

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

Invertebrate Abstract

Element Code: IIPLE1W020

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Anacroneuria wipukupa*

COMMON NAME: A Stonefly, Redrock stonefly

SYNONYMS:

FAMILY: Perlidae

AUTHOR, PLACE OF PUBLICATION: Baumann and Olson, 1984.

TYPE LOCALITY:

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS:

DESCRIPTION: For this family, the larvae body length is 8-30 mm (mature larvae, not including antennae or tails). The body is somewhat flattened and is usually brownish with yellowish markings. The middle portion of the end of the lower lip, between the two finger-like projections, has one deep notch that splits the end, which is best seen from bottom view. There are dense tufts of branching filamentous gills on the bottom of the thorax at the side, where the legs attach to the body. There are no branching filamentous gills on the abdomen. The adults have a variable color but are usually yellowish to brownish and not green. Most are 15-40 mm (0.6-1.6 in) in length. They have remnants of branched nymphal gills on the ventral side of the thorax, usually immediately behind bases of legs, along with 2 tail-like cerci distinctly longer than the width of the thorax.

AIDS TO IDENTIFICATION:

ILLUSTRATIONS: Color drawing (Voshell 2002)
Color drawing (Borror 1970)
Color photo (Milne 1980)

TOTAL RANGE: Oak Creek, Yavapai County, Arizona.

RANGE WITHIN ARIZONA: See "Total Range."

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Larvae of this family are considered crawlers. They are very agile and can move quickly. If they are transferred to still water they cannot obtain enough dissolved oxygen from the water, so they create currents over their gills by using their legs to raise and lower the body in a manner resembling “push-ups”.

The length of the common stonefly life cycle varies from 1 to 3 years, according to species and geography. Many species require 2 years to complete their life cycle. Adults emerge primarily during the summer, May through August. All stonefly larvae must crawl out of the water to transform into adults. They are strongly attracted to lights.

REPRODUCTION: Stonefly eggs are always produced in a loose egg mass. The female lands briefly on the water surface, just long enough to dislodge the egg mass, and then she flies away. The egg mass quickly falls apart in water, and the individual eggs stick to solid objects on the bottom. The eggs usually hatch in 3-4 weeks.

FOOD HABITS: The family Perlidae, are engulfer-predators. Studies of their diets have shown that common stonefly larvae consume midges, black flies, may flies, caddisflies, other stoneflies, beetles, moths, and crustaceans. They are opportunistic and will consume whatever prey is available. Very young larvae may be collector-gatherers, until they are strong enough to subdue prey.

HABITAT: Most kinds of common stoneflies are found in cool, clear streams of small to medium size. Larvae are most commonly found on or under large stones, such as cobbles and boulders, but they may also live on logs and within accumulations of debris.

ELEVATION: Unknown.

PLANT COMMUNITY: Unknown.

POPULATION TRENDS: Unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: None
OTHER STATUS: None

MANAGEMENT FACTORS: Threats include impact to aquatic habitats, especially pollution.

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Surveys are needed to determine their range, and population numbers. In addition, studies are needed to learn more about their life history and biology.

LAND MANAGEMENT/OWNERSHIP:**SOURCES OF FURTHER INFORMATION****REFERENCES:**

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MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

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