

17-1-812

PROGRESS REPORT
of
SUMMER FIELD WORK

STUDY OF THE ECOLOGY
of the
SPRUCE - FIR - BIRCH FOREST TYPE
of
ISLE ROYALE NATIONAL PARK

December 4, 1974

by

Robert A. Janke

Project Chief Investigator

Logistics

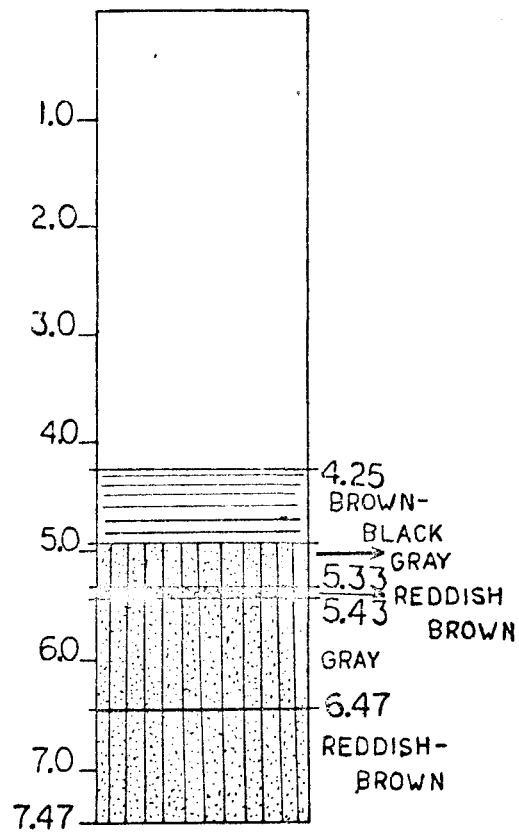
This year's phase of the project is concerned primarily with determining (1) the general nature of the forests of Isle Royale during the past few centuries and (2) the history of fire during this time. Graduate student Randall Raymond and undergraduate student Dennis McKaig were hired to conduct the field research during the summer of 1974. I traveled to Isle Royale via the motor vessel Ranger III on May 21 and spent the next three weeks traveling throughout the park gathering information on various forest stands, looking for future study sites, and helping the field workers launch their summer work program. Raymond and McKaig arrived on May 28, set up camp, and began their field sampling. I remained in the park throughout the summer as an employee of the National Park Service. I was therefore readily available to the field workers for supervision and consultation throughout the entire field season. Dr. Ronald Kapp, palynologist on the project, spent ten days in the park during July, assisting with the extraction of cores from inland lake sediments. Raymond and McKaig returned to the mainland on August 24.

Sampling

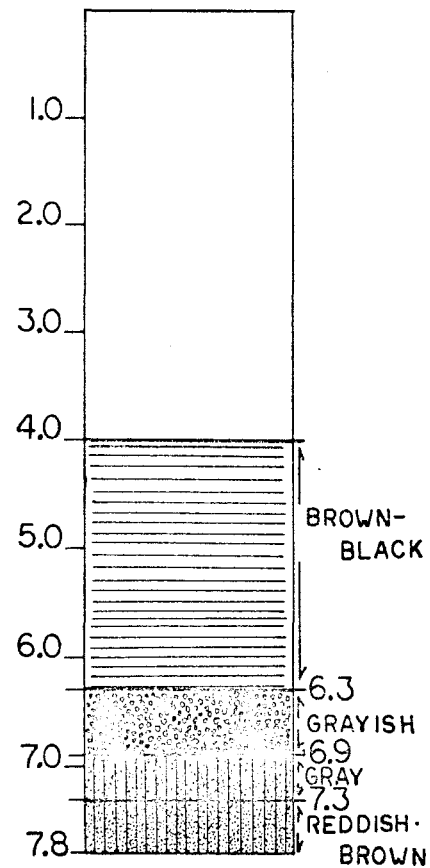
The field work consisted mostly of a continuation of projects begun during the 1973 field season. Four more borings into the upper sediments were made in 5 of the 12 lakes which were bored in 1973. This should give us ample material for pollen and charcoal analysis as well as for radio carbon dates. As in the previous season, borings were made from a raft comprised of two rubber inflatable canoes lashed together, side by side. A Livingston piston sampler was lowered into the lake bottom from a point between the two canoes. The canoes and sampling equipment were packed in on foot to all of the inland lakes sampled.

Sampling along section lines for comparison of present-day vegetation with that described in the original land survey notes was continued from the summer of 1973 and completed. Trees were sampled by the quarters method at random--by selected points along the section lines. Sampling covered every other north-south section line in the park and excluded those portions of these lines within swamps or other wet areas or that were above the 800 foot contours where the maple-yellow birch rather than the spruce-fir-birch forest type is likely to be the potential climax vegetation.

SISKIWIT LAKE



HARVEY LAKE



OTTER LAKE

