# Living with Zebra Mussels

## **Ecosystem Alterations**

Zebra mussels are filter feeders that remove plankton from the water

- Increase in water clarity as plankton are filtered out of the water
- Increase in light penetration and plant growth as clarity increases
- Increase in blue green algae as zebra mussels avoid their consumption
- Decrease in native mussel population
- Decrease in food (plankton) for fish
- Changes in aquatic life abundance and species composition
- Decrease in dissolved oxygen during population die off events
- Exponential increase in zebra mussels in early stages of the population



# Recreational Alterations

- Submerged equipment becomes covered with zebra mussels
- Intake pipes/pumps become clogged with zebra mussels
- Consider storing boats on lifts fully out of water
- Shells may wash up on shore as zebra mussels die
- Need for footwear when walking in the lake
- Need for gloves when handling equipment stored in water (docks, lifts, rafts)



# **Contacts**

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# Identification

- · D-shaped shell
- Alternating light and dark bands
- Adults up to 1 1/4 inches in length
- Attach to hard surfaces by byssal threads (unique to invasive mussels)





# **Information**

- Life span is 3-9 years
- Microscopic when immature (called a veliger)
- Females can produce up to a million veligers a season that are free floating in water for 3-5 weeks
- Physical movement of water allows for veliger dispersal
- 2-3% of veligers reach adulthood
- Can reproduce at one year of age
- Reproduction occurs when the water temp is above 54 degrees Fahrenheit
- Mostly found in 6 to 40 feet of water
- Can filter up to 1 liter of water a day
- Do not prefer direct sunlight, most often on the underside of structures

### **Decontamination**

Follow these steps to prevent the establishment of other AIS and prevent the spread of zebra mussels to other lakes

- <u>Drain all water</u> from boats, ballasts, live wells, and any other equipment
- Remove all aquatic vegetation
- Remove (scrape) all adults off equipment (docks, lifts, boats)
- Briefly run motor out of water (Veligers can be in intake lines and can damage motors and could spread zebra mussels to another lake)
- Spray all equipment that contacted lake water with a bleach solution to kill veligers (2 T. of bleach/gallon of water)
- **<u>Dry</u>** equipment for 5 days
- <u>Dispose</u> bait in trash after use if it was exposed to lake water

