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# Quagga / Zebra Mussels

woke up covered in sweat screaming: No, no, no! My wife Susan, the Admiral, asked if I was having the same nightmare about what my life was like before we met. I thought for a second and responded: "Yes, sweetheart, that's exactly what I was dreaming." (I lied.)

The real dream had to do with Quagga and Zebra mussels invading California's lakes and rivers. I dreamed I had the wife, two (fictional) kids, the dog, all camping supplies and the ski boat all packed up, fueled up and ready to go. We got to our favorite lake for a week of camping, fishing, skiing/wakeboarding and just plain having family fun on the water during the hot summer months, but the lake was closed. No boating at all! We went to another and it was closed, and another. All the lakes were closed to boating. We must be in Hell! (That's when I woke up.)

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#### Where Did They Come From?

Zebra and Quagga mussels are native to the (fresh water) areas of the Ukraine and Russia. Zebra mussels were first discovered in the Great Lakes in 1988, and a year later Quagga mussels were discovered in the same area. It is believed they arrived in America via ballast water discharge from a seafaring vessel.

### What's The Big Deal?

Quagga/Zebra mussels pose serious threats. Quagga/Zebra mussels may be tiny, but are highly destructive in freshwater systems because they can:



Various-sized Quagga mussels.



- Reproduce quickly and in very large numbers up to 1 million larvae per spawning season.
- Colonize on both hard and soft surfaces from the water's surface to more than 400 feet down, including boat hulls, propellers, anchors, docks and boat trailers.
- Coat submerged surfaces such as piers, pilings, rocks, cables, boat ramps, docks, lines, pipes and fish screens, increasing maintenance costs.
- Infiltrate and damage boat engines, bilges, live wells and steering components.
- Threaten the state's water treatment plants, hydroelectric plants and reservoirs.
- Clog municipal water intake structures and obstruct the flow of drinking water.
- Cost taxpayers millions of dollars to repair damaged pipes and water transport facilities.
- Wreak havoc on the environment by disrupting the food chain by filtering the water column of phytoplankton and out-competing other species, including sport fish and endangered species.
- Change water conditions, causing heavier aquatic plant growth, oxygen loss and fish kills.
- Result in infested waters being

closed to boating and fishing altogether.

#### **Risks To Boats**

Quagga/Zebra mussels pose serious risks and could ruin your boat. These mussels produce larvae (called veligers) too small to see with the naked eye. Newly settled young feel like sandpaper on smooth surfaces. The mussels attach to anything – hard or soft – that comes into contact with infested water.

Any water onboard can serve as a reservoir or "pocket" in which they can survive. As they grow they can:

- Ruin your engine by blocking the cooling system and causing overheating.
- Increase drag on the bottom of your boat, which would reduce speed and waste fuel.
- Jam your boat's steering equipment.



Various-sized Zebra mussels.

• Require you to scrape and repaint your boat's hull.

### What Can You Do?

What can boaters do to stem the infestation of these mussels?

- Be aware that moving a boat from infested waters to other waters could spread Quagga mussels or its sister species Zebra mussels.
- Thoroughly wash the hull of each fishing boat, sailboat or personal watercraft once it leaves the water. This is especially important if the vessel has been moored for more than a day.
- Use hot water from a high-pressure hose when possible during all cleaning operations. The use of chlorine in the cleaning process is also recommended.
- Thoroughly wash any watercraft trailer used to remove a boat from



a lake, river or waterway. Use hot water from a high-pressure hose when possible or use chlorine in the cleaning process.

- Physically inspect all exposed surfaces. The presence of Quagga mussels will feel like sandpaper to the touch.
- Remove aquatic plants from boat, motor and trailer. Check all underwater fittings and equipment, such as rollers, axle, bilge and trailer, and above-water equipment, such as anchors, live wells and docks. Place aquatic plants in the trash if possible.
- Drain any lake or river water from equipment including the motor, bilges, live wells, bait buckets

and coolers. Ensure all drained areas are dry.

- Ensure the watercraft's lower outboard unit is drained and dry.
- Dispose of unwanted live bait on shore or in trash.
- All vessels should be cleaned, drained and dried for five days in the hot summer and up to 30 days in cool, moist weather – especially if traveling from Southern California.
- For personal watercraft, impeller areas can contain Quagga and Zebra mussels and aquatic plants. Once upon the trailer, run the engine for five to 10 seconds to blow out excess water, mussels and plants. Before leaving water access, inspect and remove any mussels or plants from intake, steering nozzle, hull and trailer.
- Exercise patience at Department of Fish and Game (DFG) vehicle

checkpoints and Department of Food and Agriculture border inspection stations.

## **Kevo's Tip:**

Hey, I like mussels as much as the next guy: steamed in garlic/butter sauce and as fresh as possible. But these little buggers are going to cause us a lot of grief if they infest Nor Cal's rivers and lakes. We can't eat 'em and eradicating them is near impossible. There's an old proverb: "An ounce of prevention is worth a pound of cure." This seems appropriate for this situation.

Special thanks to Ms. Alexia Ratellack, Public Information Officer, DFG. For more info on this subject visit www.dfg.ca.gov.

As always, feedback is appreciated. I can be reached at 925/890-8428 or kevo@yachtsmanmagazine.com. 🕿