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ENCEPHALITIS SURVEILLANCE: A ONE-MAN OPERATION

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The encephalitis surveillance program has progressed steadily in the Calcasieu Parish Mosquito Control District during the 2 years that the district has been in operation. A one-man surveillance program was developed which could be operated effectively while requiring a minimum amount of manpower.

To transport the necessary equipment to the field, we have outfitted a vehicle to be used as a portable laboratory. This vehicle is a 1971 Ford 6-cylinder postal delivery van having a 250 cm³ engine with an automatic transmission and right-hand drive. Previously used standard size pickups did an adequate job, but most of the surveillance equipment was exposed and subject to damage during inclement weather. The van was equipped with work tables and storage cabinets. For transporting the birding nets, 2 brackets were bolted on the outside of the van, and a bungee cord was used to secure them.

The most difficult problem has been the one-man use of the mist nets. The nets measure 12m x 12m with a mesh size of 3.2cm.

iron was brazed to the base of each, with a smaller piece of iron brazed onto the spike for use as a heel to drive the spike into the ground.

Once the nets have been placed on the pipes, they are not removed from the pipes except for repair or replacement. When the net is picked up after use, it is rolled onto one of the pipes and the pipes are tied together. From this point on, to use it again, all one has to do is place one pipe in the ground and unroll the net while walking with the other pipe. Once it is unrolled, the net is then spread out onto the pipes and is ready for use in a matter of minutes.

RESULTS. The total surveillance activity conducted by Calcasieu Parish Mosquito Control District during the past 2 years is shown in Table 1. More birds were bled in 1976 than in 1977. It was necessary to obtain more samples in 1976 because there were more positive results (percent positive birds) in the titers tested for encephalitis. This was also evident in the number of days that trapping procedures were conducted as well as the man hours spent on encephalitis surveillance. The average number of hr/day and the average number of birds netted/day varied the least from 1976 to 1977. Included in the 7 hr/day was the time spent traveling to and from collection areas, setting up the nets, bleeding and banding the birds, recording information, centrifuging the blood, and shipping blood samples to the State Regional Laboratory in New Orleans, Louisiana.

The results of our surveillance program over a 2-year period indicate that it is both efficient and economical. If 2 men were utilized in the program, the figures would be the same except for the man hours and cost factor (these figures would have to be doubled). Therefore, when efficiency and economy are considered, our encephalitis program is ideal for mosquito

Table 1. Results of Calcasieu Parish Encephalitis surveillance activities.

Year	No. of Birds Bled	Man Hours (cost)	No. of Days Trapped	Average Hrs/Day	Av. No. Of Birds/Day
1976	1,200	379 (\$1,250)	55	7	25
1977	653	198 (\$653)	29	7	23

Each net is divided into 4 stages with each stage having loose mesh at its base forming a pocket to entangle the birds.

Two conduit pipes 2.44 m long were used for extending the nets. For supporting the pipes, a 4.75 cm long spike-like piece of angle-

control districts or county health units that must operate on small budgets.

ACKNOWLEDGMENT. The authors wish to thank Dr. Harold C. Chapman and Dr. C. D. Steelman for reviewing the manuscript.