

Monitoring Madness 9.24.15 at Devil Track Lake - Results



Attendees: Joe Carlson, Chuck Futterer, Biz Clark, Laurel Wilson, Amanda Weberg

Objectives: Survey spiny waterflea (SWF) sampling techniques, trap for crayfish

Materials: One 80 micro zooplankton net with marked 75 foot rope, bucket, bottles, two 20 feet weighted fishing line, 10 crayfish traps baited with sucker flesh, boat, captain, lake map, smiling faces

Results: One 10 minute horizontal ZP net tow at the water surface at 3 mph yielded too full of a net to pick out much besides phytoplankton. Two vertical tows at 30 and 35 feet deep produced visible SWF. A third horizontal tow weighted to an anchor at 25 feet for 10 min and ½ mph had similar results to the vertical tows. Visible zooplankton harvested: *Holopedium gibberum*, *Daphnia spp.* and *Leptodora kindtii*.

No visible SWF were found on the weighted lines being trolled behind the boat.

10 baited traps were set along the shoreline and over 100 native crayfish were caught and released.

Conclusions: As of 9.24.15 Devil Track Lake does not contain rusty crayfish. ZP net tows are more effective at less than 5 minutes per tow. Vertical ZP net tows near the deepest part of the lake are the fastest and easiest way to capture SWF. Trolling for SWF was not effective. More research is needed to find an easy and effective way for citizens to self-monitor for SWF.

Photos: Top Row L – full ZP net from first 10 minute horizontal tow M – Joe, Chuck, Biz checking the fish lines R - *Holopedium gibberum*. Middle Row L – Native crayfish in the trap R – SWF in the center. Bottom – Native crayfish – note the small size, rustys are 3x as big.