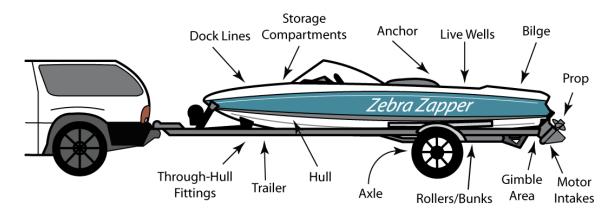
AIS: Where to Look

Aquatic Invasive Species tend to be very good at hiding in plain sight. Many Invasive Species are microscopic in their early life stages meaning that they can be transported in a very small amount of water. It is important as boaters, to make sure that we check our equipment for weeds and mud, as well as making sure that we are not transporting any water. The best way to ensure that all of the water is drained out of a boat is to **REMOVE THE DRAIN PLUG.** Below is a diagram showing areas that should be checked for plants, mud, and water.



By checking your equipment before you transport it, we can prevent the spread of invasive species and protect our valuable lakes and rivers. We owe it to future generations to preserve our pristine waters. Another way that we can slow the spread of invasive species is to be observant while on the water. If you notice anything unusual or out of place please report it to the local MN DNR Office or Hubbard County AIS contact, try to get GPS coordinates whenever possible.

Park Rapids DNR Invasive Species Specialist:

Nicole Kovar – 218-616-8102

Other DNR contacts can be viewed on DNR's Contact an Expert Website

Hubbard County AIS Contact:

Nicholas Macklem - 218-732-3890

See Next Pages for More Information





Images Courtesy of MN DNR and MAISRC

<u>Above:</u> Zebra Mussels — Cause economic harm in North America of over one billion dollars per year. Their huge populations attach to hard surfaces, clog intake pipes for water treatment/power plants, encrust boat motors/hulls, may greatly reduce lakefront property values, and their sharp shells cut swimmer's feet. Ecologically, they filter enormous quantities of microscopic algae and alter energy flow through aquatic ecosystems with potentially large impacts on fish populations and they smother and cause extinctions of native mollusks.

<u>Below:</u> Eurasian Watermilfoil — Grows rapidly and tends to form a dense canopy on the water surface, which often interferes with recreation, inhibits water flow, and impedes navigation. Eurasian watermilfoil is a particularly problematic exotic aquatic weed in North America, due to its ability to reproduce from fragments and spread rapidly, its high growth rate in a range of temperatures and environmental conditions, and its tendency to reach the surface and form extensive mats of plant at the surface, which can allow it to shade and outcompete native vegetation.





Images Courtesy of MN DNR and MAISRC



Image Courtesy of MN DNR

<u>Above:</u> Curly-Leaf Pondweed — Inhibits the growth of native species and interferes with recreational activities. It disrupts valuable services including stabilizing sediment, improving water quality, and providing support for fish and other animals.

<u>Below:</u> Faucet Snail — Is a host for three intestinal parasites that cause mortality in ducks and coots. When waterfowl consume the infected snails, the adult parasites attack the internal organs and cause lesions and hemorrhage. Infected birds appear lethargic and have difficulty diving and flying before eventually dying.



Image Courtesy of MN DNR





Images Courtesy of MN DNR and MAISRC

<u>Above:</u> Starry Stonewort — is an invasive green alga that has spread rapidly within some northern-tier lakes. It can grow tall and dense, forming mats on the surface that interfere with recreation and potentially displacing native plant species.

<u>Below:</u> Spiny Water Flea — is a microscopic freshwater zooplankton that invade lakes and can take over the bottom of the food chain, disturbing the ecology of the lake and presenting a serious potential threat to Minnesota lakes. They can also clog the eyelets of fishing rods, causing problems for recreationalists.





Images Courtesy of MN DNR and MAISRC