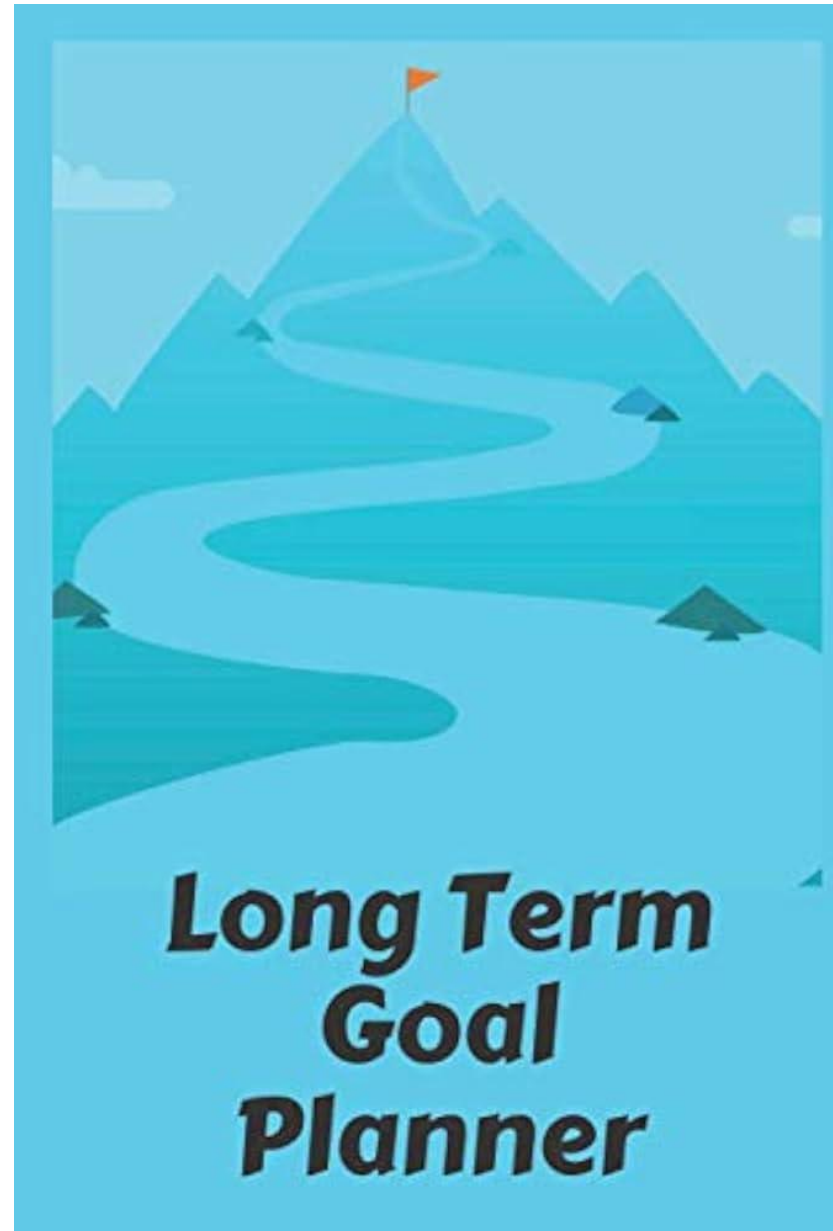
Local Partners & Funding Hurdles



- Originally planning to apply for Fish & Wildlife Service Rapid Response Fund for Aquatic Invasive Species – Due Dec 31, 2024
 - December 16th, 2024 – notified they have discontinued this opportunity.
- Illinois DNR has applied for GLRI funding for 2026-2027 but that leaves 2025 in question
- Multiple Resources for 2025:
 - IL DNR staff offering significant time for application of treatments + FastEST collection + Aquatic Plant Surveys
 - IL Hydrilla Task Force has some funding for purchase of product
 - DuPage River Salt Creek Workgroup providing some funding for Hydrilla management
 - Task Force Members volunteering time (Plant Surveys, application assistance, technical review)

Long-Term Goals

- Eradicate Hydrilla
 - Can be a multi-year treatment process.
 - Aquatic Plant surveys will help assess and determine future treatment plans.
- Acquire Grant Funding
- May require HOA assistance and management



What can YOU do?

- Help spread the word!
- Prevention is most cost-effective management than eradication.
- Hydrilla can spread in many ways – make sure any footwear, boats, or equipment used in Ginger Creek is thoroughly washed, dried and decontaminated prior to using in another waterbody.
- Never Release aquatic life into natural waterways.



Questions?

