

New Distribution Records of Mosquitoes in Indiana, 1973
(Diptera: Culicidae)

DONALD A. SHROYER and R. W. MEYER
Department of Entomology,
Purdue University, West Lafayette, Indiana 47907

Abstract

Fifty-six new Indiana county records were obtained during the spring and summer of 1973, based primarily on mosquito biting collections. Nineteen of these were new records of genera. Most of the records involved common species, principally *Aedes sticticus* (Meigen), *Aedes stimulans* (Walker), *Aedes fitchii* (Felt and Young), *Aedes trivittatus* (Coquillett), *Aedes triseriatus* (Say), and *Aedes vexans* (Meigen).

The most comprehensive source of information on the distribution of mosquito species in Indiana is Siverly's recent publication, *Mosquitoes of Indiana* (1). However, since few workers are studying the native mosquito fauna, many portions of the state have been poorly examined. Therefore, species composition of some counties is totally unknown. Accurate knowledge of species composition of any local area is essential for intelligent, effective control, as well as for understanding the potential for disease transmission.

Methods and Results

Though collection of adults was emphasized, populations of immature mosquitoes were also sampled during the spring and summer of 1973. Adult populations were sampled by collection of biting females, whereas aquatic stages were collected with a long-handled pint dipper.

Larvae and adults were identified to species, while pupae were allowed to complete development prior to identification in the adult stage. Since identification keys to the *Culex* egg rafts were not available, egg rafts were allowed to hatch and the larvae produced were identified.

As a result of these mosquito collections, 56 new records involving 25 counties were obtained in Indiana (Table 1). Most of these records were derived from collections of biting females. No new state records were obtained.

It is hoped that further efforts will be made to obtain a more complete picture of mosquito distribution in the state, and to detect temporal changes in the occurrence of species.

TABLE 1. *New records of mosquito distribution in Indiana, 1973.*

Counties	Species ¹																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Adams -----		x	x	x			x												
Cass -----		x		x		x	x												
Daviess -----			x																
Dubois -----			x				x	x											
Elkhart -----		x	x																
Fulton -----		x	x	x															
Gibson -----								x	x	x	x	x							
Greene -----																x			
Harrison -----													x						
Jackson -----			x			x													
Jasper -----			x																
Jennings -----	x																		
LaPorte -----					x	x													
Noble -----		x	x																
Orange -----														x ²					
Parke -----			x																
Pike -----			x		x													x	
Shelby -----							x												
Starke -----			x	x		x	x												x
Sullivan -----	x					x													
Vermillion -----							x												
Warren -----			x		x														
Warrick -----											x								
Wells -----		x		x	x	x													x
Whitley -----		x		x															

¹ Species code: 1-*Aedes canadensis canadensis* (Theobald); 2-*Aedes fitchii* (Felt and Young); 3-*Aedes sticticus* (Meigen); 4-*Aedes stimulans* (Walker); 5-*Aedes triseriatus* (Say); 6-*Aedes trivittatus* (Coquillett); 7-*Aedes vexans* (Meigen); 8-*Anopheles punctipennis* (Say); 9-*Anopheles quadrimaculatus* Say; 10-*Culex pipiens pipiens* Linnaeus; 11-*Culex restuans* Theobald; 12-*Culex territans* Walker; 13-*Culiseta inornata* (Williston); 14-*Psorophora cyanescens* (Coquillett); 15-*Psorophora ferox* (Humboldt); 16-*Psorophora horrida* (Dyar and Knab); 17-*Psorophora varipes* (Coquillett); 18-*Coquillettia perturbans* (Walker).

² This collection was made in 1972.

Literature Cited

1. SIVERLY, R. E. 1972 Mosquitoes of Indiana. Indiana State Board of Health, Indianapolis, Ind. 126 p.