

Aedes atlanticus DYAR AND KNAB,
FEEDING ON TURTLES¹

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The acceptance of reptilian hosts by *Aedes* mosquitoes has been of interest to many investigators. Reptiles have been suggested as possible overwintering hosts of arboviruses and limited reptilian feeding in nature has been suggested by bait trap studies. Several observations involving *Aedes canadensis* (Theobald) feeding on turtles are found in the literature, but reptilian acceptance under natural conditions is not clear for most other species. During recent investigations in southern New Jersey, *Aedes atlanticus* Dyar and Knab was observed feeding on turtles.

Aedes atlanticus has been reported from New Jersey (Headlee, 1945) but is only rarely encountered. Larvae have only been found in woodland pools late in the season following summer rains and light trap catches have been minimal. Relatively little, therefore, is known of its habits in the state. The species is common in the southeastern United States where the adult females are cryptic with those of *Aedes tormentor* Dyar and Knab. The females have been described by Carpenter and LaCasse (1955) as persistent human biters, while Michener (1947) and King *et al.* (1960) stated that they bit severely in daylight hours, often in open sunlight.

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Recent observations in southern New Jersey indicated that *Aedes atlanticus* will accept reptilian hosts. Following heavy rains late in August, numerous turtles basking in rain pools were observed being attacked by mosquitoes. In all cases *Aedes canadensis* was the major species encountered but on three separate occasions, *Aedes atlanticus* was also included. On August 25, 1967, 3 specimens were taken from an eastern box turtle, *Terrapene carolina carolina* along with 187 *Aedes canadensis*. Three additional specimens were included with 79 *Aedes canadensis* taken from a spotted turtle, *Clemmys guttata* on the same day. Four days later, a single *Aedes atlanticus* was collected from a box turtle with 126 *Aedes canadensis*.

One of the seven *Aedes atlanticus* collected was fully distended with blood. The specimen was included in the serological testing program currently being conducted on the feeding habits of New Jersey mosquitoes. Tests indicated that the specimen had taken its blood-meal from a turtle host. *Aedes atlanticus*, therefore, was shown to be not only attracted to turtles in these observations, but capable of taking a full blood-meal as well.

References Cited

- CARPENTER, S. J., and LACASSE, W. J. 1955. Mosquitoes of North America (North of Mexico). Univ. Cal. Press, Berkeley and Los Angeles.
- HEADLEE, T. J. 1945. The mosquitoes of New Jersey and their control. Rutgers Univ. Press, New Brunswick.
- KING, W. V., BRADLEY, G. H., SMITH, C. N., and MCDUFFIE, W. C. 1960. A handbook of the mosquitoes of the southeastern United States. USDA Publ. Ag. Handbook #173.
- MICHENER, C. D. 1947. Mosquitoes of a limited area in southern Mississippi. Amer. Mid. Nat. 37:325-374.