

**The Occurrence of *Hexagenia limbata californica*  
(Upholt) in a California Warmwater Reservoir  
(Ephemeroptera: Ephemeridae)**

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A number of nymphs of the mayfly *Hexagenia limbata californica* were collected from Merle Collins Reservoir, Yuba County, California. This species is the only representative of the family found in California. Spieth (1941) gives the type locality as Kingsburg, Fresno County, California, and indicates that the nymph is undescribed. Usinger (1956) describes the nymph as "Fossorial, yellowish white, dorsum marked as in adult; with low rounded frontal process of head. Length of mature nymph, 20-27 mm." Usinger limits their distribution to the Sacramento and San Joaquin river systems. A review of the literature failed to find any recent publication dealing with the taxonomy or distribution of this species in California; perhaps this note will stimulate further reports.

Four specimens were taken during a benthic sampling program at Merle Collins Reservoir in 1965, and approximately 30 specimens were collected from stomachs of brown trout (*Salmo trutta*) and red-ear sunfish (*Lepomis microlophus*) at Merle Collins Reservoir in 1967. No adults have been seen.

Identification was confirmed by Dr. G. F. Edmunds, Jr., of the University of Utah.

Dr. Richard K. Allen (letter, 1968) of California State College at Los Angeles believes that this species is not as rare as the literature indicates, and that it probably occurs in all warm-water impoundments from the Bakersfield area in California east to Utah and north to Oregon. He has searched unsuccessfully for the species in southern California.

*Hexagenia* is a major food item of many fishes in the mid-West and is even harvested commercially for sale as bait (Burton, 1953).

The various species require a soft mud substrate and can be found on the bottom in water from a few inches deep to within the lower level of the thermocline (Edmunds, letter 1968). Specimens taken in Merle Collins benthos samples were taken from a depth of 5 feet.

#### LITERATURE CITED

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