



WORMS WORDS AND WILLINGNESS

a co-op venture in gypsy moth control

"Two-inch caterpillars blanketed the walls of houses ... housewives couldn't open their doors ... one road actually became hazardous to motorists because it was covered with the slippery bodies of caterpillars!"

Rather than a scene from a science fiction thriller, this is how Emile A. Ollivier described what it was like to live in one picturesque Cape Cod community when the gypsy moth

came to town. Ollivier is insect pest superintendent and tree warden for the Town of Orleans, Massachusetts.

The greedy gypsy moth, of course, was no stranger to Ollivier's community, or to practically any other wooded area of the northeast. For several years this voracious pest has chomped it way through millions of acres of shade trees, defoliating often to the point of killing them, disrupting recreational activities and gener-

ally making a supreme nuisance of itself.

What made the problem unique in 1971, however, was that Ollivier was virtually powerless to do anything about controlling the pest. Spraying with DDT, of course, was out. So, it seemed, was spraying with any other effective chemical. At the urging of the Audubon Society and the Association for the Preservation of Cape Cod, a 90-day ban had been imposed by the state on aerial application of Sevin carbaryl insecticide. Since caterpillars do all their destruction between early May, when they hatch from egg masses on trees, and the end of June when they enter the pupal stage prior to becoming moths, the 90-day ban eliminated any chance of control for the year.

What's more, the gypsy moth situation appeared to be getting worse, not better. Despite claims that gypsy moths, given free reign, would depopulate themselves, or that natural controls would soon regulate the pest without further effort from man, the facts and figures showed that Cape Cod could expect an even more massive onslaught of gypsy moths in 1972.

Ollivier's pest population growth records, for example, showed 220 acres of woodlands infested in 1970, 1,200 acres infested in 1971, and an estimated 5,000 acres to be infested in 1972.

Gypsy moth egg counts told a similar story. "We found several acres with an egg count of 31,000 egg masses per acre," Ollivier said. "On one particular tree a count of 1,923 egg masses was recorded. Each egg mass has from 300 to 450 eggs. This means that this one tree could produce nearly 1 million caterpillars."

So with a ban on effective gypsy moth insecticides, and with Federal, state and county governments taking a "hands off" policy on the emotionally and politically-charged spraying issue, Ollivier had a lot going against him in his efforts to control the pest in 1972. What he had going for him, however, was Mrs. Jean Olmsted, a selectwoman for the nearby town of Brewster, a conservationist, and a lady who had witnessed the '71 infestation and vowed not to let it happen again. Mrs. Olmsted marshalled the resources of Barnstable county, which covers Cape Cod.

Organizing through a series of local meetings, these citizens decided

Emile A. Ollivier (above left) insect pest superintendent and tree warden for Orleans, Mass. checks out a spraying course with Dick Canning of Chemapco, Inc. Most residents participated in the co-op program.

that indeed, something had to be done about the gypsy moth. And since it was apparent that help or financing from Federal, state or county sources would not be forthcoming, it was also decided that they would have to do it themselves.

The first step was to hold a public hearing at which the 90 day ban on spraying was overturned. This left just one obstacle in the pathway to an effective spray program—money. Only \$16,000 had been budgeted for the year for pest control programs in all of Barnstable county. This would have covered only 2,000 acres. It was estimated that at 20,000 acres were infested.

Since no single community could afford to do the job, it was decided that the answer to financing lay in banding together in a cooperative spraying venture. Spearheaded by Mrs. Olmstead and two other selectmen from the towns of Harwich and Yarmouth, the cooperative program resulted in the spraying of 22,000 acres of Cape Cod residential and recreational areas encompassing six municipalities.

The communities could afford the program because a central source coordinated the program and prices were based on 20,000 acres instead of

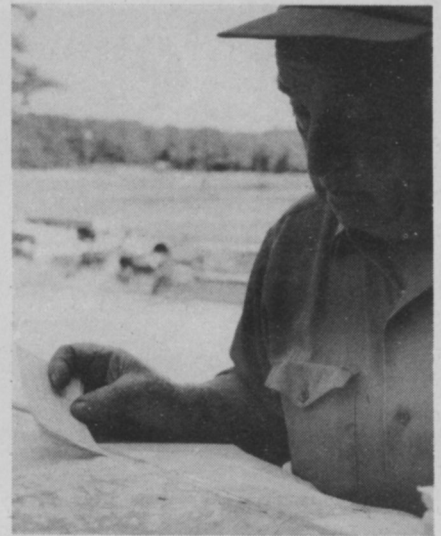
small allotments. Most important, the program was effective.

"The visible results were really dramatic," said Dick Canning of Chemapco Inc., the firm contracted to handle the program. "Our people on the ground reported that caterpillars were dropping from trees within fifteen minutes after we made a pass in the air. One man and his two boys were sweeping them up with leaf rakes. As defoliation took place, the cut-off line where we had to stop spraying was clearly visible from the air," Canning reported.

Residents were given the option to have their property skipped during the spraying by identifying the edges of their land with red balloons provided by the pest superintendents. Few took the offer. Larger boundaries were staked off for the aerial applicators with yellow balloons.

Proper application of the proper material was of key importance in the Cape Cod project. Economy and protection of the environment were obviously major criteria. So was speed. In order to get effective gypsy moth control, Canning had four weeks to cover 22,000 acres. This made aerial application a must.

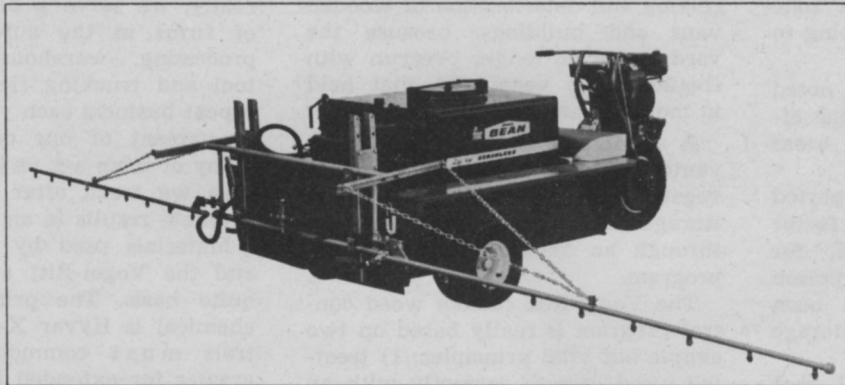
"But even with aerial spraying,"



Postcards were used by residents who wished to have their property sprayed. Ollivier checks these requests against his county map.

Canning said, "we would need a fleet of helicopters to do the job with conventional water formulation insecticides." A lower volume material was required, and the one picked was Sevin-4 Oil, a compound with a sticker base that keeps the spray on the foliage.

According to Canning, the material
(continued on page 42)



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WORMS, WORDS AND WILLINGNESS

(from page 23)

has three primary advantages. "The first," he said, "is timeliness. The oil formulation can be applied one quart undiluted per acre. That contains one pound of the active ingredient. Compared to diluted or water formulations, we could thus treat four times more acreage per load. This enabled us to treat 10,000 acres in two weeks using only two helicopters. Since we had to contract for extra helicopters and pilots, we were able to reduce our costs and pass along the savings to the towns."

"Secondly," Canning continued, "the material saves handling. We got bulk delivery of the product in tank trucks direct from the point of manufacture. The tank truck went right into our warehouse and pumped into our nurse tanks."

The third advantage cited by Canning was good control. "From the customers point of view," he said, "this is the most important benefit of all. Sevin-4 Oil remains on leaf surfaces despite heavy rains in the spring. It provides consistent performance — and that's what gets you repeat business year after year."

Keeping the spray material on the trees is also important from an ecological standpoint, according to Emile Ollivier. "Even with all the rain we had during the spraying period, we had no complaints where we sprayed. There were no fish kills and no apparent effect on wildlife," he said.

About the only complaint Ollivier did hear during the successful spray program was a far cry from complaints he had heard earlier from environmentalists. Some residents were unhappy that their property could not be sprayed. Because state regulations prohibited spraying the heavily wooded, sparsely populated areas, many individual property owners within these areas were missed in the spray program. Ollivier received, in fact, over 400 requests for spraying from residents within the out-of-bounds areas.

"That's one of every eight people in Orleans," he noted. "Last year during the big anti-spraying debate, people signed petitions against spraying. This year, after the big infestation, the same people were begging us to spray." □

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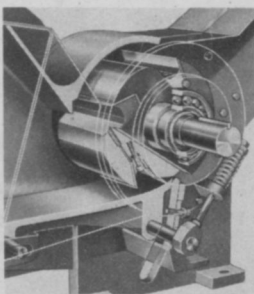


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