







Starry Stonewort Collaborative

Starry Stonewort COLLABORATIVE

David Carr, Project Manager dcarr@hws.edu









Finger Lakes Institute (FLI) at HWS, Geneva, NY www.hws.edu/fli

Promote environmental research and education about the Finger Lakes and surrounding environments

Program Areas: Research, Education, Community Outreach, Economic Development



Finger Lakes Partnership for Regional Invasive Species Management (FL-PRISM)

www.fingerlakesinvasives.org

Partnerships

Reduce the introduction, spread, and impact of invasive species through coordinated education, detection, prevention, and control measures









The Starry Stonewort Collaborative



Great Lakes basin

Enhance the capacity of experts, resource managers and local stakeholders to address SSW by:

- providing general knowledge about SSW Ecology
 - expanding Outreach efforts at all levels

-reviewing and distributing the best Control techniques (BMPs)







Great Lakes basin (International!)











Finger Lakes Region, NY











Nitellopsis obtusa – Starry Stonewort

Aquatic Macro Algae

Europe and Asia

1978 Saint Lawrence River, spread throughout Great Lakes basin







Bulbils

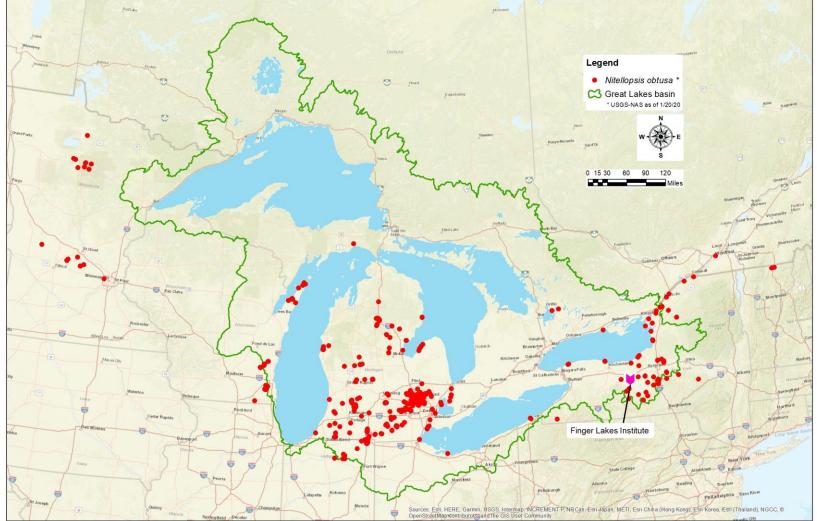
S. Brown







• Current Extent - Great Lakes basin











Impacts

Starry Stonewort

Rapid, aggressive growth

Potential harm to environmental systems

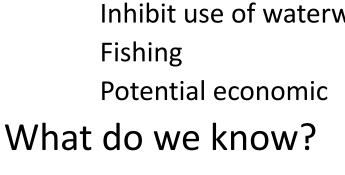
Spawning areas

Water quality?

Replacing native species

Human impacts

Inhibit use of waterways



































Collaborative Structure and Roles

Citizen Scientists

Collaborators

Expert Panel

Finger Lakes Institute

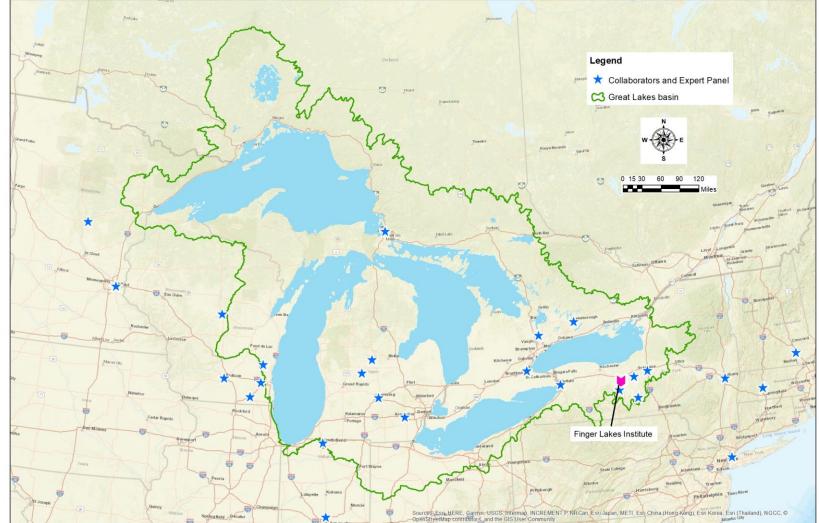








Expert Panel and Collaborators











Community level education training, identification, and reporting

Training Materials

Field Kits

Training - Basic Surveys

Reporting

smart phone or tablet

Upload to USGS-NAS, iMapInvasives











NAS - Nonindigenous Aquatic Species













Survey123 😰



3:45	M R M M •	0		40
×	2019 Starry Sto	newort Pilot	روكل	\equiv
Sam	pler Initials			
Org	anization Name			
Date	e.			
	Monday, July 1, 2019	③ 3:44 PM		8
Latit	tude			
decin	nal degrees to 5 decimal place	s		
4				8
Long	gitude			
decin	nal degrees to 5 decimal place	s		
-7				8
Mar	Location			
	nd zoom to locate sampling lo	cation		
\Diamond	42.860°N 76.982°W ± 2	1.4 m		⊗
				~
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Data Sheets

						onewort Surv			neet					
	Ider	ntification		9	GPS	Location	n Descripti	on					Rake Toss Resu	ts
Date	Start Time	Sampler	Org. Name	Longitude	Latitude	W aterbody Name	Water Depth (m)	Water Access	Visible SSW beds (Y/N)	Density	Estimated% SSW	Sample Collected? [Y/N]	Sample Name	Other Observed Invasives
		-1												
	ity Values	Shore or B		andful of plants): 5-5n	arse(2 handfuls); M=Me	fium (armful): D-Dones	(covered -	aka)						
Estimated	I Percentage of SSW	0%; 1-25%	; 26-50%; 51-75%; 76	6-100%	moets nandruis); M=Me	aum (armiui); D=Dense	(covered r	akej						
	ple Name		ate, location. Ex - Do											
Jerrit	pre remine		acc, rocacioni EX - Di	OD OU ISHIPME			_							

	QUESTIONS RESPONSES	
Starry S	tonewort Data Sheet	
Form description		
Sampler Initia	als	
Short answer text		
Organization	Name	
Short answer text		
Date		
Month, day, year		
Start Time		
Time	0	
Latitude (dec	imal degrees to 5 decimal places; 4)	
Short enswer text		
Longitude (de	ecimal degrees to 5 decimal places; -7)	

Waterbody N	ame	
Short answer text		







www.starrystonewort.org



Library

Reports, papers, training, BMPs, identification materials, videos

Public submittal (review)

Forum







www.facebook.com/starrystonewort (@starrystonewort)









Greater Engagement with Collaborators

Outreach – Citizen Science Survey Programs for 2020

Digital Outreach – Website, Social Media, Constant Contact...

Control Protocols, Methods and Measurements

SSW Workshop #2







Questions?



dcarr@hws.edu



