

to furnish the DDT and supervision and for the county and city to supply the necessary labor and equipment for applying the spray. A Dobbins 100-gallon orchard sprayer was available although it was considered too small for the purpose. Mr. John A. Mulrennan, in charge of CDC activities for the Florida State Board of Health, furnished eight 55-gallon drums of DDT isomer, 35 percent concentrate, which arrived in Sarasota by truck on July 31. Spraying of the DDT was initiated immediately and was continued under the supervision of Mr. Thurman. While greater success could have been obtained by using an airplane or a ground fog machine for dispensing the DDT, the group felt that, because of the limited health hazard, this greater expense was not justified.

RESULTS

Spraying was begun on Sarasota county beaches on August 1 by a crew of four men. Fly control of the worst areas was soon effected and spraying work was discontinued about August 8. Prior to application of the spray the beaches were inspected and spray applications were scheduled as near as possible to the peak of emergence so that adult flies were killed before they began to migrate. A small amount of spraying was done at Boca Grande on Gasparilla Island on August 2 - 3. Here the flies already had migrated from the beaches and were becoming a nuisance around homes. The 5% DDT emulsion applied with a Bean orchard sprayer was used throughout the town and excellent results were obtained.

SPECIAL ENTOMOLOGICAL ACTIVITIES IN FLORIDA

ANOPHELES ALBIMANUS SURVEY

During the winter of 1946-47, evidence was accumulated which indicated that *Anopheles albimanus* is established in the Florida Keys on Stock Island near Key West, with intermittent breeding on Key West itself. Collections of adults have since been taken in light trap collection on Boca Chica, Cudjoe Key, Marathon (Vaca Key) and Islamorada. The Entomologists of the U.S. Quarantine Service determined a specimen of this important *Anopheles* from Fisher's Island in Dade County, in the spring of 1947.

For the purpose of gaining additional information about the distribution, populations and biology of *Anopheles albimanus*, an intensive anopheline survey of South Florida has been inaugurated under the direction of CDC Activities, Division of Entomology, Florida State Board of Health. Mr. J. S. Haeger, entomologist, assigned to the project, has established headquarters at Homestead, Florida, from which point he will cover the area south to Key West and Cape Sable, operating light traps at strategic locations and searching for anopheline larvae in likely looking breeding places. From data obtained during this

survey conclusions will be made as to whether or not control work is warranted.

SPOTTED FEVER INVESTIGATIONS

Entomological investigations are being carried on in connection with the occurrence of sporadic cases of Spotted Fever in Florida. Clinical cases have been reported from a number of widely separated areas and cases which have been more definitely identified by the use of blood tests have been found at Quincy in Gadsden County, near Bradenton, Manatee County, and at Orlando in Orange County. Arrangements have been made with the Virus and Neurotropic Disease Laboratory of the U. S. Public Health Service in Montgomery, Alabama to test ticks collected from places where human diseases were acquired. Several collections have been submitted to the laboratory. An investigation has been made of the Gadsden and Manatee County cases and plans are being made to collect ticks in Orange County in the near future.

Species of ticks collected in suspected areas are as follows: *Dermacentor variabilis* Say, *Amblyomma americanum* (L), *Amblyomma maculatum* Koch, and *Ixodes scapularis* Say.