

as well as pigeons and many other species of birds. Because of the relationship of birds to an encephalitis epidemic, an appeal was made to the residents to forego feeding the birds in hopes of encouraging their migration away from the urban areas. The City of St. Petersburg passed an ordinance making it unlawful to feed or water wild birds—at least during the summer period.

Upon notification of the first suspected cases of encephalitis, an intensified fogging program was begun, until we were covering the populated areas of the county every four days by ground fogging. The intent here was to cut the life span of the adult mosquitoes as short as possible, in order to break the virus transmission cycle. Seventeen trucks were employed, fogging at the rate of 40 gallons per hour, while driving at a rate of 5 m.p.h. Until the middle part of

Glen C. Collett, from Salt Lake City Abatement District, brings to our attention his method of using aerial photographs. Of course, many Dis-

August, we were using a 3-3-94 fogging solution of 90 percent malathion, Lethane 384 and # diesel oil, at which time we began the use of Dibrom 14, using 6¼ pints to 100 gallons of diesel. All machines were grouped together to fog completely a large segment of a populated area at the same time, thus reducing the chance for mosquito movements from untreated blocks into treated blocks.

While it would be difficult to credit any one of the aforementioned phases of mosquito control with completely checking the outbreak, since they were all necessary precautions, it is our feeling that cutting down the life span of the adult mosquitoes via the stepped up fogging program was the greatest contributing factor. We only know the epidemic was checked—and it was checked long before cool weather began.

tricts use the U.S.D.A. aerial photos and in some districts special commercial aerial photographs are also available.—P. B. B.

#### THE USE OF AERIAL PHOTOGRAPHS IN MOSQUITO CONTROL

GLEN C. COLLETT

During the past ten years we have made extensive use of aerial photographs in our control program. Undoubtedly, many districts also use them, but possibly there are some managers who may not be aware that they are available from the U. S. Department of Agriculture for a very moderate price. Various enlargements are available, but we find for our needs the 27 inch by 28 inch size with an approximate scale of 660 feet per inch is satisfactory. The cost for this size is \$2.20 each in quantities of 6 to 100.

We find aerial photographs of our marshes along the Great Salt Lake extremely useful in the airplane larviciding of this area. Rather than doing mass spraying of this source, we are able

by careful inspection of the area to pinpoint on the mosquito producing areas, thus reducing the amount of spraying done. By using clear acetate overlays the inspectors can mark over the photos with wax pencil, areas needing spraying and this is then taken to the landing strip for the pilot use.

There are many other uses of aerial photographs such as checking acreage, planning water management and source reduction programs, familiarizing new employees with their areas, and other uses too numerous to mention. Although crop changes occur in agricultural areas, aerial photographs can be a useful tool in the mapping of mosquito producing areas in a district.

## SCIENTIFIC NOTES

#### THE OCCURRENCE OF *Aedes taeniorhynchus* (WIEDEMANN), *Anopheles barberi* (COQUILLETT), AND *Culex thriambus* (DYAR) IN ARIZONA

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This note reports the collection of three species of mosquitoes which are believed to be new distribution records from Arizona.

(1) *Aedes taeniorhynchus*. A single female, taken in a biting collection at Yuma Test Station, Arizona on June 5, 1962.

(2) *Anopheles barberi*. A single male, reared

from a larva taken from a tree hole at Fort Huachuca, Arizona on September 17, 1962.

(3) *Culex thriambus*. A single male taken in a mosquito light trap at Fort Huachuca, Arizona on September 27, 1962.

The authors are indebted to Colonel Stanley J. Carpenter and Dr. Alan Stone for verification of identifications.