

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

Invertebrate Abstract

Element Code: IMGASM5050

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CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Gyraulus (Torquis) parvus*
COMMON NAME: Ash Gyro; Ramshorn Snail; Freshwater Disc Snail
SYNONYMS: *Planorbis vermicularis*, *Planorbis similaris*
FAMILY: Planorbidae

AUTHOR, PLACE OF PUBLICATION: T. Say 1817, in W. Nicholson's British Encyclopedia 1st American Edition, 2, Art. Conchology, signature Xx, 9th unnumbered page, Pl. 1, fig. 5, as *Planorbis*. *Planorbis vermicularis* A. A. Gould, 1847, Proc. Boston Soc. Nat. Hist. 2:212. *Planorbis similaris* F.C. Baker, 1917, Bull. Amer. Mus. Nat. Hist. 41:529.

TYPE LOCALITY: Delaware River, Pennsylvania (Bequaert and Miller, 1973).

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS: The *Gyraulus* genus is worldwide in distribution . There are 5 species within the *Gyraulus* genus. The only other species within the *Gyraulus* genus occurring within Arizona is *G. circumstriatus*. The *Gyraulus parvus* species is taxonomically well-characterized and systematically stable (Perez et al., 2004, Bequaert and Miller, 1973).

DESCRIPTION: For the genus the shell is small, 2-8 mm in diameter, spire height varying from high to flattened or depressed, spire pit shallow and wide, height of body whorl equal across the whorl. The shell of *G. parvus* is brownish, translucent, and not planispiral (Perez et al., 2004). They have 3.5 adult body whorls.

AIDS TO IDENTIFICATION: *G. parvus* can be distinguished from *G. circumstriatus* by shell color and shape. The shell of *G. parvus* is brownish, translucent, and not planispiral, whereas the shell of *G. circumstriatus* is whitish or yellowish, semi-transparent, and planispiral. Although superficially similar to *M.dilatatus*, *G. Parvus* seems to be restricted to richer environments.

ILLUSTRATIONS: Color Photo (In http://www.cofc.edu/~dillonr/FWGSC/g_parvus.html)

TOTAL RANGE: *G. parvus* is widespread throughout North America. However, it seems especially well-adapted to lacustrine environments north of the glacial maximum and becomes less common as one samples from North to South Carolina. (Dillon, 2004).

RANGE WITHIN ARIZONA: Coconino Co.: Walker Lake, Spitz Spring, Lindbergh Spring, Ashurst Lake, and Chevelon Creek. Navajo Co.: Cholla Lake, Clear Creek Reservoir, and Rainbow Lake. Apache Co.: East Fork of Black River, A-1 Lake, Rogers Reservoir, Luna Lake, and Wilson Reservoir. Greenlee Co.: Eagle Creek. Cochise Co.: Parker Canyon Lake, Cave Creek at Herb Martyr Dam, and Rucker Canyon. Santa Cruz Co.: Pena Blanca Lake. Yavapai Co.: E side of Cornville 5 mi. E of Cottonwood. Gila Co.: Reynolds Creek, Seneca Lake, and Carizo Creek (Bequaert and Miller, 1973).

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Planorbid snails lack an operculum and as in the family Physidae, Planorbid snails have an accessory "gill", which is the pseudobranch located on the foot.

REPRODUCTION: Planorbid snails are hermaphroditic; each individual possesses both male and female reproductive organs and two animals may exchange sperm during copulation. Egg-laying begins in the spring, and can continue throughout the summer. In northern climates where adults aestivate, these snails may live for 2-4 years, although the norm is likely 9-15 months (Aquatic Invertebrates Illustrated Field Guide, 2000).

FOOD HABITS: *Gyraulus parvus* are considered to be scrapers (grazers) whose diet includes algae, diatoms, and periphyton (Aquatic Invertebrates Illustrated Field Guides, 2000).

HABITAT: Lotic freshwaters of both temporary and permanent habitat (Aquatic Invertebrates Illustrated Field Guides, 2000).

ELEVATION: 3,000-8600 ft (914-2,621 m) (Bequaert and Miller, 1973).

PLANT COMMUNITY: Can be found attached to vascular plants.

POPULATION TRENDS:

SPECIES PROTECTION AND CONSERVATION

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

MANAGEMENT FACTORS: Occurs regularly, as a native taxon in multiple nations (NatureServe, 2006).

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: Surveys to determine distribution and status should be performed.

LAND MANAGEMENT/OWNERSHIP:

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

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