

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

**Invertebrate Abstract**

**Element Code:** IIORTH4050

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Morsea kaibabensis* (Rehn & Grant) Otte

**COMMON NAME:** A Monkey Grasshopper

**SYNONYMS:** *Morsea californica kaibabensis* Rehn & Grant

**FAMILY:** Eumastacidae

**AUTHOR, PLACE OF PUBLICATION:** *Morsea kaibabensis* (Rehn & Grant) D. Otte, Orthoptera Species File. 2. 1994. *Morsea californica kaibabensis* Rehn & Grant, Trans. Amer. Entomol. Soc. 84: 239. 1958.

**TYPE LOCALITY:** NW escarpment of Kaibab Plateau, Coconino County, Arizona, USA.

**TYPE SPECIMEN:** HT: ANSP (Philadelphia, male).

**TAXONOMIC UNIQUENESS:** There are 1,200 species in this family.

**DESCRIPTION:** Monkey Grasshoppers are distinguishable from katydids and crickets by their short stubby antennae. The head of these slim insects is long and set at an angle to the thorax. Many are brightly colored, while some resemble leaves or sticks. The hind legs are thin and elongate, with distinctive spines on the lower half of the tibiae. At rest, many species sit with their hind legs splayed out sideways. The antennae are shorter than the front femora. The majority of them are wingless.

**AIDS TO IDENTIFICATION:** They are distinguishable from katydids and crickets by their short stubby antennae.

**ILLUSTRATIONS:**

**TOTAL RANGE:** Arizona, Kaibab Plateau, Coconino County.

**RANGE WITHIN ARIZONA:** See "Total Range."

**SPECIES BIOLOGY AND POPULATION TRENDS**

**BIOLOGY:** They are diurnal and readily fly in the sun, and they resemble damselflies in several respects. As a group, grasshoppers (along with katydids and crickets) are well known for their

abilities to jump and particularly for singing by males (females are typically silent). Grasshoppers usually sing diurnally in the warm season.

**REPRODUCTION:** For the family mating involves the male on top of the female. Eggs are laid in the ground or in detritus.

**FOOD HABITS:** Herbivores. This family feeds on a variety of plant types ranging from grasses and sedges to desert shrubs and ferns.

**HABITAT:** Shrubland/chaparral.

**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:** Studies to determine distribution, life history factors, and population status need to be performed.

**LAND MANAGEMENT/OWNERSHIP:**

### **SOURCES OF FURTHER INFORMATION**

#### **REFERENCES:**

- Borror, D.J., and R.E. White. 1970. Insects: Peterson Field Guide. Houghton Mifflin Company. Boston, Massachusetts. Pp: 78-80.
- Bugbios. Available: [http://www.insects.org/entophiles/orthoptera/orth\\_008.html](http://www.insects.org/entophiles/orthoptera/orth_008.html).
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- McGavin, G.C. 2002. Smithsonian Handbooks Insects Spiders and Other Terrestrial Arthropods. DK, New York, New York. Pp: 64.
- NatureServe. 2004. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.1. NatureServe, Arlington, Virginia. Available: <http://www.natureserve.org/explorer>. (Accessed: January 06, 2005).
- Resh, V.H., and R.T. Carde. 2003. Encyclopedia of Insects. Academic Press. New York, New York. Pp: 883.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:****ADDITIONAL INFORMATION:**

This family contains several species of relatively uncommon grasshoppers that are found in the chaparral country of the Southwest, where they usually occur on the uppermost branches of bushes.

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