



*CAUTION: Invasive Species*

## Zebra Mussel and Quagga Mussel

**Impact:** Zebra mussels and the closely related quagga mussels are both invasive voracious filter-feeding freshwater bivalve mollusks. They displace native species and attach to many surfaces, have sharp shells and are a nuisance to humans in addition to altering property values. As filter feeders they remove particles from the water affecting the food chain and ecosystem, effectively starving out many native zooplankton species. They attach to all hard surfaces including boats, water intake pipes, rocks, docks, etc. Once established they are nearly impossible to remove. Zebras are found in Lake Champlain, Lake George, Oneida Lake and in Vermont. Quagga are present in the Erie Canal and St. Lawrence River.

**How to Identify:** Zebra Mussels have D shaped shells which are typically fingernail size to less than 2 in. long with a striped pattern. Color can vary from light to dark. They attach to all objects including other mussels with Byssal threads. Zebra mussels can inhabit depths to 50 ft and quaggas up to 90 feet. Quaggas are typically up to 1 ½ in long and rounder than the zebra. Quagga color bands vary from black, cream to white and typically has dark rings over it shell that lighten near the hinge. Quaggas can be distinguished by laying them on flat surfaces, the zebra is stable while the quagga will topple.

Zebra Mussel



Quaggas Mussel



**Control:** Once established, very little can be done other than manual removal. They are introduced into new bodies of water through boat bilges, live wells, bait buckets, etc. An effective way to eliminate infestations has not been found. The best way to prevent the spread is to Drain, Clean and Dry all equipment that will come in contact with our waterways. Removal from water craft may require multiple treatments with hot high-pressure water. The good news is that both require high levels of calcium to form their shells which is limited in Schroon. Bad news is they can survive up to two weeks in moist conditions.