these were the only two species observed feeding on turtles among ten species collected in the swamp at that time of the year. The other eight species were, *Culex salinarius, Culiseta melanura, Aedes sollicitans, Aedes taeniorhynchus, Aedes vexans, Anopheles punctipennis* and *Anopheles* sp. (*bradleyi-crucians* complex).

No mention was found in the literature on *Aedes triseriatus* feeding on turtles in nature. This species is known as a persistent biter on a wide range of animals (Wallis, 1960) and man (Masters, 1962). However, *Aedes canadensis* was previously reported by Carpenter (1941) to feed on cold blooded animals including turtles, though no reference to a specific observation was stated. This species was also reported by Hayes (1961) as feeding on three species of caged turtles (eastern box turtle, eastern painted turtle and eastern spotted turtle) in Massachusetts.

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GYNANDROMORPHISM IN *Culex erythrothorax* (DYAR)

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A gynandromorph was found in a laboratory colony of *Culex erythrothorax,* maintained at the Sixth U. S. Army Medical Laboratory, Fort Baker, California. It emerged on 22 January 1964 and was killed and preserved eight days later. The specimen has the following pertinent characteristics: typical female antennae, palpi and proboscis and typical male genitalia.

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NOTES ON SOME LABORATORY-REARED *Culiseta melanura* (COQUILLETT)

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On August 7, 1964, a number of first instar larvae of *Culiseta melanura* (Coquillett) were collected in the Pocomoke Cypress Swamp, Worcester County, Maryland. These larvae were taken to Washington, D.C. and reared to the adult stage in our insectary. This paper describes some points of difference between our experience with *C. melanura* and reports of previous workers (Wallis, 1954; Chamberlain, Sudia and Nelson, 1955; Siverly and Schoof, 1962).

The larvae were collected from beneath a dead pine tree, which in falling had lodged at about 60° with the horizontal. The shallow roots of this tree had lifted the litter and duff on the side opposite its direction of fall. No opening to the crypt so formed could be found, but probing established that it extended below the level of ground water, which was perhaps a foot beneath the surface. A small entrance was made by digging and the larvae were collected blindly with a dipper. The crypt was perfectly dark and only its deepest part contained water.

The larvae were reared at 27° C. in 6 x 26 x 41 cm. cloth-covered white enameled pans with 15 hours artificial daylight, dawn and dusk. The original swamp water was replenished with tap water as required by evaporation; each pan was fortified with a pinch of dog food in the 4th, 10th and 15th weeks.

The larval medium was darkly colored with tannins and contained the rot of leaves, twigs and rootlets. It supported—in addition to mosquito larvae—populations of *Cyclops* and larval hydrophilids. The light, grayish, iridescent scum which formed on the surface of the pan was removed at intervals.

There were some 15 mosquito larvae per pan. Larval growth was homogeneous, all larvae attaining the fourth instar at approximately the same time. However, the larval period was inordinately long, and adult emergence occurred in two discrete waves (Table 1). These conditions have not been reported by previous authors. No larval or pupal mortality was detected.

The adult mosquitoes were hardy, yet passive. They survived well on apple slices and/or 4 percent sucrose-soaked cotton pads. The females could not be induced to feed on chick or mouse by 24-hour starvation or by low temperature (21° C.) with concurrent starvation for 16 hours. They will, however, gorge on blood-soaked cotton pledgets, in the absence of other foods, (Siverly and Schoof, 1962). In our trials, mosquitoes given 4 percent sucrose-96 percent heparinized chick blood ingested only serum, since the two

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