
A co-operative mosquito trapping project in south-east Queensland is copyright by Elizabeth N. Marks 1968.

Permission has been granted by the University of Queensland Library and the executors of the estate of Dr Elizabeth Nesta Marks for display of A Biographical History of Australian Entomology on the SERF website.
A COOPERATIVE MOSQUITO-TRAPPING PROJECT IN SOUTH-EAST QUEENSLAND.

The Brisbane City Council and a number of adjacent Councils have formed a Contiguous Local Authorities' Committee to discuss common problems, and it has appointed a Mosquito Abatement Subcommittee.

In 1967 this Subcommittee decided to investigate the possibility of cooperative mosquito control projects, with particular reference to the Salt-marsh mosquito, Aedes vigilax, which is known to migrate long distances from its breeding places. A light trapping programme was considered to be the simplest and most economical initial measure towards defining sources of infestation and affected areas, and it was decided to run this for a trial period early in 1968.

Twenty standard miniature light-traps made by Brisbane City Council to the design of Mr. H. A. Standfast, with 6 watt bulb and fan operating off 240V mains supply were distributed among 5 local authorities with a 50 mile radius of Brisbane. The overall trapping period was 4 March – 14 May: most traps were in operation 11 March – 11 April.

For various reasons in this trial period not all traps operated every night, nor for the same period each night, but it appeared that all the difficulties encountered could be overcome.

The Mosquitoes from each trap collection were sorted out from other insects by the responsible operator (usually a Health Inspector; but a Pound-Keeper, and a boys' Secondary School Biology class also undertook this). They were stored in a plastic vial over paper tissue, with trap number and date of collection, held in the freezer of a domestic refrigerator until transported by the Health Inspector in styrene foam boxes with picnic freezer blocks to the University where they were again stored in a freezer until identified. Condition of these specimens was usually very good.

The Brisbane City Council engaged an Entomology III student on a part-time basis to identify collections: he referred all difficult specimens to the writer who from time to time did some bulk identifications also.

A total of 7265 mosquitoes (5874 females, 1391 males, representing 25 species) were identified from 439 trap-catches.

_Culex annulirostris_ (60 percent), _Culex sitiens_ and _Aedes vigilax_ (each about 16 percent) were the species most frequently taken. Numbers of _Culex annulirostris_ in some localities showed a distinct increase 2-4 weeks after rain. Numbers of _Aedes vigilax_ in some localities, principally those near its salt-marsh breeding grounds, reached a peak 9-13 days after the highest tide. It had been hoped that relative numbers of _A. vigilax_ in trap catches might indicate the rate of its movement inland from breeding grounds but numbers taken at distances from the breeding grounds were too
low to indicate whether there was a sudden invasion. Numbers of *A. vigilax* at this time were lower than they commonly are in mid summer.

A more restricted project has commenced this summer. Trapping will be confined to a period of 18 nights following the 7 ft. tides in October and November, identifications will be restricted to *A. vigilax* (and in some cases *C. annulirostris*) and will be done by the Health Inspectors themselves. This should provide further information on the possible use of these light traps in study of movements of *A. vigilax* away from its breeding places.

**E.N. MARKS.**

**A GRANT FOR POSTGRADUATE RESEARCH ON Aedes vigilax**

A post-graduate student at the University of Queensland will be financed by an American company for the next two years to study the salt marsh mosquito (*Aedes vigilax*).

The Deputy Vice-Chancellor of the University of Queensland, Professor L.J.H. Teakle, today received from Dr. D. Hunnam of Melbourne, Research Specialist International, a cheque for $3,400 from the Chevron Chemical Company of San Francisco as the first half of a Grant-In-Aid Scholarship to be established in the Department of Entomology.

The Chevron Chemical Company has provided the two-year grant for the study of the Australian Salt Marsh Mosquito by a candidate for a Ph.D. or Master's degree.

The candidate will be supervised by Dr. E.N. Marks, who does research on Queensland mosquitoes under a grant from the State Department of Health, and Dr. G.H.S. Hooper of the Department of Entomology.

The study will include such aspects as the influence of high tides and heavy rain on the emergence of the mosquito, and the effect of various factors on the migration of adults. This should indicate the optimum method of using a chemical product for controlling the mosquito.

In making the presentation, Dr. Hunnam said that "it is apparent to all Scientific Observers concerned with the trials so far carried out in Australia that there is still much to learn about the chief pest, the salt marsh mosquito, before we can say with full authority how we should go about using aerial spraying".

Dr. Hunnam pointed out that extensive tests of their product in the U.S.A. by Wild Life Authorities have shown that it does not harm birds, fish and other wild life. He stated, "It would appear that the stage is now well set for