

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Invertebrate Abstract

Element Code: IIPLE0Z040

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Taenionema jacobii*

COMMON NAME: A Stonefly, Southwest Willowfly

SYNONYMS:

FAMILY: Taeniopterygidae

AUTHOR, PLACE OF PUBLICATION: Stanger and Baumann, 1993.

TYPE LOCALITY:

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS: There are only 6 genera and 35 species in this family.

DESCRIPTION: For the family, the body length is 7-15 mm (mature larvae, not including antennae or tails). The body is short and stocky, especially the thorax. The middle portion of the end of the lower lip, between the two finger-like projections, is mostly blunt on the end with three small notches (best seen in bottom view). There are no gills in the neck region between the head and thorax. Both pairs of wing pads, especially the hind wing pads, diverge at an angle from an imaginary straight line running from the front to the back of the body. If the hind legs are pulled straight back, the ends of the legs reach about to the tip of the abdomen or a bit beyond. Close examination of the three small segments on the end of the legs reveals that the first and second segments (proceeding away from the body) are about equal in length. The claws on the ends of the legs do not count as a segment.

AIDS TO IDENTIFICATION:

ILLUSTRATIONS: Color drawing (Voshell 2002)

TOTAL RANGE: Arizona and New Mexico.

RANGE WITHIN ARIZONA: Greenlee, Pima, and Yavapai counties.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: These stoneflies are crawlers. This is another of the two families of stoneflies that have their life history reversed from most aquatic insects, with the adults emerging during the cold months rather than during the warm months. There is one generation per year. In most kinds, the adult emergence takes place from December to April, depending on species, latitude, and altitude.

REPRODUCTION: Courtship for stoneflies largely consists of drumming against the substrate with the underside of the abdomen. The females generally sit around waiting for the drumming males to reach them.

FOOD HABITS: This family is mostly shredder-detritivores, some collector-gatherers and scrapers.

HABITAT: Almost all lotic-erosional. Larvae of this family occur in permanent streams of all sizes and temperatures, from small, cool, mountain streams to large, warm rivers on plains. Larvae live in a variety of coarse substrates, such as leaf packs, debris jams, tree roots, submerged plants, and on large rocks with algae growing on them. They are often found near the stream margins where the current is reduced.

ELEVATION:

PLANT COMMUNITY:

POPULATION TRENDS: Unknown

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None

STATE STATUS: None

OTHER STATUS: None

MANAGEMENT FACTORS:

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP:

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

Another common name that is used for this family is early stones.

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