Report to Monhegan Associates and Offices of the Plantation of Monhegan on the Status of Woodlands on Monhegan Island

Douglas A. Stark, Staff Pathologist
And
Vladek Kolman, Director, Management Division
Maine Forest Service

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## OVERVIEW

Several trips to Monhegan Island were made in 1986 by Maine Forest Service staff to evaluate the condition of the forested area, and were charged with submission of a report to address any problems found. Mrs. Gladys Russell reviewed common insect and disease problems encountered, Douglas Stark addressed the dwarf mistletoe problem, Jack Dirkman the soils problem, George Bourassa the fire hazard problem, and Vladek Kolman the forest management aspect. A preliminary report listing several management options addressing problems noted was submitted to Monhegan Associates following these visits (see Preliminary Report - 1986, by Stark and Kolman).

On June 24 and 25, Stark and Kolman again visited the island, and had a opportunity to walk many of the trails not traveled on the one-day trips of 1986. The following is a brief account of the forest types and sub-types encountered in these most recent walks (see enclosed map):

## I. Southern Sector (White Spruce Type and sub-types)

- a. Immediate Shoreline Strip This sub-type extends from the height of land to the ocean, and is characterized by good soil and good water drainage. The white spruce in this narrow, coastal band is infected with dwarf mistletoe, but trees are surviving and mistletoe-caused mortality is minimal. Stocking is heavy, causing early lower branch natural mortality. This perhaps is somewhat responsible for the decreased impact by the mistletoe.
- b. Height-of-Land Toward Island Center This site is primarily wet, almost swampy. Stocking of white spruce is sparse, trees retain live branches to the ground, thus increasing chances for re-infestation by dwarf mistletoe. Trees contain high numbers of "brooms," and tree mortality is high. Reinfestation of white spruce regeneration is high, so a high level of mortality in the white spruce type is expected to continue. In the heaviest areas of tree mortality, hardwoods are coming in; shrubs and low quality hardwoods are reclaiming the sites.
- c. "Island" Subtype Within the subtype described in "b" above are a few "islands" of good spruce located on deeper soils and better drained sites. In these areas, stocking is high. Trees retain green crowns only in the upper portions of the bole, so there is little infestation by dwarf mistletoe on these "islands."