Bone Lake Public Access September 22, 2020

Aquatic Invasive Species Search in Bone Lake, Washington County, Minnesota

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Prepared for:
Comfort Lake Forest Lake Watershed District

Prepared by:
Steve McComas, Jo Stuckert, and Connor McComas
Blue Water Science, St. Paul, MN

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Summary of the 2020 search: Two searchers from Blue Water Science surveyed the boat access and surrounding areas in Bone Lake on September 22, 2020 searching for occurrences of invasive species, primarily zebra mussels (Figure 1). Zebra Mussels were previously discovered in Bone Lake and all known zebra mussels were treated with Earthtec copper sulfate in 2019. AIS searches at the public water accesses are a high priority in order to identify new infestations before it spreads to the rest of the lake. The searchers spent approximately 2.0 search hours using scuba diving and snorkeling. No starry stonewort and no zebra mussels were observed. Representative photos and observations shown on the following pages.

Table 1. Site data for the two aquatic invasive species searches on September 22, 2020.

	Number of Searchers	Starry Stonewort (SSW)	Zebra Mussels (ZM)	Bottom Conditions
September 22, 2020				
1. Public Access and surrounding area	2 (120 minutes total search time)	No SSW found	No ZM observed	Sandy, rocks rare, some branches. Moderate plant growth.

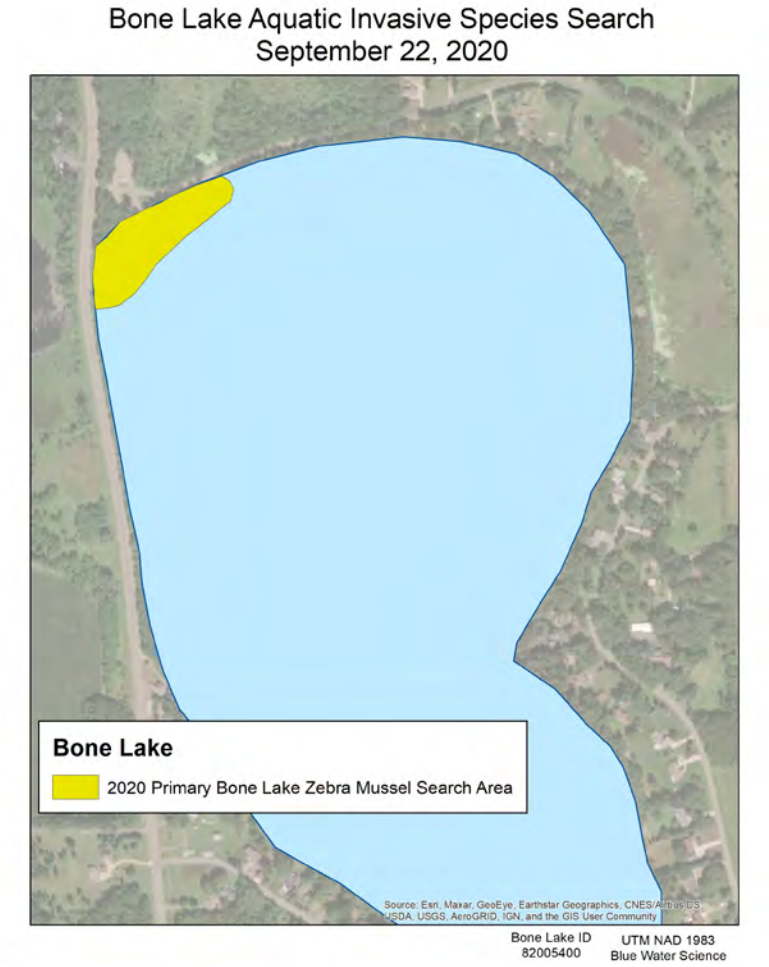

Figure 1. Location of the search sites.

Photos from the September 3, 2020 AIS Search- No New AIS Observed

Figure 2. Plants were still growing in Bone Lake on in September. The public access area substrate is dominated by a sand bottom with few rocks or branches. Scattered branches would seem to be the most suitable growing substrate for early infestations of zebra mussels in bone lake.

Starry Stonewort Information Sheet

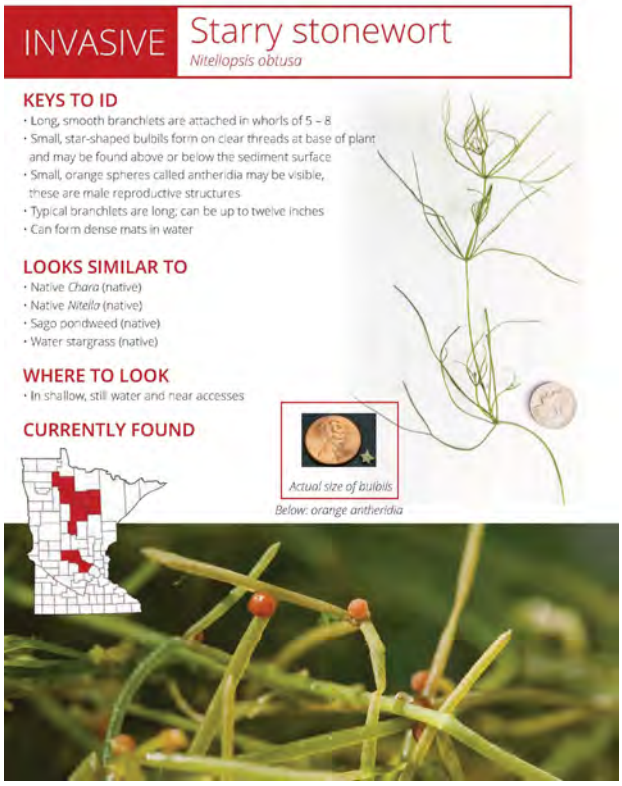

Figure 3a. [left] Starry stonewort identification page from the University of Minnesota Aquatic Invasive Species Research Center (MAISRC).

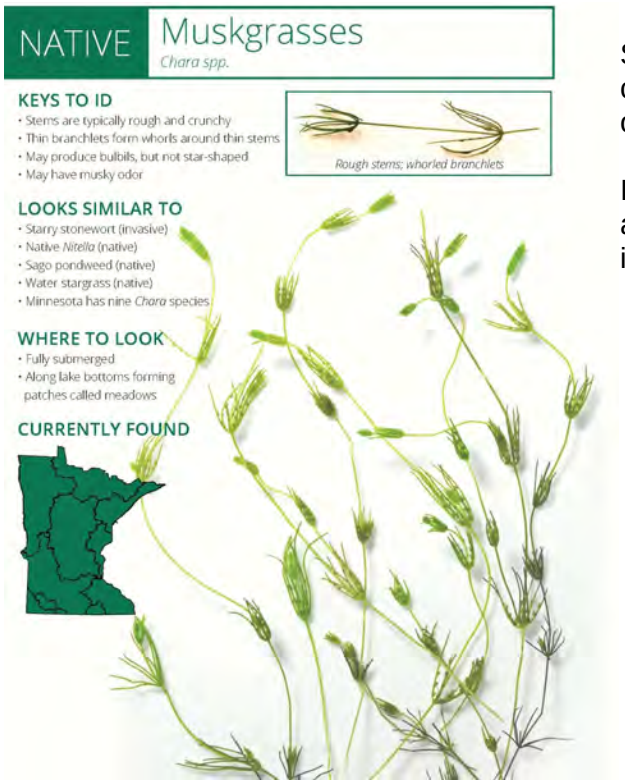

Figure 3b. Chara identification page from the MAISRC.

Starry stonewort looks a lot like some growth forms of chara and nitella (Figure 3). Starry stonewort was not observed in Bone Lake in 2020.

Initial searches for Starry Stonewort focus on public access points as a priority, nearly all new SSW infestations are found at boat launch locations.

Rapid Response Plan for Starry Stonewort or Zebra Mussels

Neither starry stonewort nor zebra mussels were found in Bone Lake on the September 29, 2020 search. A rapid response plan, shown in Table 2, has a number of preventative steps as well as actions to be considered after a potential new AIS sighting.

Table 2. Tasks and assignments for an early detection and rapid response program for Bone Lake, Minnesota.

	Bone Lake Lake Assoc.	CLFLWD	Washington County	MnDNR	Others	Treatment Contractor	BWS
1. Early Detection							
1.1. Create website information.	X						
1.2. Designate contact person.	X						
1.3. Conduct training session for volunteer searchers.	Late summer	Late summer					Late summer
1.4. Conduct monthly targeted searches (late summer).	X						X
1.5. Press release if SSW is found.	X			X			
2. Rapid Response Assessment							
2.1. Conduct an initial exploratory search after the first report of a starry stonewort observation.				X			X
2.2. Organize and train lake resident searchers for a full search effort.	X						X
2.3. Conduct an expanded targeted search with diving (if needed).	X	X		X			X
3. Rapid Response Action							
3.1. Meet to determine treatment options.	X		X	X	X	X	X
3.2. Close public access, if necessary.	X		X	X	X		
3.3. Treat area with copper sulfate.						X	
3.4. Evaluate treatment.				X			X
3.5. Report all findings and results.	X			X			X