

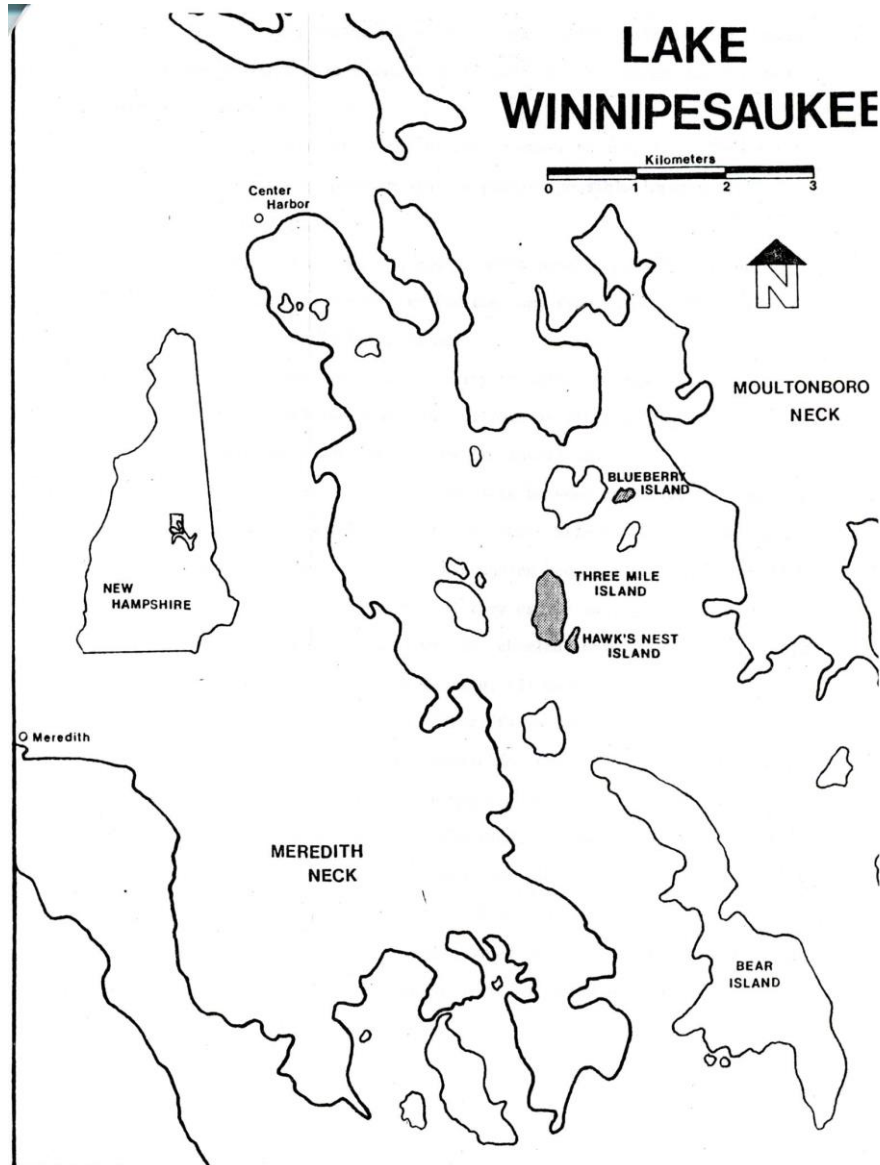
40 Year Overview of vegetation sampling on Three Mile Island: past, present and future



- Prepared by Marge Holland, Professor Emerita, Biology Department, University of Mississippi,
- In collaboration with William Clapham [“Bat”], USDA-Agricultural Research Service, Research Scientist, retired, and
- Jay Maciejowski, Forester, Vermont Agency of Natural Resources, retired

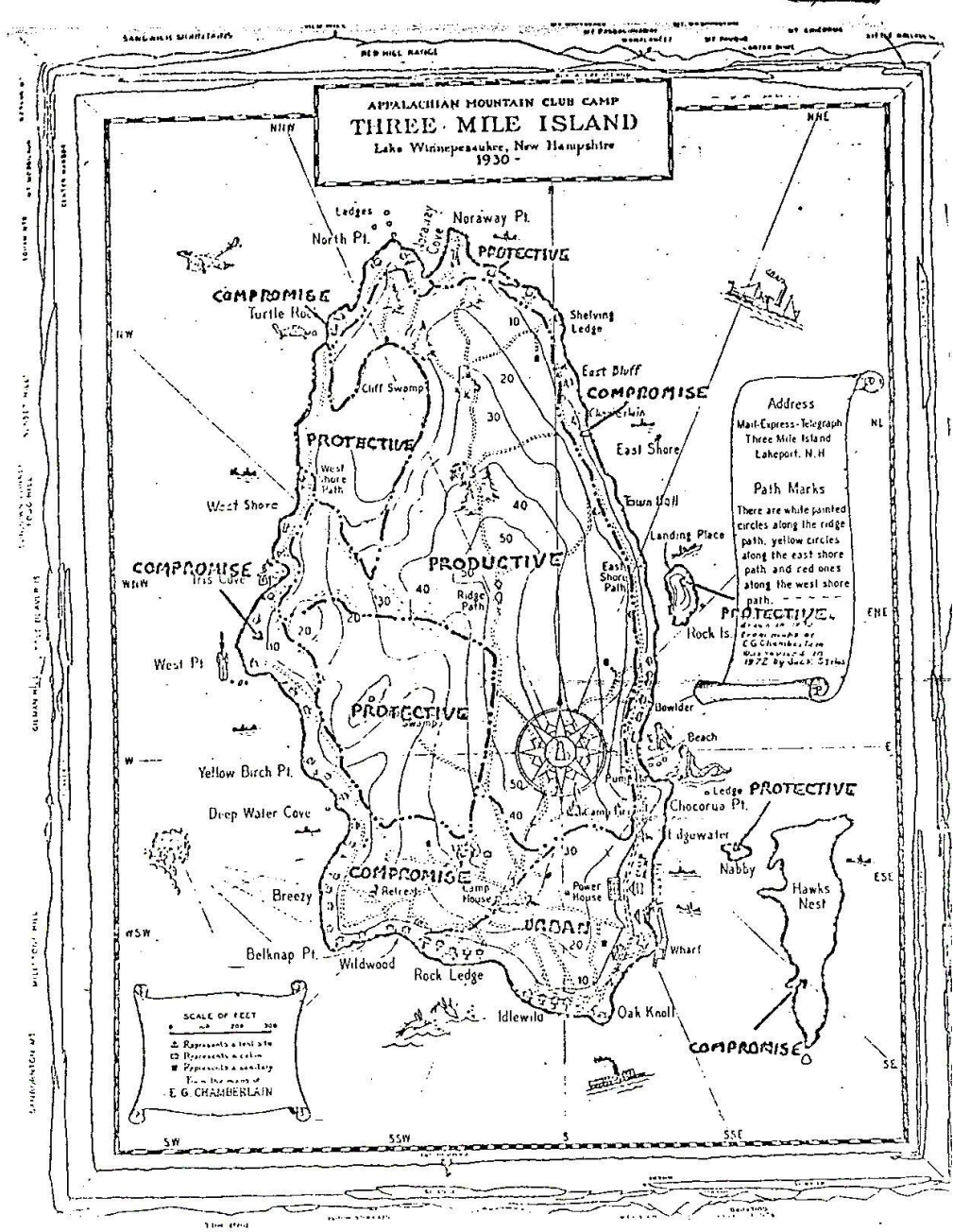
Lake Winnepesaukee

located in central New Hampshire: TMI flora investigated by Boston-based botanists in 1901



Three Mile Island Zoning Map

Adopted by
TMI Camp
Committee in
mid-1970's



TMI Zoning Classes and Acceptable Uses

LAND USE ZONING PLAN

(Adapted by Jay, Marge, and Paul Ritch from E.P. Odum (1969), and Adopted by Three Mile Island Camp Committee)

<u>ZONE</u>	<u>PRESENT USE</u>	<u>ALLOWED FUTURE USE</u>
Protective	areas which contain unusual vegetation or natural formations and are generally undeveloped	most restricted from future development and will remain in a natural state
Compromise	land areas containing a small density of buildings and located along areas of shoreline sensitive from an aesthetic point of view	no new buildings is encouraged; replacement building, trail maintenance, and cutting of vegetation to maintain vistas and protect buildings is allowed
Productive	areas designated for forestry and wildlife habitat improvement cuttings	manage area for harvest of firewood
Urban	existing built-up areas and areas of heavy use	construction is allowed, but plans for building are submitted to Natural Resources Advisory Committee for approval

Example from Urban Zone: the TMI dock is a good example of an area designated as part of the “Urban zone.” Urban areas are those that receive heavy use by campers and staff



Sheep Laurel: blooming at Noraway Point in Protective Zone



Example from Productive Zone near the Ridge Path



The Compromise Zone
includes areas around cabins



False Lily-of-the-Valley or Canada Mayflower, which is
common along Ridge Path

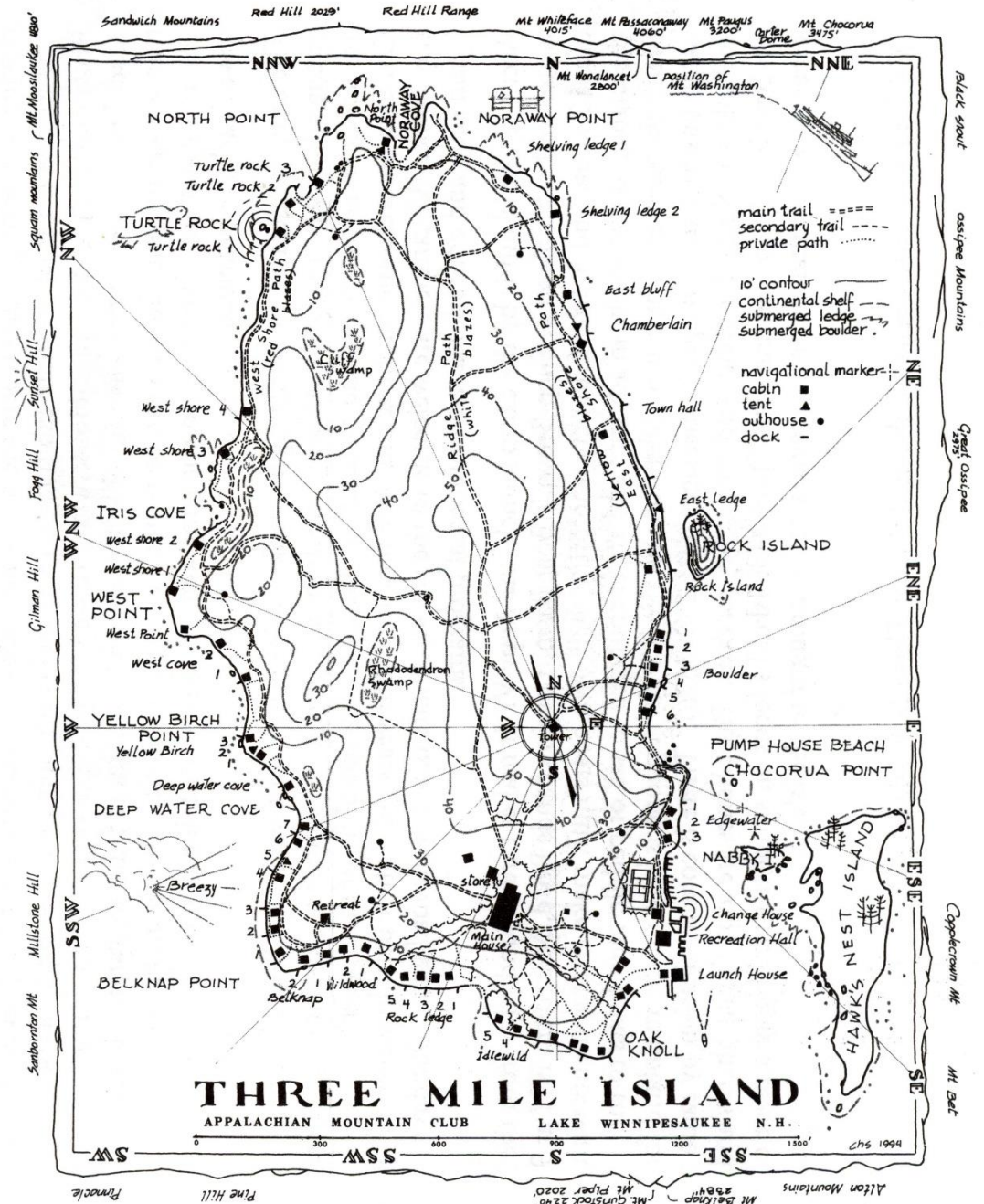


Ram's Head Lady Slipper: a rare species in Protective Zone



Map of TMI

Camp Committee has increased amount of area designated as “protective” after re-discovery of Ram’s Head Lady Slipper.



Changes in top five dominant woody species from 1978 to 2011

THREE MILE ISLAND

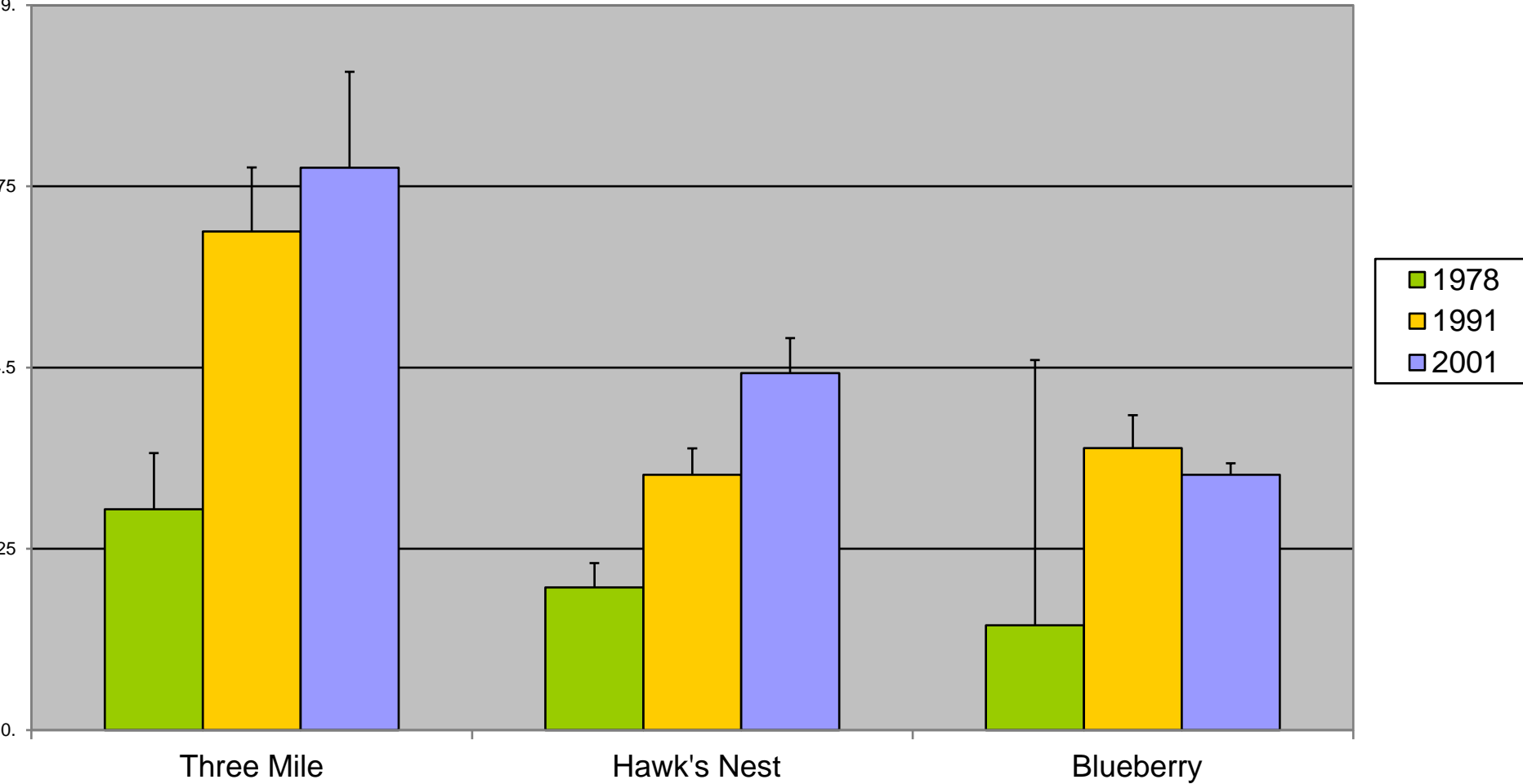
1978

- White pine
- Red oak
- Paper birch
- Red pine
- Red maple

2011

- * Striped maple
- * Beech
- * Hemlock
- * Red maple
- * Red oak

Mean Species per Quadrat for Understory Plots



Effectiveness of Land Use Plan

- Species diversity has increased since implementation of zoning plan
- Globally, scientists believe that higher biological diversity means healthier natural areas
- Most changes in the forest can be attributed to lightning strikes and other natural storms since the land use plan was implemented.

The Dock in 1961

For over 120 years AMC members have been interested in the natural history of Three Mile Island and adjacent islands. During roughly half that time, campers have enjoyed the recreational opportunities offered on 'the dock'.



And Now, in summer 2021,



Dr. Diana Jolles,
Assistant
Professor of Plant
Biology,
and Director,
Plymouth State
University
Herbarium,
Plymouth State
University,
Plymouth, NH,
will lead the Three
Mile Island study.