

Clearwater Resource Council
Aquatic Invasive Species Prevention Program
Spook Lake
7/19/2015, 8/23/2015

Spook Lake is located in Missoula County in Township 15N, Range 16W, Section 2, at elevation 5627'. It is surrounded entirely by U.S. Forest Service land. There are four campsites along the northern shore of the lake and no toilet facilities. There is a single access road that is dirt and has several exaggerated humps that would make it difficult to trailer a boat or camper. Montana Fish, Wildlife, and Parks (MTFWP) boating regulations restrict use to manual or electric powered watercraft.



There are no inlets to the lake. The one outlet feeds into Boles Creek which joins with Placid Creek and enters Placid Lake along the southwest shore.

We first visited the lake on July 19th, to scout the access to the lake. There was one inflatable raft with a small electric motor on the lake. Several people were camping at one of the campsites.



We returned on August 23rd, with our canoe, to collect samples and observe the aquatic vegetation. There was a single group of about 6 people (and a dog) fishing from the shore at the northern-most campsite.

The first notable observation was the many, many red dragonflies that were mating.

We launched the canoe at the eastern most campsite which is closest to the access road. We circled the entire shore, clockwise, observing aquatic vegetation. The lake bottom is muddy with no rocks.

The most predominant plant was a grass-like plant that grew several feet longer than the depth of the water, but couldn't support itself above water. It formed floating mats in many places around the lake, visible in the left edge of the left photo of the lake and the right edge of the right photo of the lake. Central in both photos is an emergent reed-like plant with a round stem. Nuphar was also present in several locations. We also observed one of the floating-leaved pondweeds, identification unknown. (See photos). None of the plant species was found in any great abundance.

We took 3 100' plankton net tows along the west, north, and southeast shores, and 2 20' vertical tows in the deepest hole. The samples had a lot of red zooplankton. Composite samples were prepared for cross-polar microscopy to search for Dreissenid veligers and for eDNA testing for Dreissenid mussels and Eurasian Water Milfoil.

The 0.5 m water temperature at mid-lake was 18°C. Air temperature was in the 70's °F. Secchi depths were 10'2" and 10'6". The water color at 2 feet was clear. The sky was clear; full sun; no wind.

We tried to locate the outlet and determined that the lake level was too low for any outflow.

Spook Lake is an unlikely site for an introduction of aquatic invasive species. It is about 5 water miles from Placid Lake, so it is also unlikely that aquatic invasive species, if established in Spook Lake, would find their way to Placid Lake.

Site List

Lake	AIS Site	N Latitude (DMS)	W Longitude (DMS)	H V	Length (ft)	Description
Spook (SP)	1	47° 04' 22.5"	113° 34' 17.4"	V	20	Center Hole
Spook (SP)	2	47° 04' 22.6"	113° 34' 23.8"	H	100	West shore (outlet)
Spook (SP)	3	47° 04' 26.97"	113° 34' 17.75"	H	100	North shore
Spook (SP)	4	47° 04' 21.93"	113° 34' 11.39"	H	100	SE shore

Shoreline vegetation in background
Nuphar in the foreground



Frogs and floating grass-like plant



The most predominant plant



The outlet was completely dry.
David standing in the dry channel bed.



This plant measured 67"

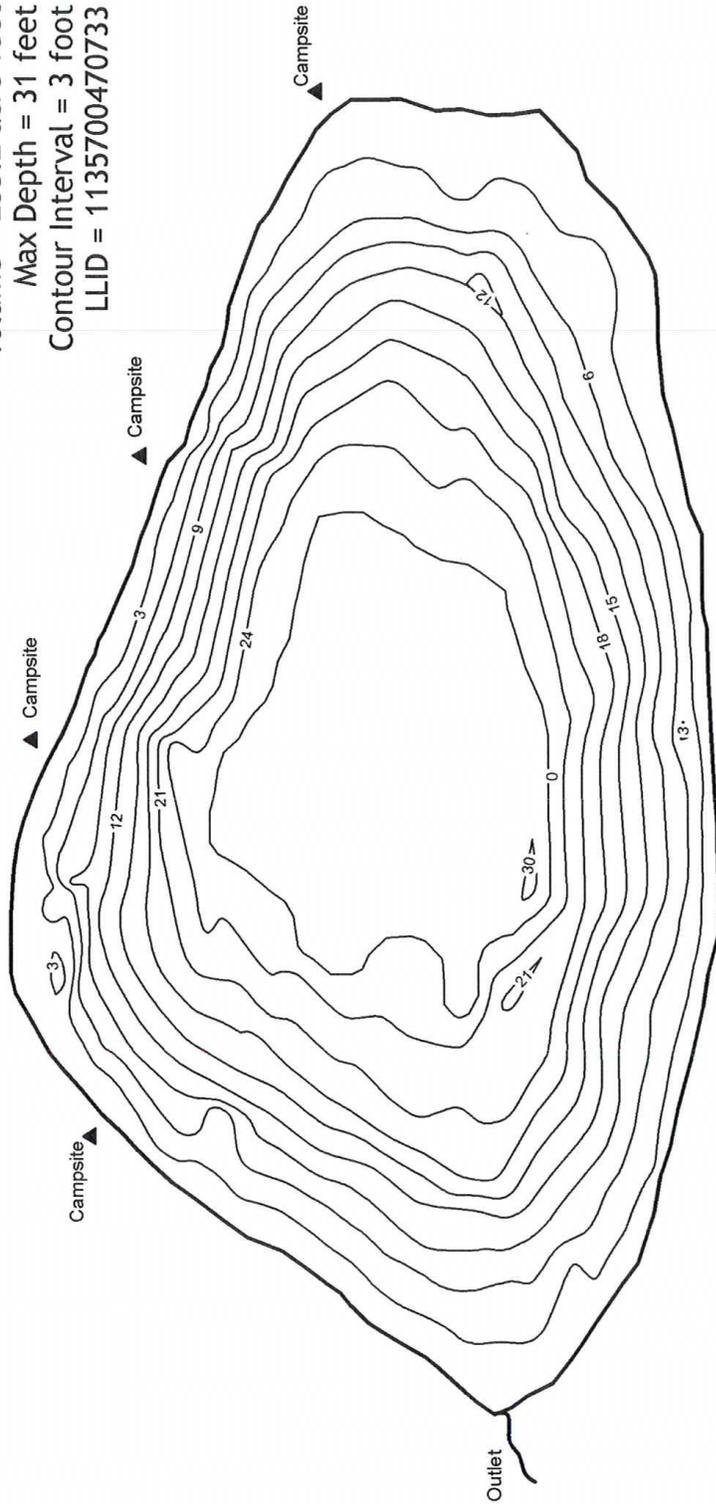


One of the native pondweeds



Spook Lake

Surface Area = 15.8 acres
Volume = 235.2 acre-feet
Max Depth = 31 feet
Contour Interval = 3 foot
LLID = 1135700470733



Map and 3 foot contours produced in ArcGIS
using 3-D Analyst from field data collected 06/15/2005.
Montana Fish, Wildlife & Parks
Helena, MT
ISR 9770 - 01/18/2011 - asp