

Clearwater Resource Council
Aquatic Invasive Species Prevention Program
Tuppers Lake
9/28/2015

Tuppers Lake is located in Missoula County in Township 16N, Range 15W, Section 8, at elevation 4321'. It is surrounded partly by public land and partly by private land. There is one campsite in the public area; no put-ins or other parking areas. The lake is about 2 miles from Highway 83. Montana Fish, Wildlife, and Parks has not defined any boating regulations for this lake. The lake is surrounded by tall shoreline vegetation except along the road. We located the least steep approach to the lake from the road and launched the canoe there.



There are no inlets to Tuppers Lake. It is essentially a deep hole in a marshy area. There is an extensive marsh on the south end of the lake which leads to the outlet. It is unclear whether the outflow directly reaches Placid Lake or empties into another marshy area. There are signs of current beaver activity in the south marsh.

As we have driven by this lake many times, we did not make a specific scouting trip.

We visited the lake on September 28th, with our canoe, to collect samples and observe the aquatic vegetation. There were no other people, vehicles, or watercraft present at all the entire visit. Nuphar and a reed-like plant were present where we put-in.

We first paddled along the eastern shore to the south. At the south end there are extensive stands of cattails. We observed Nuphar and a tapegrass-like plant along the south shore. The water is dark and the bottom is covered with loose, dark sediment that appeared to be decaying plant material. We continued paddling clockwise along the shore to the northeast end of the lake. There we deployed the plankton net, rigged for horizontal towing, and paddled a transect westward approximately 300' to the center of the lake. We paddled south and repeated the process, paddling eastward. Then we returned to the center of the lake. At mid-lake we measured Secchi depths of 9'7" and 10'3". The water color at 2' was brown, but at 7' was reddish. The 0.5m water temperature was 13°C. The sky was clear, the surface was smooth with no breeze. Air temperatures were cool. We took two 20' vertical tows at mid-lake. The sample material contained a lot of red zooplankton and a lot of small worm-like organisms about an inch long with eyespots that may be damselfly larvae.

The contents of all four (4) tows were composited and prepared for cross-polar microscopy to search for Dreissenid veligers and for eDNA testing for Dreissenid mussels and Eurasian Water Milfoil.

We collected and photographed samples of bladderwort, a floating-leaved pondweed, a slender-leaved pondweed, and a pondweed similar to Richardson's pondweed. None were in large numbers.

Tuppers Lake is an unlikely site for an introduction of aquatic invasive species. It is a very uninviting lake, in my opinion. There are many more far attractive lakes in the area to visit.

As we left Tuppers Lake, we stopped at the outlet culvert marked on the map. There was a beaver dam that had been breached. The water level visible on the plants above the dam was 12-15" above the current water level. There was sign of current beaver activity in the area with partially gnawed trees and one tree with green needles that had been felled.

Site List

Lake	AIS Site	N Latitude (DMS)	W Longitude (DMS)	H V	Length (ft)	Description
Tuppers (TU)	1	47° 09' 25.4"	113° 31' 24.1"	H	300	MLD
Tuppers (TU)	2	47° 09' 21.3"	113° 31' 25.4"	H	300	South-mid transect
Tuppers (TU)	3	47° 09' 22.8"	113° 31' 24.3"	V	20	North transect

Shoreline vegetation at put-in



Close-up of shoreline vegetation



Beaver lodge (active or deserted?)



Bladdarwort



Floating-leaved and Richardson's-like pondweeds



Slender-leaved pondweed



Breached beaver dam, waterline



Sign of beaver activity

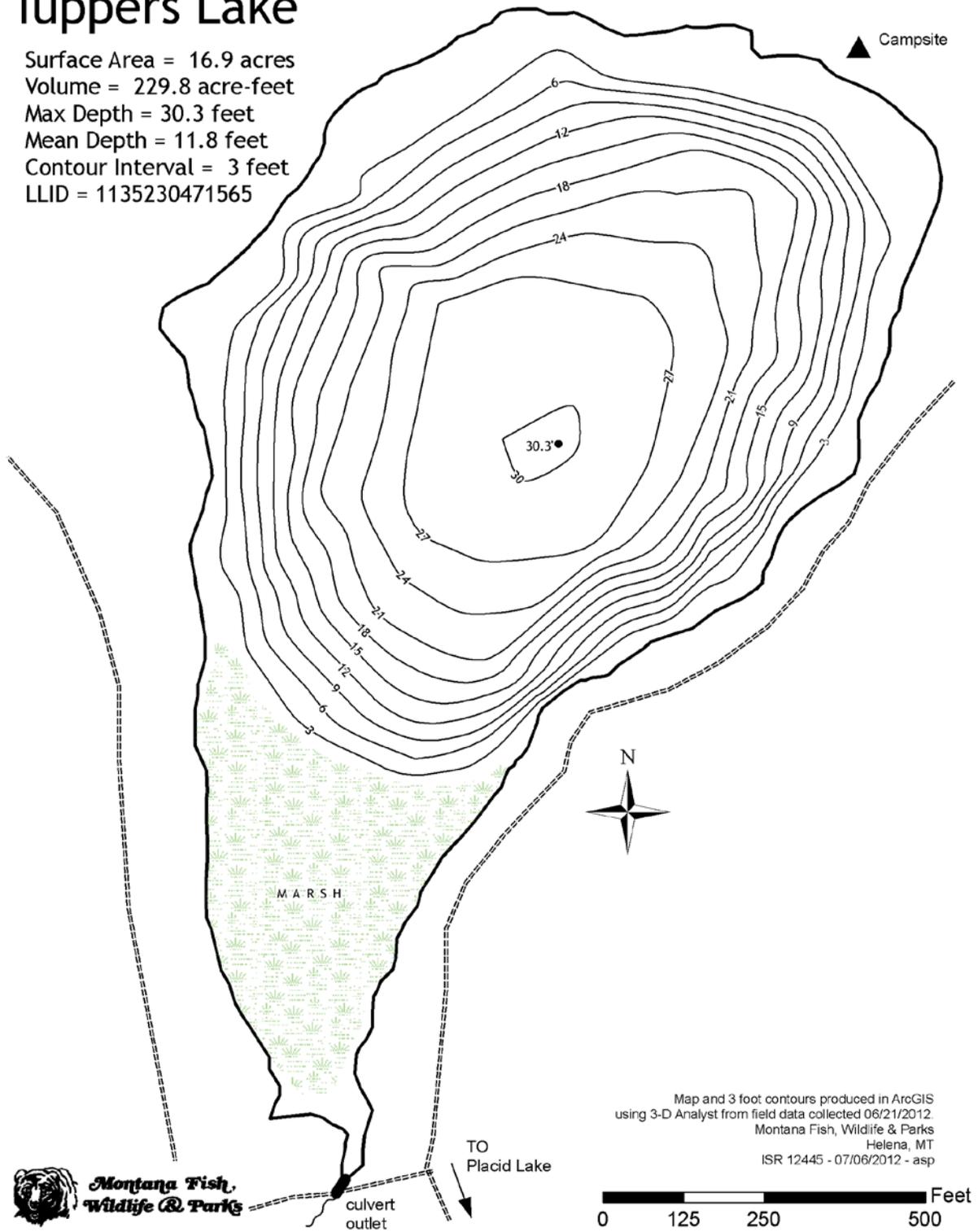




2015 Tuppers Lake

Tuppers Lake

Surface Area = 16.9 acres
Volume = 229.8 acre-feet
Max Depth = 30.3 feet
Mean Depth = 11.8 feet
Contour Interval = 3 feet
LLID = 1135230471565



Map and 3 foot contours produced in ArcGIS
using 3-D Analyst from field data collected 06/21/2012.
Montana Fish, Wildlife & Parks
Helena, MT
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