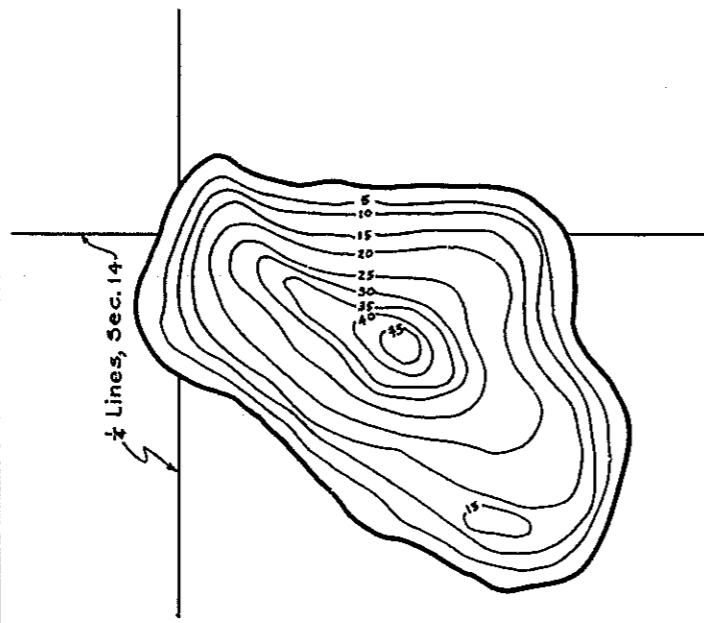


R-9
 U.S. Department of Agriculture
 Forest Service
 LAKE AND STREAM SURVEY
JOYCE LAKE - PORCUPINE LAKE
 Ottawa National Forest
 Michigan

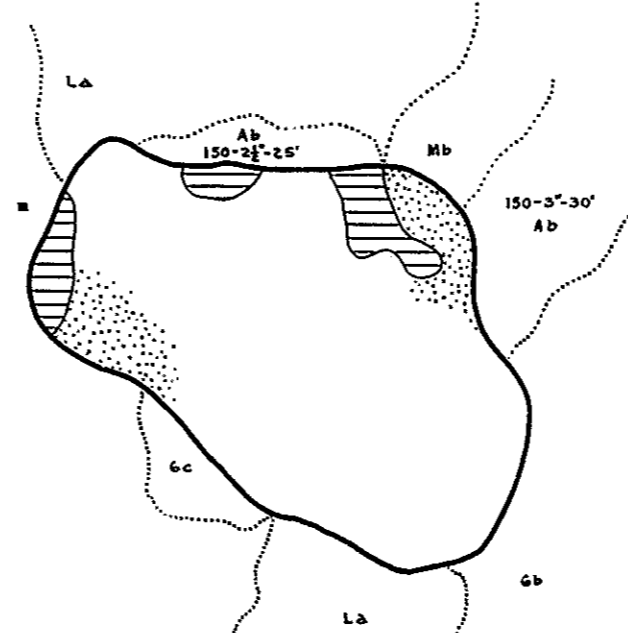
Joyce Lake Area 23 Acres
 Porcupine Lake Area 28 Acres
 Joyce Lake Length of Shoreline .75 Miles
 Porcupine Lake Length of Shoreline .93 Miles

Scale: 16 Inches = 1 Mile

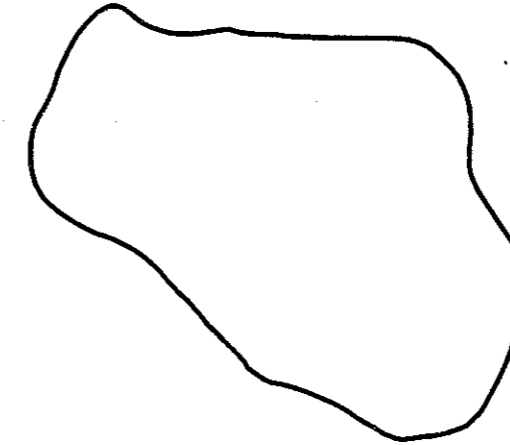
Joyce Lake
 Location: Sec. 14, T. 45 N. R. 40 W.



Contour Map
 Contour Interval = 5'

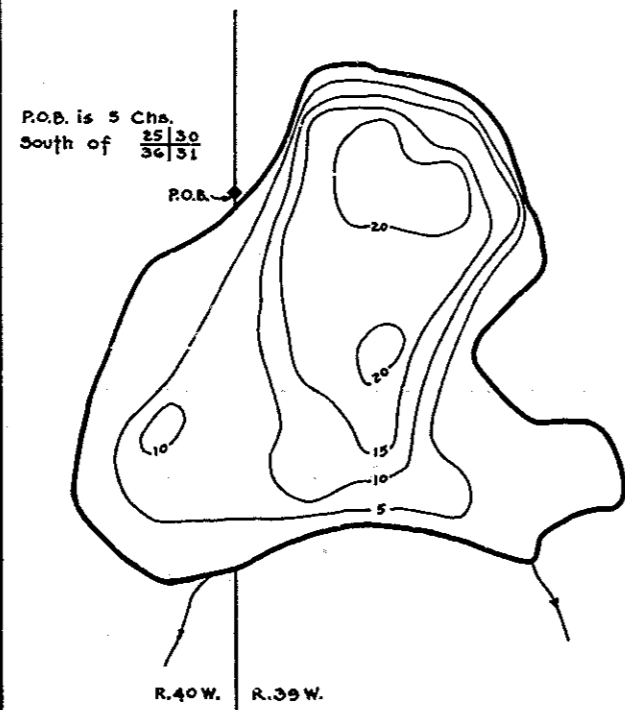


Cover Type And
 Lake Bottom Soil Type Map

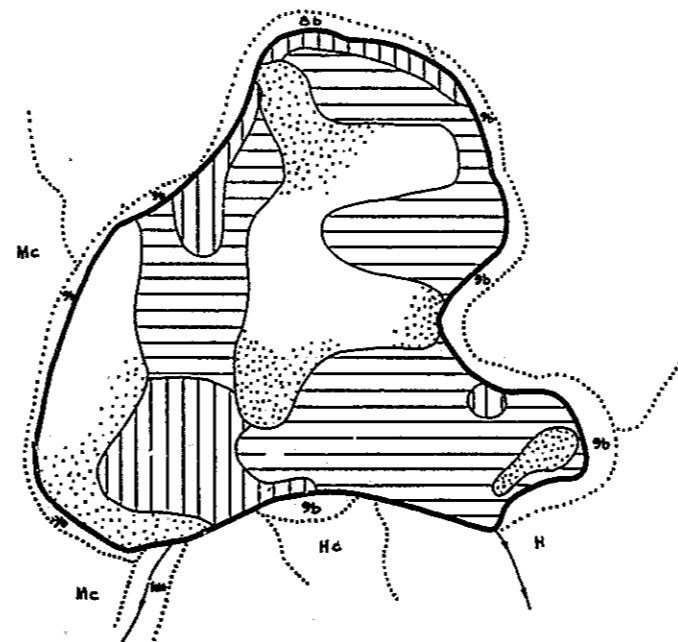


Aquatic Vegetation Map

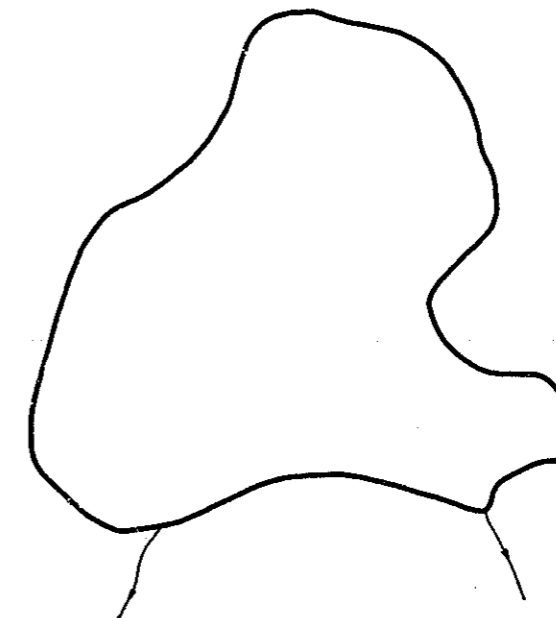
Porcupine Lake
 Location: Sec. 31, T. 45 N. R. 39 W.
 Sec. 36, T. 45 N. R. 40 W.



Contour Map
 Contour Interval = 5'



Cover Type And
 Lake Bottom Soil Type Map



Aquatic Vegetation Map