



Bobby Lake
Deschutes County
Deschutes Basin

Location	
Area	91 acres (36.8 hect)
Elevation	5,408 ft (1,648.4 m)
Type	natural lake
Use	recreation
Location	13 mi W of Davis Lake, 70 mi SW of Bend, in Deschutes N.F.
Access	by trail from Waldo Lake Rd from W or trail from F.S. Rd from E
USGS Quad	The Tw ins (24K), La Pine (100K)
Coordinates	43° 39' 43" N, 121° 57' 59" W
USPLSS	township 22S, range 06E, section 14

Bobby Lake is located immediately east of the Cascade Mountains divide at an elevation of 5408 feet above sea level. Although it is located in the headwaters of the Deschutes River Basin, the closest access point is from Waldo Lake Road in the Willamette River Basin. The lake lies in a rugged area of volcanic terrain that was also affected by glaciation during the Pleistocene Epoch. Most of the runoff in this region is subsurface through permeable volcanic material. No surface streams enter the lake, and the outlet stream, Moore Creek, is intermittent. Vegetation in the drainage basin is a dense coniferous forest, typical of the High Cascades at this elevation. The lake is accessible only by trail and does not receive very heavy recreational use. However, fishing is consistently good; eastern brook trout are taken occasionally up to 16 inches, and it is a good fly-fishing lake with lots of shallow water.

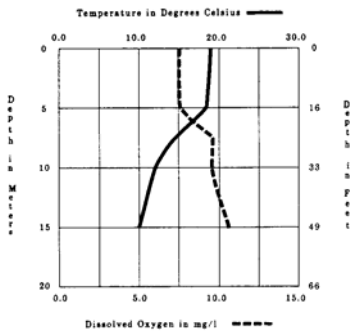
The shape of the lake is irregular and consists of several small interconnected basins of very different morphology. The upper, or western, end has a larger surface area, and contains the deepest basin in the lake, reaching a maximum depth of nearly 60 feet. The eastern end of the lake includes a smaller and somewhat shallower basin, and, near the outlet has an elongate and very shallow bay. The water column develops a distinct thermal stratification with a thermocline at a depth of about 20 to 26 feet (6 to 8 meters). A few submerged macrophytes develop in shallower areas, particularly in the shallow bays. The water in the lake is very low in chemical constituents; the concentrations of ions and the alkalinity and conductivity are less than in most Oregon lakes, but are typical of other high elevation lakes in the Cascades. The concentrations of phosphorus and chlorophyll are very low, and water transparency is excellent. Bobby Lake is very oligotrophic, nearly ultraoligotrophic, and has very little biological productivity.



Source: Oregon National Guard, 1981-82. View looking Southwest

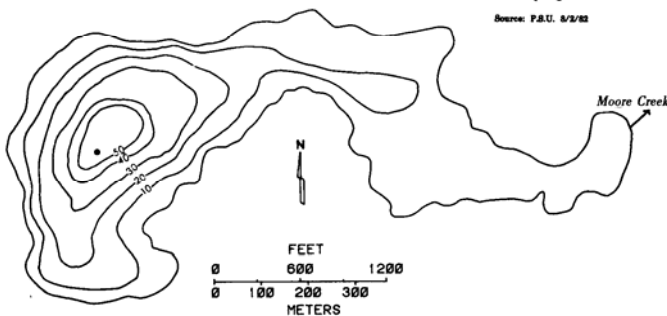
Drainage Basin Characteristics			
Area	3.2 sq mi (8.3 sq km)	Relief	steep
		Precip	50 in (127 cm)
Agriculture			
Land Use %	Forest	Range	Water
	95.2	-	3.9
		Irrig	Non Irrig
		-	-
		Urban	Other
		-	0.9
Notes	Other - Rock outcrops		
Lake Morphometry			
Area	91.0 acres (36.8 hect)	Depth	59 ft (18.0 m)
		Average	14ft (4.4 M)
Ave/Max Depth Ratio	0.240	Volume	1,301 acre ft (1.61 cu hm)
Shoal area	52%	Volume factor	.73
Length of Shoreline	2.6 mi (4.2 km)	Shape factor	1.96
		Retention time	indet.
Notes	-		
Water Quality			
Trophic status	oligotrophic		
Sample date	08/02/82	Temp	66.2F (19.0C)
Transparency	44.9 ft (13.7 m)	Phosp (mg/l)	0.004
		Diss. Oxygen (mg/l)	7.5
		Chlorophylla (mg/l)	0.3
Alkalinity	2	Conductivity (umhos/cm)	7
pH	7.0		
Major Ions	Na	K	Ca
	0.6	0.3	0.7
		Mg	Cl
		0.1	0.7
		SO4	Other
		0.3	
Notes	-		

TEMPERATURE AND OXYGEN



BATHYMETRY

Depth in Feet
 • Sampling Site
 Source: F.S.U. 8/2/82



DRAINAGE BASIN
 --- Approximate Boundary

