

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

**Invertebrate Abstract**

**Element Code:** IIORT01V10

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Melanoplus janus*

**COMMON NAME:**

**SYNONYMS:**

**FAMILY:** Acrididae

**AUTHOR, PLACE OF PUBLICATION:** Otte, Trans. Amer. Entomol. Soc. 138: 73-167.  
2012.

**TYPE LOCALITY:**

**TYPE SPECIMEN:**

**TAXONOMIC UNIQUENESS:** This family contains 17 recognized subfamilies with more than 1,500 genera and 10,000 species. There are 21+ species in this genus.

**DESCRIPTION:** For the family Acrididae (Short-horned Grasshoppers): Short-horned grasshoppers get their name from their short, horn-shaped antennae, which are usually less than half the length of the body. They are 0.5-3.25 in. (12-80 mm) long. These common grasshoppers have a 3-segmented tarsi and one flat, round hearing organ called tympana on each side of the first abdominal segment. The pronotum is saddle shaped and does not extend over the abdomen. The females, which are nearly always larger than the males, do not have a conspicuous ovipositor. They have strong hind legs for jumping and kicking. The hind wings are large and membranous. Most grasshopper species have camouflage coloring and patterning, although some have bright "warning" coloration and produce noxious chemicals.

**AIDS TO IDENTIFICATION:**

**ILLUSTRATIONS:**

**TOTAL RANGE:** Arizona.

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

**SPECIES BIOLOGY AND POPULATION TRENDS**

**BIOLOGY:** This family of grasshoppers produces a low buzzing sound by rubbing the roughened surfaces of their hind wings against the fore wings. Many members of this family attack crop plants. Grasshoppers are active most exclusively in the daytime. This means that courtship and mating take place under conditions in which it is possible for the participants to view each other. It is not surprising then, that courtship, where it exists, depends heavily on visual displays involving various parts of the body.

**REPRODUCTION:** For the family, females lay eggs in large masses below the surface of the ground. During laying, the eggs are covered in a layer of foam, which hardens as it dries, giving a degree of protection from desiccation, predators, and parasites.

**FOOD HABITS:** Herbaceous.

**HABITAT:** Grassland.

**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:** Life history studies, population surveys and range distribution studies need to be performed.

**LAND MANAGEMENT/OWNERSHIP:**

**SOURCES OF FURTHER INFORMATION****REFERENCES:**

- Borror, D.J. & R.E. White. 1970. A Field Guide to Insects, America north of Mexico. Houghton Mifflin Company. Boston, Massachusetts. Pp: 78.
- McGavin, G.C. 2002. Smithsonian Handbooks Insects Spiders and Other Terrestrial Arthropods. DK. New York, New York. Pp: 64.
- Milne, L. & M. Milne. 1980. National Audubon Society Field Guide to North American Insects and Spiders. Alfred A. Knopf. New York, New York. Pp: 417.
- NatureServe Explorer: An online encyclopedia of life [web application]. 2005. Version 4.2. Arlington, Virginia, USA: NatureServe. Available: <http://www.natureserve.org/explorer>. (Accessed: January 27, 2005).
- Otte, D., 2012. Eighty new melanoplus species from the United States (Acrididae: Melanoplinae). Transactions of the American Entomological Society, 138(1&2), pp.73-167.
- Preston-Mafham, R. & K. Preston-Mafham. 1993. The Encyclopedia of Land Invertebrate Behaviour. The MIT Press. Cambridge, Massachusetts. Pp: 48, 55, 137, 249.
- Resh, V.H. & R.T. Carde. 2003. Encyclopedia of Insects. Academic Press. New York, New York. Pp: 837-838.

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

**Revised:** 2005-09-30 (AMS)

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