

“The Truth About Zebra Mussels and Clearer Water”, an article by Jody Tucker, District Manager of the Turtle River Watershed Conservation District caught my eye this weekend. It had always been my understanding that once a body of water was infected with zebra mussels, it had to run its course and the result would be a clearer, cleaner body of water that would embrace wildlife and almost ‘start over’. Well, I was wrong! Let me give you a bit of background:

Zebra Mussels are an invasive species of mollusk that arrived in 1988 in Detroit aboard a fishing vessel from Europe. The nasty little beast has since managed to eat its way through most of the U.S. and Canada. Here in Manitoba we are experiencing an infestation that threatens our wildlife, our water supply, our recreation and our economy. The thing is, we have to understand that adult female mussels can produce around 500,000 eggs per year! The eggs hatch into what is called ‘veligers’ which are free living microscopic larvae that float around for 2 or 3 weeks before settling down and glomming on to any hard surface using tiny fibres and then mature within a year. They can live for up to five years, can latch onto surfaces up to 45 feet deep and can form layers up to 6 inches thick with 700,00 mussels per square meter. That is a very simplified, brief description of WHAT they are, but if you understand their ability to colonize you can understand how they impact water bodies and shorelines by attaching themselves to rocks, trees, water intake pipes, boat propellers, docks etc. They cut feet of people and pets on the beaches and in the water and massive amounts of these shells wash up on the beaches.

Human activity, says Jody, is by far the main reason for the spread of zebra mussels in Manitoba’s lakes. Adult mussels can live out of water for seven days and the ‘veligers’ can be transported in live wells, boat trailers, fishing gear, etc so we must learn to practice prevention. The Department of Natural Resources in Minnesota says that they can survive out of water for 21 days if the conditions are wet. The best way to deal with them is to follow a simple routine:

- **Clean** watercraft by hosing down (the hull, drive unit, trim plates, trolling plates, prop guards, transducers, centerboards, rollers, axles, anchor and rope and trailer) and remove all aquatic plants. If you find mussels attached to your boat, use hot water. (Sometimes a do-it-yourself car wash can come in really handy!)
- **Drain** all water (including the motor, live well, bilge and transom wells) and remove drain plugs and keep them out during transport.
- **Trash** all leftover bait.. wrap them in a bag and put them in the garbage.

- **Dry** docks, lifts, swim rafts and other equipment thoroughly.

Sounds like a lot of work, but know this... once we are infected... it's done. There is no going back, and there is no known cure. In the U.S., University and Government researchers are working on one, and have come up with some interesting solutions. At the University of Minnesota researchers have discovered some treatments that have the ability to exterminate more than 90% of populations in water temperatures of 45 degrees Fahrenheit, but are still trying to get the correct combination to kill substantial numbers without affecting other species.

And to get back to the clearer, cleaner water.. Jody Tucker says clear does not mean clean. She says that although the mussels filter as they feed, this extreme, indiscriminate filtering often causes algal blooms that are harmful to people, pets and other wildlife. That clearer water also promotes vegetation growth on the lake bottom which can choke out beaches and get caught in boat motors. This vegetation growth can occur in deeper waters due to the ability of the sunlight to penetrate. And that extreme filtering also annihilates planktons that form the base of the food chain.. no plankton, no larger organisms, no minnows, no game fish! So basically, if you eliminate the smallest creatures by filtering them out, you affect the entire aquatic ecosystem of a lake from the bottom up, and can decimate sport and commercial fish stocks. So, really.. wash your boat.. it's so simple.. and you get to enjoy water sports and fishing too!