Anopheles carlei Vargas is recognized as a mosquito species of northern distribution that occurs across the northern United States and Canada to Alaska (Carpenter and LaCasse, 1955). The species has not been included on the New Jersey list, but has been reported from New York State (Larsons et al., 1950) and the New England States (Fellton et al., 1950). Recently, Anopheles carlei was found breeding in Northern New Jersey.

On August 2, 1966, a single 4th instar larva was taken at High Point State Park in Sussex County. The specimen was found in the weed-choked backwater of a beaver pond in association with Anopheles punctipennis, Anopheles quadrivittatus, and Uranotaenia sapphirina. Attempts to locate additional specimens from this area proved unsuccessful. The specimen from High Point was sent to Dr. Alan Stone of the U.S. National Museum, who confirmed the identification as Anopheles carlei Vargas.

On August 17, 1966, three larvae and one pupa were taken from a clear fresh water swamp at Hainesville, New Jersey, an area approximately 6 mi. WSW of the first location. Uranotaenia sapphirina was the predominant species in the area, although all of the aforementioned associated species were present. The pupa and two of the three larvae were reared to the adult stage.

The addition of Anopheles carlei brings the New Jersey list to 52. It now includes the following species:

Genus Aedes Meigen
1. Aedes abbreviatus (Felt & Young)
2. Aedes atlanticus Dyar & Knab
3. Aedes ariophilus (Coquillett)
4. Aedes australis (Coquillett)
5. Aedes canadensis (Theobald)
6. Aedes cantor (Coquillett)
7. Aedes ciceronensis Meigen
8. Aedes communis (DeGeer)
9. Aedes dorsalis (Meigen)
10. Aedes dupruii (Coquillett)
11. Aedes exocricias (Walker)
12. Aedes fitchii (Felt & Young)
13. Aedes grossus (Felt & Young)
14. Aedes impunctatus Vockeroth
15. Aedes intrudens Dyar
16. Aedes mitchelliae (Dyar)
17. Aedes punctor (Kirby)
18. Aedes sollicitans (Walker)
19. Aedes sticticus (Meigen)
20. Aedes stimulans (Walker)
21. Aedes taeniorynchus (Vicedo)
22. Aedes trichurus (Dyar)
23. Aedes triseriatus (Say)
24. Aedes trivittatus (Coquillett)
25. Aedes vexans (Meigen)

Genus Culic Cinnaeus
26. Culex pipiens Linnaeus
27. Culex restuans Theobald
28. Culex salinarius Coquillett
29. Culex territans Walker

Genus Culiciella Felt
30. Culicicella inornata (Williston)
31. Culicicella melanora (Coquillett)
32. Culicicella minnesotaensis (Barr)
33. Culicicella moxitans (Theobald)

Genus Mansonia Blanchard
34. Mansonia perturbans (Walker)
35. Mansonia robusta (Dyar & Knab)

Genus Ochrobatis Desvoidy
36. Ochrobatis cinctus (Fabricius)
37. Ochrobatis confinis (Lynch-Arribalzaga)
38. Ochrobatis discolor (Coquillett)
39. Ochrobatis ferox (Humphries)
40. Ochrobatis varipes (Coquillett)

Genus Toxorhynchites Theobald
41. Toxorhynchites rutilus septemtorquis (Dyar & Knab)
42. Toxorhynchites eugeni Theobald

Genus Uronotaenia Lynch-Arribalzaga
43. Uronotaenia sapphirina (Osten Sacken)
44. Uronotaenia Theobald

Genus Wyeomyia Theobald
45. Wyeomyia smithii (Coquillett)
46. Anopheles ablurki Theobald
47. Anopheles carlei Vargas
48. Anopheles carlei (Vargas)
49. Anopheles carlei (Vargas)
50. Anopheles punctipennis (Say)
51. Anopheles quadrivittatus Say
52. Anopheles walkeri Theobald

Literature Cited


1Paper of the Journal Series, New Jersey Agricultural Experiment Station, Rutgers University, Department of Entomology and Economic Zoology.