

Gypsy Moth Monitoring at Isle Royale National Park, 1999

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Introduction:

The gypsy moth (*Lymantria dispar*) is an exotic species in North America, and has spread across much of the northeastern United States. Michigan's lower peninsula is considered completely infested, while the Upper Peninsula is slowly becoming infested as well. In 1997, Houghton and Keweenaw counties recorded no gypsy moths, but surrounding counties were already occupied by low numbers (information supplied by USDA Forest Service, St. Paul, MN). The U.S. Department of Agriculture, with cooperation from other state and federal agencies, including the National Park Service, has initiated Federal regulations and a nationwide integrated pest management approach to managing the gypsy moth. Isle Royale National Park is cooperating with these nationwide efforts.

Description:

Gypsy moth caterpillars have few natural enemies in North America, consequently they survive in high numbers to become major defoliators of trees and shrubs while in caterpillar stage. There are 4 stages of development-egg, larva (caterpillar), pupa (cocoon), and adult (moth). Egg masses are velvety, buff or yellow colored, and average about 1.5" x .75" in size. Caterpillars are grayish, hairy, 1.5" to 2.5" long, and display red and blue dots on their backs when half grown. Female adults are generally white, but cannot fly. Male adults are tan to brown, have wavy patterns on their wings, and a 1.5" wingspan. A USDA pamphlet in Natural Resource Management files shows photographs of all stages.

Location of traps in 1999:

Gypsy moth traps were set out as a precautionary measure to identify possible populations on Isle Royale. The locations are specified on trapping forms in Natural Resource Management files, but general locations were the Daisy Farm campground, Moskey Basin campground, Mott Island (2 traps), Rock Harbor marina (2 traps), Windigo (2 traps), Belle Isle campground, and Birch Island campground. These are the same locations that were monitored in 1998. The most likely method of spreading the gypsy moth to Isle Royale would be egg masses attached to boats or hiking equipment, so traps were placed in high visitor-use areas. The traps contain a pheromone designed to attract male gypsy moths. No gypsy moths were present in 1999 traps.

Recommendations:

This monitoring program is low cost, with materials donated by the USDA Forest Service in St. Paul, Minnesota. It involves few personnel hours and should identify introductory populations of gypsy moths when control efforts would be more cost effective and efficient. Therefore, it is recommended that this program be continued yearly.

Contact:

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