THE MAYFLIES OF THE GLEN CANYON DAM AREA, COLORADO RIVER, UTAH

George F. Edmunds, Jr.

University of Utah

The principal collections of mayflies on which this study is based were made in Glen Canyon by personnel of the University of Utah and the Utah State Fish and Game Commission during a survey conducted for the United States Bureau of Reclamation. Guy Musser and Gerald Smith of the University, and Donald McDonald of the Fish and Game Commission made collections of mayflies from July 1 to August 4, 1958, from a point 161.5 river miles to 50.5 river miles above Lee's Ferry, Arizona.

These collections were supplemented by those which the writer made along the same route in April 1948, and from fringe areas on various dates. McDonald made a few small collections in the same area late in 1958.

The Colorado River in Glen Canyon is a highly silted stream with little food material available. The shifting silted sand bottom is a particularly poor habitat with few species or individual insects present.

*Siphlonurus occidentalis* Eaton. Several nymphs of this species were collected in April from pools at Bridge Canyon National Monument. It probably occurs early in the season in pools in tributary streams of the Colorado River in Glen Canyon.

*Lachlania powelli* Edmunds. This species was originally described from the Green River at Hideout Canyon. It was taken rarely from the mouth of Trachyte Creek (river mile 161.5) to Music Temple (r.m. 76.2), and although uncommon, probably occurs on submerged rocks and sticks throughout Glen Canyon.

*Homoeoneuria* sp. Three nymphs collected in the Escalante River, one mile upstream from the canyon mouth
(r.m. 88), represent the first record of the genus from Utah. In a recent review of this genus by Edmunds, Berner, and Traver (1958), the westernmost records of this genus in the United States were from Nebraska, Kansas, and Texas. The nymphs, which burrow in the sand of running streams, appear to represent an undescribed species. It is hoped that adults of this species may be obtained before inundation of the collection site.

*Heptagenia eleganta* Eaton. This species was taken from most of the few rocky bottomed areas of the river. It was collected from the mouth of Ticaboo Canyon (r.m. 148.5) to the mouth of the San Juan River (r.m. 78).

*Baetis* spp. Nymphs of at least two species were taken on rocks and other debris from the mouth of Trachyte Creek (r.m. 161.5) to the mouth of the San Juan River (r.m. 78). One of the two species has peculiar flattened claws.

*Callibaetis* sp. Nymphs of this genus were common in the pond-like sections of streams and ponds in tributary canyons along the entire survey area. Callibaetis nymphs will probably use the protected shore areas of the completed reservoir.

*Traverella albertana* (McDunnough). Nymphs of this genus were collected in rocky rapids from the mouth of Trachyte Creek (r.m. 161.5) to the mouth of the Escalante River (r.m. 88). They were also taken one mile up the Escalante River. A mating swarm of adults was observed and a series was collected at Music Temple (r.m. 76.2).

*Tricorythodes* sp. A few typical nymphs of this genus were collected at the mouth of Trachyte Creek (r.m. 161.5) and at river mile 108.

**Literature Cited**