GYPSY MOTH: 1/40TH ACRE EGG MASS SURVEY

Objective: To estimate the number of gypsy moth egg masses above and below snowline

Time of Year: August-April; whenever the ground is snowfree

Equipment Needed: Rope to measure 18.6'
2' measure
Baggie or other container to collect egg masses

Data Sheets Needed: "Gypsy Moth Survey"

Procedure: See "Instructions for Gypsy Moth Survey; September 1978", attached. See "Gypsy Moth Egg Mass Counting" for information on aging egg masses

Interpreting Results:

Over 500 egg masses/acre has the potential for significant defoliation

Less than 200 egg masses/acre rarely results in defoliation

Instructions for Gypsy Moth Survey
September 1978

1. Area ID #: Give the area a letter - number ID using the first letter of the town and a consecutive numbering system (ex. C-1 for 1st area checked in Colchester).

2. Species Composition: Estimate the percentage of major tree species in the area. If the area consists mainly of low-value species (ie. gray birch, aspen) and is uninhabited, do not establish egg mass plots unless requested by the owner. Do record all other data. If egg mass plots are justified, you may wish to determine species composition after you've established the plots. Species composition does not have to add up to 100%.

3. Plot Data: Randomly establish 1/40 acre plots using the following guidelines:

Acres	Minimum # Plots	Distance Between Plots
0- 25	1	Near center of area
26- 50	2	400 ft.
51-100	3	425 ft.
101-200	4	450 ft.
201-300	5	500 ft.
301-400	5	600 ft.
401-500	5	700 ft.
500+	1 per 100 acres	775 ft.

Avoid edges, roads, or stand openings for establishment of plots. Record only new egg masses but note number of old egg masses in the area. Plots for large areas may be located at various access points rather than trying to traverse the whole area from one starting point. Draw a rough sketch of plot locations and shape of area on the back of the survey card.

Collect 5 egg masses of average size per area and return to the laboratory for determination of size and parasitism.

4. Population Trend: Estimate this on the basis of the ratio and size of old egg masses compared to new egg masses.

5. Remarks: Feel free to make any remarks pertaining to the area, such as % defoliation if known, tree mortality present if it can be attributed to gypsy moth, defoliation of conifers, etc.

VT GYPSY MOTH EGG MASS SURVEY

DATE _____

BLOCK NAME _____ EVALUATOR(s) _____

BLOCK SIZE(acres) _____ ROCK OUTCROPS(circle) present absent

SPECIES COMPOSITION: BASAL AREA or % OF TOTAL

OAK	_____	_____
BIRCH	_____	_____
ASPEN	_____	_____
OTHER MAJOR SPECIES(list) _____	_____	_____

NUMBER OF EGG MASSES PER FIVE MINUTE WALK PERCENT OLD MASSES _____

LINE 1____ LINE 2____ LINE 3____ LINE 4____ LINE 5____ LINE 6____ LINE 7____ LINE 8____

LOCATION OF EGG MASSES(circle) mostly high mostly low widely distributed

NUMBER OF NEW EGG MASSES PER 1/40 ACRE PLOT (18.6' radius)

PLOT#	BELOW 2'	ABOVE 2'	TOTAL	PLOT#	BELOW 2'	ABOVE 2'	TOTAL
1	_____	_____	_____	6	_____	_____	_____
2	_____	_____	_____	7	_____	_____	_____
3	_____	_____	_____	8	_____	_____	_____
4	_____	_____	_____	9	_____	_____	_____
5	_____	_____	_____	10	_____	_____	_____

AVERAGE NUMBER OF EGG MASSES PER ACRE _____

AVERAGE EGG MASS LENGTH(circle) SMALL (< 15mm) MEDIUM (15-30mm) LARGE (> 30mm)

POPULATION TREND(circle) STABLE INCREASING DECREASING COLLAPSED

REMARKS _____

VT GYPSY MOTH EGG MASS SURVEY

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BLOCK SIZE(acres) _____ ROCK OUTCROPS(circle) present absent

SPECIES COMPOSITION: BASAL AREA or % OF TOTAL

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BIRCH	_____	_____
ASPEN	_____	_____
OTHER MAJOR SPECIES(list) _____	_____	_____

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