prepared for: Sherburne County AIS Task Force Fall 2021 Meeting

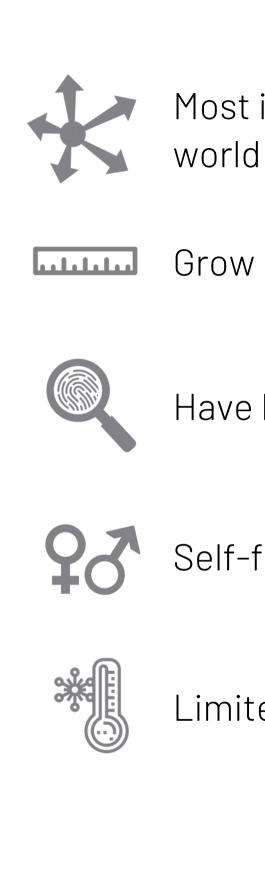
# Corbicula fluminea in Sherburne County Lakes

Megan M. Weber Daniel Cibulka

#### December 20, 2021



### What are Corbicula fluminea?





Most invasive freshwater organism in the world

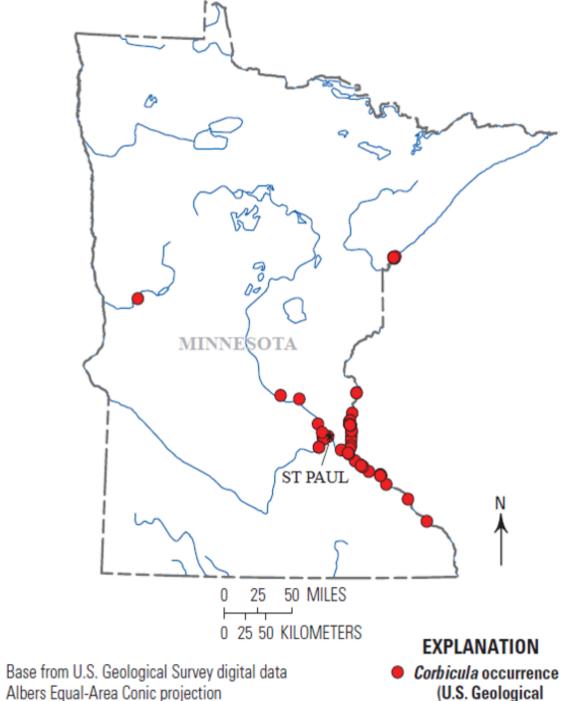
Grow up to approx. 2 inches across

Have heavily ridged rings

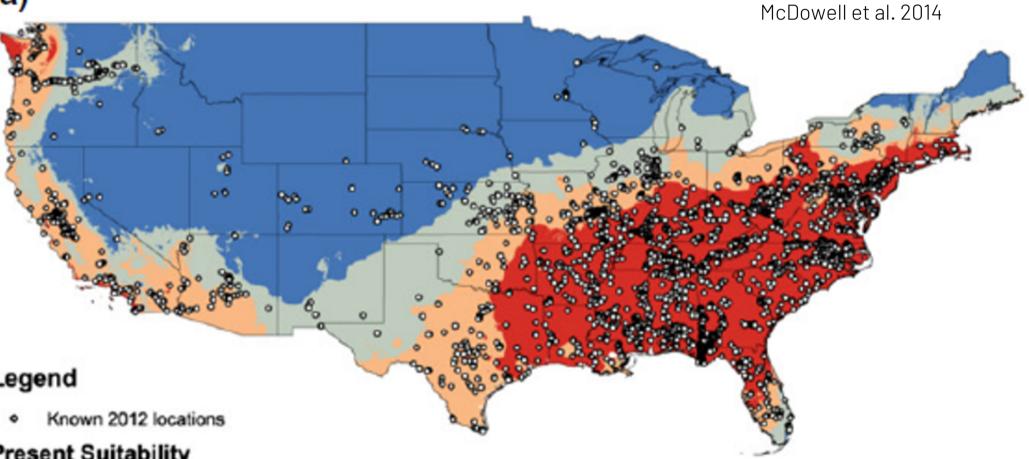
Self-fertilizing

Limited by cold waters (?)

#### Distribution

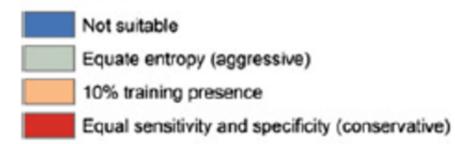


(a)



#### Legend

- **Present Suitability**



Albers Equal-Area Conic projection North American Datum of 1983

Survey, 2019)



# Discovery in Briggs Lake

# Monthly Sampling



Drill sample holes (10 /month)

Process sediment samples

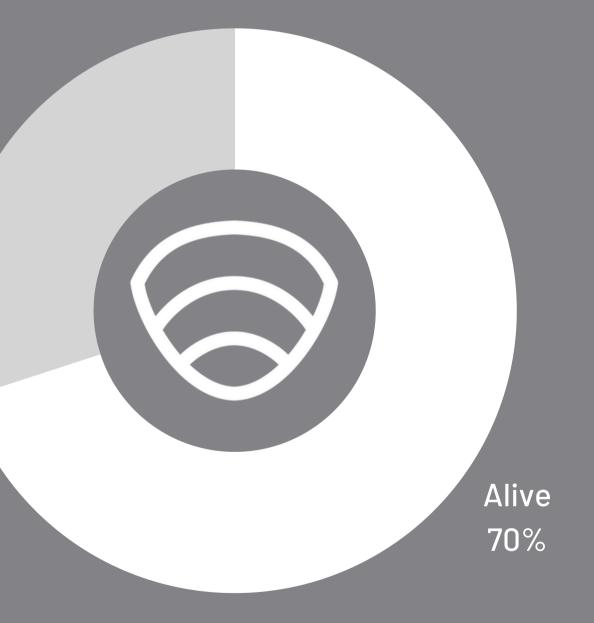


Collect individual clam data Collect water quality data

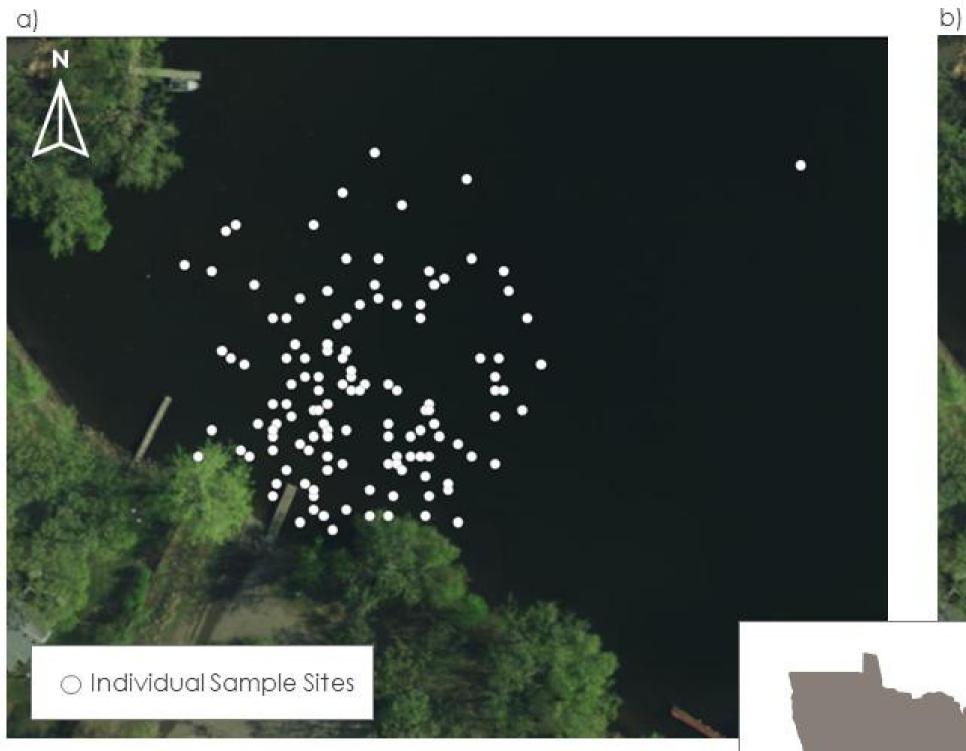
## What we've learned

There are many clams present near the public boat launch and they are living through the winter months Dead 30%

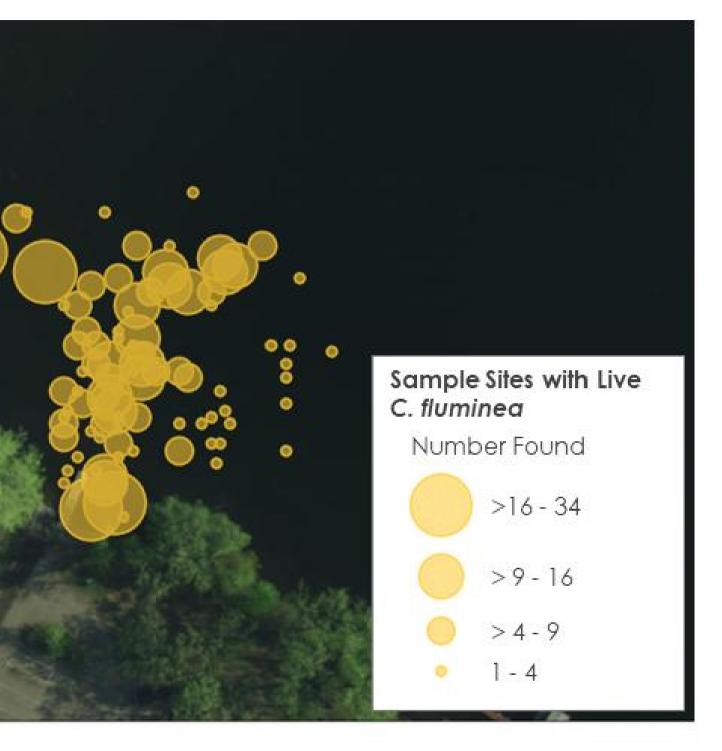
#### TOTAL: 823 clams

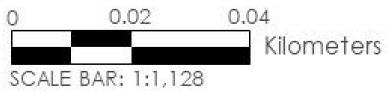


a)





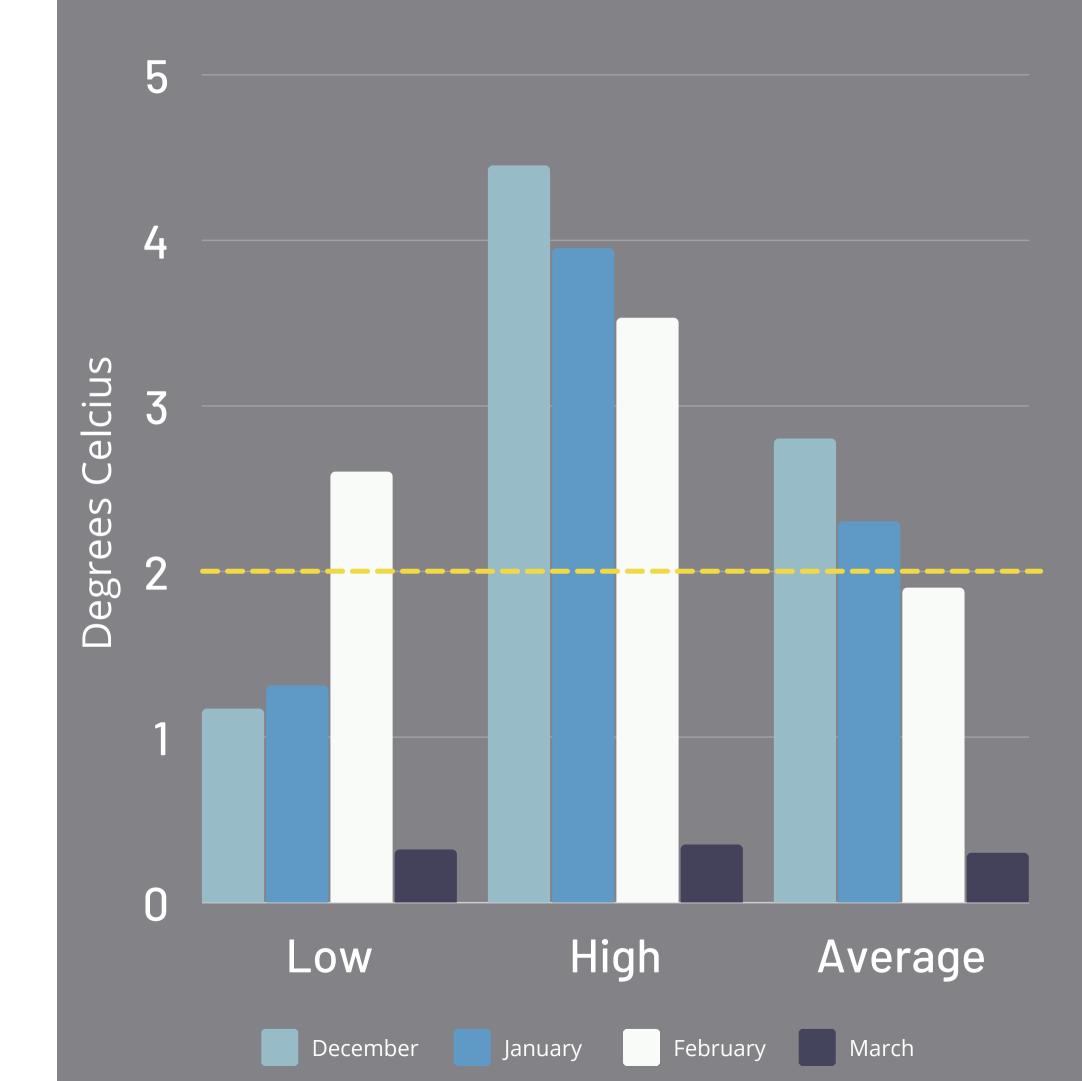


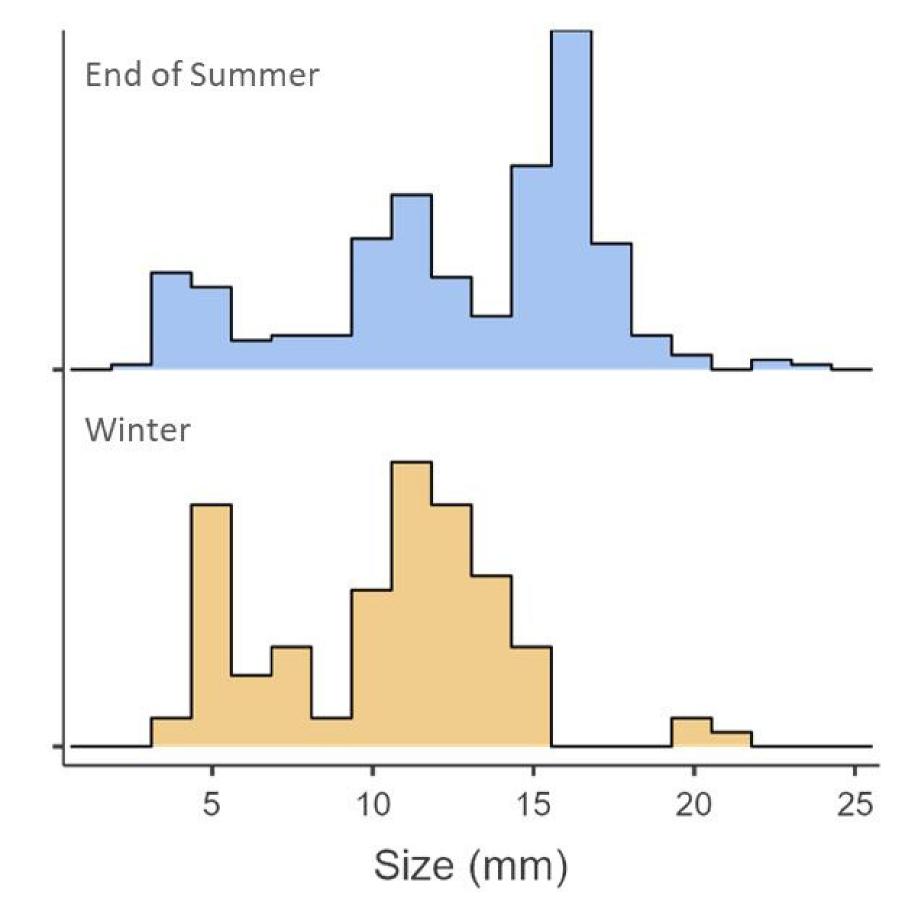


## What we've learned

#### Water temperatures drop below 2 degrees C over the winter months.

Graph shows lowest, highest and average temperatures live *Corbicula* were found at in December, January, February, & March.





Frequency

Reproduction is happening in Briggs Lake.

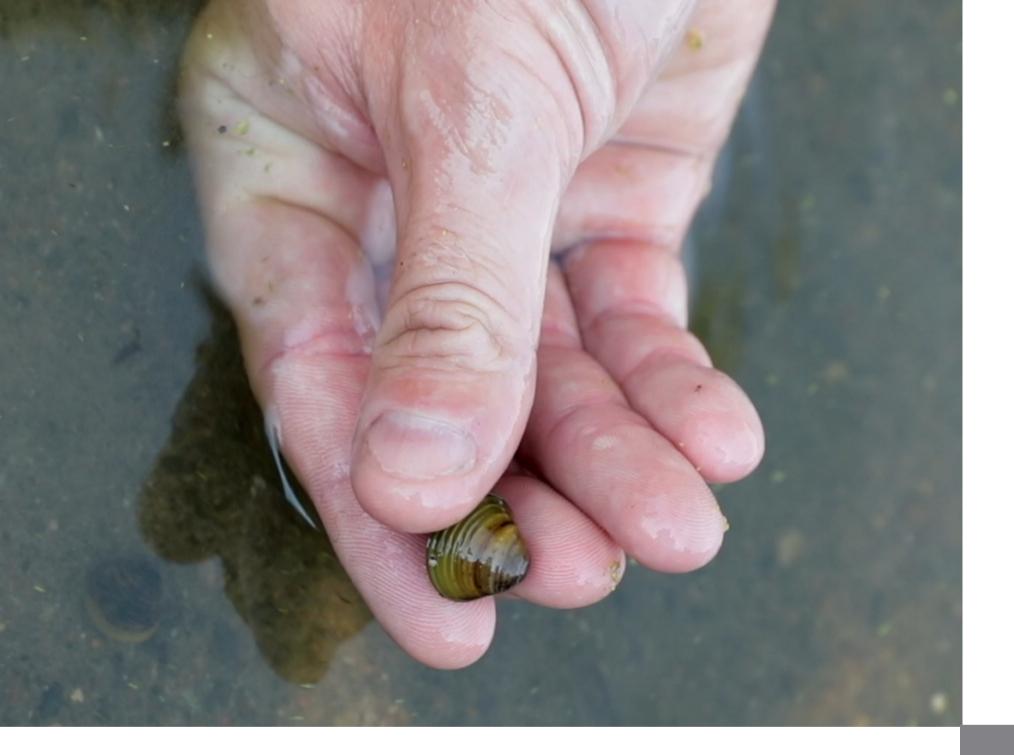
## What we've learned



#### Additional Reports in Big Lake September search recovered 15 live clams (and hundreds of dead, empty shells)



### What does it all mean?



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#### Minnesota Aquatic Invasive **Species Research Center**

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# Thank you!