

## ACTIVITIES IN MEMBER STATES

### Mosquito Control in the Second Corps Area

by Dr. Albert Russell  
Senior Surgeon, U.S.P.H.S. Liaison  
Officer, Second Corps Area, Fort Jay,  
Governors Island, N. Y.

The Second Corps Area of the Army comprises the th states of New York, New Jersey and Delaware. There are concentrated in this area an unusually large number of essential defense plants, in addition to important Army and Navy establishments. Many of the defense industries and service establishments are located close to tidewater or inland marshes and other sources of large scale mosquito breeding. The need of effective mosquito control work for civilian defense as well as Army and Navy personnel is readily understood.

Under the general arrangement between the States and the W.P.A., the States are to furnish supervision with help of funds provided by the U.S.P.H.S., with all labor materials, equipment, etc. necessary provided by the W.P.A. Fortunately, in the Second Corps Area through various county or city agencies already in existence, much of the basic data as to location of breeding places, cost of elimination, maps, etc. were already available, and when

this was not the case the necessary surveys have been made or are being made.

The mosquito control projects which have been planned for the Corps Area to date include the following: Additional projects will be added from time to time.

#### NEW YORK STATE:

CAMP UPTON: This work is in two projects, the one inside the reservation is sponsored by the Army and the one outside the camp is sponsored by the N. Y. State Health Department and the Suffolk County Mosquito Control Commission. Both projects include thorough spraying of breeding places and the deepening and cleaning of Carman's River and Peconic River and tributaries west and east of Camp Upton. The total cost will be about \$125,000. Work on this project is partly completed.

FORT TOTTEN, QUEENS, N. Y. CITY: About 350 men have been employed in this area which includes the fort, several shipyards and as far west as the La Guardia Airport. Some spraying was done during the summer and drainage work was started Sept. 15th. This project as well as the one at Floyd Bennett Naval Airport, Brooklyn, and the one in Staten Island are sponsored by the N. Y. City Department of Sanitation.

FLOYD BENNETT NAVAL AIRPORT, BROOKLYN, and FORT TILDEN, QUEENS: Approximately 100 men were employed and work was started Nov. 5th. It will include larvicide spraying and extensive salt marsh and fresh water ditch regrading.

FORT WADSWORTH and MILLER FIELD, STATEN ISLAND: Started with some spraying last summer and with drainage work on October 15th. About 125 men are at work on both salt marsh and fresh water areas.

The total original cost of the three N. Y. City projects was \$139,000.

NEW JERSEY:

Mosquito control work in New Jersey has included the following:

RARITAN ARSENAL: Work was started inside the arsenal reservation early last summer as a W.P.A. project and was sponsored by the Commanding Officer of the Raritan Arsenal and the Middlesex County Mosquito Extermination Commission. An average of about 30 men have been employed on spraying drainage and salt marsh ditching maintenance. The total cost of the work is to be \$43,000.

MONMOUTH COUNTY -KEYPORT TO LONG BRANCH: This project began Sept. 2nd and has averaged about 40 to 50 men. It consists largely of maintenance of drainage and some new ditching is to be carried on at a total cost of \$47,000. The work is somewhat behind schedule due to shortage of men. The project was sponsored by the Monmouth County Mosquito Extermination Commission and supervised by it. This work is being done for the protection of Fort Monmouth, the Signal Corps Training Centre for the United States.

HUDSON COUNTY: Mosquito control project totaling \$225,000 includes diking, tide gating and ditching work on the salt marshes. Project was sponsored and supervised by the Hudson County Mosquito Extermination Commission. The diking work is almost two-thirds finished and going well and bulkhead work has just started.

FORT HANCOCK, SANDY HOOK: About \$35,000 worth of work involving filling and drainage with some spraying has been carried on at Fort Hancock, Sandy Hook. This work is sponsored by the Army together with the Monmouth County Mosquito Extermination Commission and will tie in with the Monmouth County work previously mentioned.

A state wide mosquito control project totaling \$383,000 sponsored by the N. J. State Health Department and the N. J. Experiment Station has been approved and

work under it has started as follows:

FORT DIX: \$60,000 of the \$383,000 is to be used as a W.P.A. project at Fort Dix. This is co-sponsored by the Burlington County Mosquito Extermination Commission and work has already started. The work to be done is to be entirely outside of the Fort Dix Army Reservation and will supplement the work which has been done by the Army within the reservation first by the employment of 100 civilian laborers beginning in the early summer and then followed by the work of a C.C.C. company and more recently by labor provided through the National Youth Administration for the Army. The beginning of this work was delayed owing to the necessary procedure in the re-establishment of the Burlington County Mosquito Extermination Commission. This has been accomplished.

PICATINNY ARSENAL, DOVER, N. J.: Work at Picatinny Arsenal started about Nov. 15th with 20 men partly within and partly outside the arsenal reservation. Total cost is estimated at \$118,000 and involves deepening of a large outlet creek through rock to relieve very swampy conditions within the arsenal property.

FRANKLIN and OGDENSBURG, SUSSEX COUNTY, N. J.: Drainage work around the New Jersey Zinc Company mines and refineries. This is to be directly for malaria control which has been a serious problem in the vicinity for several years. The total cost of the project will be \$33,932. It is co-sponsored by the Sussex County Mosquito Extermination Commission. This project had the approval of the Liaison Officer on December 18, 1941, Army approval not being needed inasmuch as there are no troops within 20 miles.

ISLAND BEACH ARMY RECREATIONAL AREA SOUTH OF SEASIDE PARK, OCEAN COUNTY, N. J.: About \$9,000 will be needed for this work. This project is co-sponsored by the Ocean County Mosquito Extermination Commission, and it had the approval of the Liaison Officer on October 9, 1941. This work involves the application of larvicides, drainage, and filling, and incidental appurtenant work.

DELAWARE ORDNANCE DEPOT, SALEM COUNTY, N. J.: Work in and around the military zone of the Depot. This project has been approved for the amount of \$22,058 by the Office of the Commanding General and the Liaison Officer, and work no doubt will be started in the near future. The project was approved as of December 18, 1941.

At the time of writing the following projects are in preparation:

CAPE MAY NAVAL AIR STATION, CAPE MAY, N. J.  
INDUSTRIAL AREA FROM CAMDEN SOUTH TO THE VICINITY OF PENNSVILLE ALONG THE DELAWARE RIVER.  
LAKEHURST NAVAL AIR STATION.

Additional work is also contemplated in projects to be set up for mosquito control work in the INDUSTRIAL AREA ALONG THE DELAWARE RIVER FROM CAMDEN NORTHWARD toward Trenton as far as may be necessary. Work at DISMAL SWAMP (MIDDLESEX COUNTY) between PLAINFIELD and METUCHEN, N. J. and an industrial area at BENDIX, BERGEN COUNTY around a large aircraft plant and training centre - drainage work at NORTH ARLINGTON MEADOW, BERGEN COUNTY, N. J.

DELAWARE:

Work in Delaware has included a project to cost \$63,000 surrounding FORT DuPONT south of Wilmington. About 25 to 30 men have been working since June 21st when the project started. Work involves drainage and tide gating of extensive marshes, flooding of some areas which are now marsh, and other work. In addition a state wide project costing \$36,000 has been approved of which \$9,600 is to be spent at FORT MILES, CAPE HELOPEN near Lewes, Del., and \$5,400 at FORT SAULSBURY. Some additional work may also be done in the WILMINGTON INDUSTRIAL AREA in 1942.

All of this work in the three states is being carefully planned and executed so as to give the very best results in mosquito control for the money being expended. The military and naval authorities have given excellent

cooperation in these projects which are designed for the health and comfort of personnel in the vicinity.

### Mosquito Control In The First Corps Area

by Russell W. Gies,  
Sanitary Engineer Reserve

The First Corps Area is made up of the six New England States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut. It is all included as part of District No. 1 of the United State Public Health Service. Doctor Joseph Bolten is Liaison Officer of that Service for the Corps Area.

Massachusetts, Rhode Island and Connecticut have all done large scale mosquito control work in past years, but Maine, New Hampshire and Vermont have not carried on organized campaigns except in a few local cases.

In Massachusetts the State Reclamation Board, of which Mr. Edward Wright, Sanitary Engineer of the State Health Department is Chairman, is in general charge of this work. Much public support has been given to mosquito control in this state because of the very serious outbreak of equine and human encephalomyelitis or sleeping sickness a few years ago which has been thought to be transmitted by several common varieties of mosquitoes. The Reclamation Board has sponsored the various W.P.A. mosquito control projects in the state.

In Rhode Island the State Department of Agriculture has done considerable control work in past years and is co-sponsoring all defense projects in the state with the State Health Department.

Connecticut has a mosquito control board which consists of the State Health Commissioner as Chairman, the Director of the State Experiment Station and the State Commissioner of Public Works. About 20,000 acres of salt marsh along the entire coast were ditched in past years with a consequent maintenance problem, and some