TITLE

Forest Response to Stress and Damage (FORSTAD) Gypsy Moth Data 1980-2004

PRINCIPAL INVESTIGATORS

Clive Jones Charles Canham Gary Lovett Rick Ostfeld

BEGIN DATE

1980

END DATE 2004

LOCATION

On Cannoo (Tea House) Hill, on the property of the Institute of Ecosystem Studies, on the Cary Arboretum, in Millbrook, New York. (41° 47′N, 73° 44′W)

LOCATION DESCRIPTION

The twenty Tea House Hill plots are circular areas, ten meters in diameter. They are arranged in two perpendicular transects, forming a cross over the length and width of Tea House Hill. The space between plots varies from 30 meters to 130 meters, and the terrain ranges from almost flat to a slope of about 25 degrees. The center of each plot is marked with a fiberglass T-post, and the edges of the plots are marked with PVC posts. Each tree > 7cm DBH is tagged with a unique number, and species and DBH have been recorded.

ACCESS

Public

DATA LOCATION

Institute of Ecosystem Studies, Millbrook, New York

LAST UPDATED

January, 2006

CONTACT PERSON

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CODES

Density = gypsy moth egg mass density

DATA DESCRIPTION

Gypsy moth density is presented in egg masses/hectare for each year of data collection.

SAMPLING DESIGN

Plots are sampled between November and April, after leaf drop and before the eggs hatch in the spring. The following substrates are searched:

- 1. Live trees > 7 cm DBH
- 2. Standing dead trees
- 3. Fallen dead trees

- 4. Litter (i.e. coarse woody debris)
- 5. Rocks
- 6. Live trees < 7 cm DBH

A thorough search of all substrates is conducted, and the number of egg masses found on each substrate is noted. On live trees and standing dead trees, only egg masses found at < 2m height are counted. Above this height, it is possible to visualize egg masses but impossible to examine them to determine if it is a current year's egg mass or an old one.

NOTES

In years of very low gypsy moth density, it is possible that no egg masses are found on these twenty plots. In these years, off-plot searches are conducted until at least one egg mass has been found. The area searched is tallied and used to produce the density estimate in egg masses/hectare for that year. This occurred in 1985, 1986, 1992, 1998, 1999, 2001 and 2003.

DATA