## It's time to separate Fact from Fiction regarding Zebra Mussels

Although PGOLID and PLPOA are at the forefront of education on how to maintain the quality of our lake as well as preventing the spread of AIS (Aquatic Invasive Species), we choose not to do that with scare tactics that aren't true, so here are some facts to dispel some of the rumors floating around out there. Zebra mussels were discovered on Pelican Lake in 2009 and some of those found were determined to be one or two years old because of their size. Zebra mussels have a 3 to 4 year life cycle in our area and go dormant at less than 55 degrees. They cannot survive freezing temperatures.

**Rumor:** Zebra mussels will clean the water allowing weeds to take over the lake.

**Fact:** While it is well documented that zebra mussels do filter and clean the water, its relationship to excessive vegetation growth and taking over lakes has yet to be documented in the real world even though the DNR and others had been promoting this theory. Pelican Lake has had two lake-wide vegetation studies, one in 2004 and another in 2011 which are on either end of the discovery of zebra mussels in 2009. These studies show no significant changes during the period that zebra mussels were introduced.

If this theory were true, lakes that are notably clearer than Pelican Lake like Big Cormorant, Bad Medicine and Ten Mile would have been taken over by weeds long ago. This, of course, is not happening and on Pelican a 30% increase in clarity would only offer more sunlight to a small increase in area. A key ingredient missing from the equation is nutrients and this is one of the reasons we promote best use practices to minimize the increase of phosphorous and other nutrients to our lake. The vegetation has grown taller this year on all area lakes because of the ice going off a month earlier than normal and the warmer than normal water temperatures, but this has very little if any relationship to zebra mussels. That scenario combined with the lower lake levels brings that same growth closer to the surface.

Rumor: Zebra mussels will destroy or drastically change our fishery.

**Fact:** We really don't know the long term extent of what might happen and neither does the DNR, but we do know from researching other lakes that have had zebra mussels much longer than Pelican Lake that this has not been the case. Sandy Pond in NY for example has had zebra mussels 20+ years and their fishery is doing just fine and weeds have not taken over their lake. Fishermen report that the walleye fishing on Lake Erie is as good as, if not better than it was 20 years ago. Fishermen do report that they've had to modify their techniques when the water becomes clearer because the fish spook easier, so if you haven't caught one in a while, you might need to change your technique.

**Rumor:** Children can't go in the water without being cut up by zebra mussels.

**Fact:** While zebra mussels do have some sharp edges and are one more thing in the water that has the potential to cut through the skin along with sharp rocks, other shell fish, and other objects. This does not seem to be a common occurrence. Pelican Lake Sailing School has over 30 kids per year in and out of the water almost every day of the week and in 3 years one student cut his foot on something in the water. Castaway Club has 3,500 kids per year attend their camps and the waterfront director reports that this year there were 4 kids that required attention from cuts by something in the water. So while water shoes are a good idea when you don't know what's in the water, this is not an everyday occurrence.

**Rumor:** Zebra mussels damage boat motors and hulls.

**Fact:** On Pelican Lake, because we've promoted a few common sense procedures, this has not been a problem. Almost all of the boats are on boat lifts and of no risk at all. Of the few that are moored, most keep their engines tilted out of the water and/or have copper based bottom paint to minimize the risk. To date, there has been no reported damage to boating equipment on Pelican Lake. We have one big advantage the southern lakes don't have and that is a long freeze cycle and the requirement to remove all boats, docks and lifts from the water.

**Rumor:** Zebra mussels will clog irrigation pipes and pumps, rendering them useless.

**Fact:** Again, we are fortunate to have a long freeze cycle that lakes in the moderate climates don't have. Most of the piping is plastic which the mussels have a harder time attaching to. In the short time they would have to attach and grow inside the system, they would still be quite small and then die and freeze dry over winter in the drained piping. To date there have been only a couple of minor problems reported with zebra mussels building up in pipes that may or may not have taken care of itself over the winter.

With just a few common sense precautions, Pelican Lake will continue to be one best lakes in the area. Pelican Lake is an incredibly diverse lake with many good things going for it. It is one of the premier lakes in the area because of all the opportunities it offers regarding fishing, sailing, swimming, other water sports, or just enjoying the pristine surroundings and will remain that way into the foreseeable future.

Pelican Lake Property Owners Association