

Citizen Zebra Mussel Monitoring

PVC Dock Samplers

Materials

- Two 1-foot sections of 1.5-2" PVC pipe
- 10 feet of 5/16" polypropylene rope
- One brick or other weighted object

Construction

- Six inches from one end, drill holes through the top and bottom of the PVC pipe sections using a 1/2" drill bit
- Tie an overhand knot roughly 1.5 feet from one end of the rope.
- Thread the rope from the untied end through the holes drilled in one piece of pipe. Slide the pipe down the rope until it hits the knot.
- Tie another knot approximately 1.5 feet above the first pipe, and thread the second piece of pipe down the rope until reaching the knot.
- Tie a final knot directly above this second pipe to prevent it from moving up or down along the rope.
- If necessary, burn the ends of the rope with a lighter to prevent the strands from unravelling.



Zebra mussel shells with a dime for size comparison.



PVC dock samplers offer a simple and inexpensive method for the public to get involved in monitoring for zebra mussels in South Dakota waters.

Deployment

- Tie the short end of the rope to a brick or similar weighted object.
- Tie the long end of the rope near the end of the dock so that the line stays tight and the bottom pipe section is approximately 1 foot above the lake bottom.

Zebra Mussel Biology

- Zebra mussels can begin to reproduce in May in South Dakota waters. Adults can reach 2 inches in length, but juveniles are much smaller. Zebra mussel shells are triangular or "D"-shaped and typically have stripes.
- Unlike native mussels, Zebra mussels have byssal threads that allow them to attach directly to hard surfaces.

Monitoring and Reporting

- The samplers should be checked once per month from July to September.
- Please report all sampler checks, even if you don't see any mussels, by using the "Citizen Monitoring" link at SDLeastWanted.sd.gov

