What is Starry Stonewort





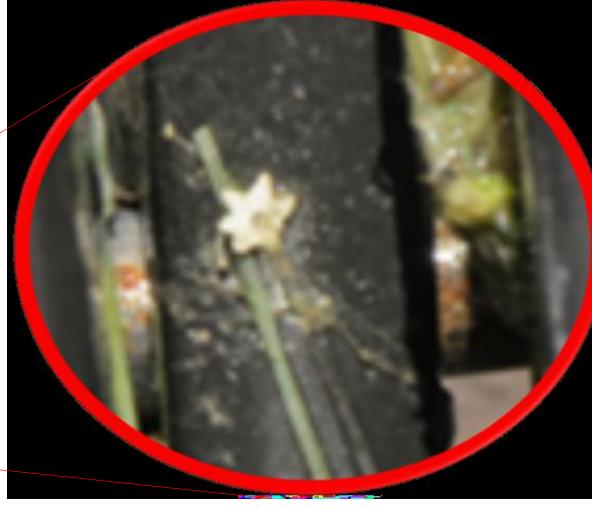


Photo: Paul Skawinski

Starry Stonewort

- A non-native invasive macro algae
- Bulbils are small and easily hid
- Bulbils are not susceptible to herbicide
- Nodes can form into bulbils
- Species is hard to ID
- Only Male plants have been found in USA = only reproducing via asexual means





Photos: Paul Skawinski

Bulbils are small enough to be lost in a spot of bottom mud.

How might starry stonewort affect a lake?

- May outcompete native aquatic plants.
- Thick "meadows" can prevent fish from spawning
- Can become a navigational nuisance in shallow waters (< 6 feet).
- Meadows may increase water clarity by minimizing sediment re-suspension.



Photo: Paul Skawinski Slide: Courtesy WDNR

Where did starry stonewort come from?





St Lawrence River –1978 –thought to be from ballast

- •St Clair River -1983
- •Michigan inland lakes in 2006 –unclear whether it took SSW a long time to move inland or whether it wasn't recognized until after it had been there for some time

Slide: Courtesy WDNR

Starry stonewort in Wisconsin

- Big Muskego
- Little Muskego
- Long Lake
- Wind
- Silver (Washington)
- Pike
- •Green
- Little Cedar
- •Green Bay (City of Sturgeon Bay up through Door County)
- Geneva

Slide: Courtesy WDNR

GLEA and WI DNR Initial Response to Starry Stonewort Geneva Lake, WI

- Identify locations
- Newspaper outreach
- Meeting with GLEA board
- Working relationship with Village of Williams Bay, City of Lake Geneva, Village of Fontana, Town of Linn.
- Coordinated monitoring efforts with Amy Kretlow, WDNR
- Searching funding sources
- Establish a management strategy with WDNR

Slide: WDNR and GLEA

Monitoring involved in starry stonewort management, Geneva Lake, WI

- Upon identification in the fall of 2018, plant surveys were conducted at all lake launch site, private and public.
- A pre-treatment survey of lagoon to confirm its presence and extent
- Post treatment herbicide residual survey to include, herbicide, copper and dissolved oxygen – both treatments.
- Lake-wide point intersect (PI) aquatic plant survey.
- Shoreline meander survey.
- Post treatment (PI) lagoon plant survey.

Slide: GLEA

Location, East Bay of Trinke Lagoon, Geneva Lake WI



Slide: WI DNR

Management strategy - eradication

- Restrict access to known location.
- Chemically treat twice during summer of 2019.
- Residual herbicide testing after both treatments.
- Lake-wide plant surveys, summer of 2019
- Hydrologically dredge in fall of 2019

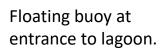
Slide: GLEA

Buoys and markers located in Trinke Lagoon Geneva Lake WI.











Two markers located on piers in lagoon.

Two floating buoys, Invasive species

Photos: GLEA

Management Plan for Starry Stonewort, Geneva Lake WI.

Chemical treatment twice during summer of 2019



Slide: WI DNR and GLEA

Site Plan for Dredging and Dewatering, Trinke Lagoon Fall 2019, Geneva Lake, WI

Photo:Baxter & Woodman



Grants

- DNR Rapid Response Grant #1 —can provide up to \$20,000 in cost share for dredging (75% DNR and 25% local match)
- •DNR Rapid Response Grant #2 —can provide up to \$20,000 in cost share for outreach, education, plant surveys, chemical treatment, informational buoy
- Limit of two Rapid Response Grants
- •Reimbursement grants –no funds up front

Estimated Costs

\$175,000 Dredging, dewatering: • Spoils disposal and site restoration: \$35,000 Chemical treatments: \$15,000 Contingencies and Engineering: \$40,000 \$5,400 Aquatic Plant Survey: \$ 271,400 Total costs - \$40,000 **Grants** \$231,400 Need to Raise:

Slide: GLEA

Trinke Lagoon with buoys and curtains,



Photo: GLEA

Donation to help support SSW management of Geneva Lake WI.

- Direct contribution to Geneva Lake Environmental Agency.
 Send donation to: GLEA, P.O. Box 914, Williams Bay WI 53191
 ID for Starry stonewort.
- Go directly to our GoFundMe site at: https://www.gofundme.com/f/starry-stonewort-management
- Visit our web page at <u>www.genevalakemanagement.com</u> and link to our GoFundMe site.