

Mosquito Surveillance Report*

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Period August 1982

Introduction

August was relatively cool this year and the rainfall was generally below normal. Most of the rain was the result of localized thunderstorms which produced some local flooding with associated mosquito breeding.

Salt Marsh Mosquitoes

Population levels of <u>Aedes sollicitans</u> were substantial throughout August, and required numerous State airsprays. Since Eastern Encephalitis Virus was isolated from a pool of <u>Aedes sollicitans</u> this month, the potential for virus transfer to humans was high and control was mandatory. The main brood in August resulted from the moontide of the 19th and flooding from rainfall shortly thereafter. This produced multiple hatches in some areas which, combined with cool weather, stretched the emergence out over a longer period than usual.

<u>Culex salinarius</u> populations were quite high in some regions of the State during August. Ae. cantator have dropped off almost completely.

Floodwater and Culex Mosquitoes

As was reported for July, populations of <u>Ae. vexans</u> were down throughout most of the State during August. This was primarily due to the below average rainfall during the month. The cool temperatures have also influenced a variety of <u>Culex spp.</u> populations which were also below normal for August.

Freshwater Swamp Mosquitoes

Population levels of <u>Anopheles</u> are increasing and were about average for August. <u>Culiseta melanura</u> populations increased during August, as expected, and should slowly recede during September and October. Population levels of <u>Cq. perturbans</u> were rather high in early August, but diminished rapidly toward the end of the month. Research data suggest that <u>Cq. perturbans</u> is essentially a univoltine species that exhibits one extended emergence period during the summer.

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

Average Rainfall for North, Central and South New Jersey*

		North	Central	South
Week Ending	August 2	1.62"	1.84"	0.36"
	August 9	1.29"	0.31"	0.81"
	August 16	0.70"	0.98"	0.14"
	August 23	0.16"	0.01"	0.30"

Average Departure from Normal Temperature (°F)*

		North	Central	South
Week Ending	August 2	-2	-1	0
	August 9	+1	+1	-1
	August 16	NA	NA	NA
	August 23	-5	-2	-2

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

Summary Report

A summary report, including light trap data for major pest species in each region, will be distributed in the fall. This report will include population curves for this year compared to the mean population levels for the past several seasons.

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