

TO: C. S. Hood

FROM: D. V. Trefry

SUBJECT: Annual Report

7-20-77

The summer of 1976 and early fall were spent in determining if the parasites released in June 1976 were established. The release sites were in Easton and Sturbridge, Mass. Gypsy Moth larvae in late instars were collected and reared through pupation. Fall webworm, an alternate host for the parasite were also collected and reared. (see attached report).

The state was surveyed in its entirety by air in July 1976 and in September the western end of the state was surveyed for a possible buildup of Saddled Prominent. In June 1977 a survey of the Connecticut River Valley was done for the defoliation by the Oak Leaf Tier.

An aquatic weed survey was conducted in the fall of 1976 on various department owned waters. (see attached report).

Gypsy Moth egg mass surveys were conducted in the areas used for the experimental work with 'Disparlure' in previous years. No increase in egg masses was found except on the south end of Mt. Zion which was a trapping area for the 'Disparlure' project and in the central third of the island which was a check area.

A parasite of the Gypsy Moth, *Palexorista avarum*, was released in June 1977. The location is in the Town of Montague east of route 63 and north of Dry Hill Rd. This was a small release of 400 puparia.

Collections were made of Gypsy Moth and Eastern Tent Caterpillars for further evaluation of the parasites released in Easton and Sturbridge in 1976.

Meetings were attended with state and federal personnel relative to the various research projects.

The Oak Leaf Tier complex caused considerable, severe defoliation with 100,650 acres being found infested in the Connecticut River Valley. The U. S. F. S. at Portsmouth, N.H. was contacted. Parker Snowden of that office is assisting in that project by parasite evaluation and in the identification of the defoliators.

Considerable time was spent in the establishment of plots and transects of red oak to evaluate the effects of the continued defoliation of the Oak Leaf Tier complex. In addition to the visual observations, samples have been taken from the root systems for evaluation of starch depletion as an indicator of tree mortality.

Approx. number days spent:

Parasite plot set up and release	15
" collections and evaluations	17
Aerial survey	7
" " map work and compilations	9
A. R. S. projects	35
Project meetings	10
Tree and insect meetings	8
U. S. F. S. meetings	6
Regional, bureau and departmental meetings	7
Aquatic weed survey and treatment observations	16
Oak Leaf Tier observation, plots, samples	32
Checking areas of disease and defoliation	18
Pesticide meetings and exams	3
Data correlation and reports	11
Egg mass surveys	5
Service calls	3