Mosquito Surveillance Report*

Vol. 10 *No.* 2 *Period* June 1982

Introduction

The first half of June was unusually wet and produced continuous floodwater conditions in most of the State. Trap records show that overall mosquito populations were above average for the month, composed primarily of floodwater Aedes. The excessive amounts of rainfall could have produced a severe mosquito problem but trap records did not indicate the potential populations that were expected. This was probably due to the abnormally low temperatures that accompanied the wet period, by delaying larval development and allowing time for thorough control.

Early Season Aedes

The early season Aedes populations were well below average during most of May but the June rains appear to have produced additional Ae. canadensis in some parts of the State. The combination of reflooded woodland pools and below normal temperatures would favor this species and bite counts show that we are probably dealing with a fresh emergence. Ae. canadensis is an extremely long-lived mosquito and the late emergence will probably produce adults that survive into August.

Salt Marsh Mosquitoes

The spring rains and low temperatures also favored Ae. cantator whose populations remained unusually high throughout the month of June. Trap counts in coastal areas showed an increase in Ae. cantator during a time when the populations are normally into a decline. Two broods of Ae. sollicitans occurred during the month, the largest emerging over the first week. Light trap records as well as landing rate counts showed a sharp increase early in the month and the biting populations did not subside until the 3rd week. This was actually the first major brood of the season, originating from the moon tide of May 22. The second brood emerged after the moon tide of June 21 and was considerably smaller in terms of nuisance and longevity.

Floodwater and Culex Mosquitoes

As expected, the rainfall during early June provided extensive breeding habitat for Ae, vexans and this floodwater mosquito was the dominant pest during the month. Trap records were higher than average in all parts of the State but the

---

*This work was performed as a part of NJAES Project 40506, supported by the New Jersey Agricultural Experiment Station and the State Mosquito Control Commission.

brood was apparently reduced markedly by larval control efforts. Culex mosquitoes continue to increase slowly and are about average for this time of year.

Freshwater Swamp Mosquitoes

Light trap records show that Cs. melanura populations were higher than average during June and Cq. perturbans is on the increase. An. quadrimaculatus have become surprisingly numerous during the month, a factor that will probably contribute to exceedingly high late-season populations. In each of these cases, data suggest better than average winter survival for the larvae (Cs. melanura and Cq. perturbans) as well as the adults (An. quadrimaculatus).

Average Weekly Rainfall for North, Central and Southern New Jersey*

Week Ending	North	Central	South
7 June	1.22	0.80	0.93
14 June	1.83	2.29	1.81
21 June	1.06	0.81	0.24
28 June	0.47	0.13	0.02

Average Departure from Normal Temperature (°F)*

Week Ending	North	Central	South
7 June	-4	-3	-2
14 June	-8	-9	-8
21 June	-2	0	-1
28 June	-4	-4	-3

*These data were gathered from 6-8 weather stations in each area and reported in the New Jersey Weekly Digest.

PROGRAM STAFF

Mosquito Identification Specialist: Roy K. Sofield

Mosquito Program Acting Director: Dr. Harry D. Brown

Associate Mosquito Program Staff:

Garrett Pezzeca
Dr. Bin Khoo
Peg Horan
Bunnie Hajek
Linda McCuiston
Dr. Joseph Shisler
Dr. Donald Sutherland

Cooperating State Mosquito Control Commission Personnel:

Aaron Rappaport
Leonard Spiegel
James Gaspari
Theodore Czech
Frank F. Wallace
Robert Fothergill
Dave Adam
Harry D. Brown

Department of Environmental Protection:

Dr. Kenneth W. Bruder
Robert B. Kent

Cooperating County Mosquito Control Commissions:

Atlantic
Bergen
Burlington
Camden
Cape May
Cumberland
Essex
Gloucester
Hudson
Mercer
Middlesex
Monmouth
Morris
Ocean
Passaic
Salem
Somerset
Sussex
Union
Warren

Project Leader: Dr. Wayne J. Crans