# PROCEEDINGS OF THE

## BIOLOGICAL SOCIETY OF WASHINGTON

THE NOMENCLATURE, BIONOMICS, AND DISTRIBUTION OF NOTATICUS FASCIATUS (COLEOPTERA: DYTISCIDAE: AUBEHYDRINAE)<sup>1</sup>

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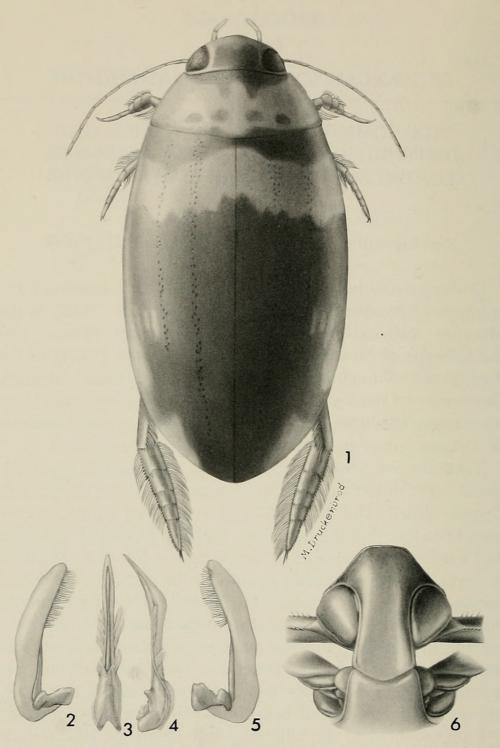
During a visit to some European museums I examined the holotype of *Aubehydrus speciosissimus* Guignot (1942) in the Museum National d'Histoire Naturelle, Paris, France, and the holotype of *Notaticus fasciatus* Zimmerman (1928) in the Zoologische Sammlung des Bayerischen Staates, Munich, Germany. I found that the two names were applied to the same taxon; therefore, I am placing *Aubehydrus speciosissimus* as a junior subjective synonym of *Notaticus fasciatus*.

Notaticus fasciatus and its synonym, Aubehydrus speciosissimus, were described from specimens from the state of Mato
Grosso, Brazil, and no additional reports of its occurrence
have been found in the literature. In 1969, Phyllis M. Spangler
and I collected specimens of the attractive Notaticus fasciatus
in several South American countries. In addition, we found
specimens of N. fasciatus bearing several different manuscript
names in some South American collections. The synonym
created by Guignot and the manuscript names on specimens
indicated to me that this taxon has been misidentified frequently. Therefore, I hope this report will assist in the recognition of this species and help to prevent further synonymies.

I am indebted to the following individuals for allowing me to examine types and other specimens in their institutions; acronyms following the names of the institution will identify the source of the material listed under specimens examined: Dr. Heinz Freude (now retired), Zoologische Sammlung des

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Figs. 1–6. Notaticus fasciatus Zimmerman: 1, 3, habitus; 2, right paramere, lv; 3, median lobe, vv; 4, median lobe, lv; 5, left paramere, lv; 6, prosternum and prosternal process, vv. lv = lateral view; vv = ventral view.

Bayerischen Staates, Munich, Germany (ZSBS); Dr. Luis De Santis, Universidad Nacional de LaPlata, LaPlata, Argentina (ULP); Mme. A. Bons, Museum National d'Histoire Naturelle, Paris, France (MNHN). Specimens in the National Museum of Natural History, Smithsonian Institution are identified by the acronym USNM.

I am indebted to Mr. Michael Druckenbrod, Smithsonian Institution staff artist, for the illustrations included in this article.

When Zimmerman described his monotypic genus *Notaticus*, he assigned it to the tribe Hydaticini. Guignot being unaware of Zimmerman's previous description of this taxon established the subfamily Aubehydrinae for what he thought was a new genus and species. According to Article 40, Example (1) of The Code (1961), the subfamily name remains Aubehydrinae and the type-genus is *Notaticus* because *Aubehydrus speciosis-simus* is a junior synonym of *Notaticus fasciatus*.

The current synonymies for the subfamily Aubehydrinae and the genus *Notaticus* follow.

# Subfamily Aubehydrinae

Aubehydrus Guignot, 1942:11. Type-genus, Notaticus Zimmerman [not Aubehydrus Guignot, a junior subjective synonym of Notaticus].

#### Genus Notaticus Zimmerman

Notaticus Zimmerman, 1928:182. Type-species, Notaticus fasciatus, by monotypy.—Blackwelder, 1944:79.

Aubehydrus Guignot, 1942:11 [NEW SYNONYMY].

# Notaticus fasciatus Zimmerman Figures 1–8

Notaticus fasciatus Zimmerman, 1928:183; type-locality: Brazil, Mato Grosso, Carandasiuh; type ♀, in Zoologische Sammlung des Bayerischen Staates, Munich, Germany, examined.—Blackwelder, 1944:79.

Aubehydrus speciosissimus Guignot, 1942:12; type-locality: Brazil, Mato Grosso; type Q, in Museum National d'Histoire Naturelle, Paris, France, examined; [NEW SYNONYMY].

Neither Zimmerman nor Guignot had males in their type-material, and their descriptions, therefore, refer to the external morphology of the female of the species. Males of N. fasciatus average slightly shorter (6.5 mm to 7.0 mm) than females (7.0 mm to 8.0 mm). The protarsi and



Fig. 7. Notaticus fasciatus Zimmerman, Biotope, Lago de los Patos, 15 km south of Calabozo, Venezuela.

mesotarsi of the females are unmodified; whereas, the males have the 3 basal protarsal segments broadened and bearing 3 large basal cupules and 9 small cupules along the inner and outer margins and the 2 basal mesotarsal segments slightly broadened and bearing 12 or 13 small cupules. I have included a habitus view (Fig. 1) and illustrations (Figs. 2–6) of some of the distinguishing characters of the male.

The specimens of *Notaticus fasciatus* collected by P. and P. Spangler were collected from the shallow margins of ditches and ponds (Fig. 7) in association with *Eichornia*, *Pistia*, and various nymphaceous and alismataceous plants. Also, the one specimen collected by R. Cumming at the Saavedra Experiment Station in Bolivia was collected in a light trap. The species is distributed widely (Fig. 8) in South America, and I have examined specimens from the following localities.

Argentina: Santa Fe: Dept. Garay-C. Macias, M. J. Viana, 6 specimens (ULP).

Bolivia: Santa Cruz: Santa Cruz (60 miles north), Saavedra Experiment Station, 3–5 Jan. 1960, R. Cumming, 1 & (USNM).

Brazil: Mato Grosso: No additional locality, 1886, P. Germain, (type ♀ of Aubehydrus speciosissimus Guignot) (MNHN); Carandasiuh (type ♀ of Notaticus fasciatus Zimmerman) (ZSBS).—Para: Belém, 3 July 1969, P. and P. Spangler, 1 ♂, 3♀♀ (USNM).

Colombia: Atlantico: Barranquilla, 18 Mar. 1969, P. and P. Spangler, 1 & (USNM).

Paraguay: No additional locality, Dec. 1936, ( paratype of Aubehydrus speciosissimus Guignot) (MNHN).

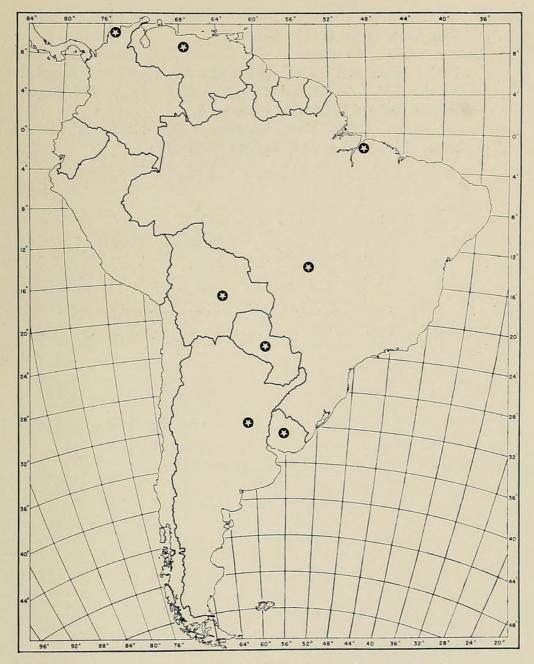


Fig. 8. Notaticus fasciatus Zimmerman, known distribution.

Uruguay: Bassin del Juculuja, Feb. 1952, 1♀ (MNHN). Venezuela: Guarico: Calabozo (15 km south), 9–13 Feb. 1969, P. and P. Spangler, 1♂, 4♀♀ (USNM); Calabozo, 7 Feb. 1969, P. and P. Spangler, 1♂ (USNM).

#### LITERATURE CITED

BLACKWELDER, RICHARD E. 1944. Checklist of the Coleopterous Insects of Mexico, Central America, the West Indies, and South America. U.S. Nat. Mus. Bull. 185(1):xi + 188 pages.

- Guignot, Felix. 1942. Description d'un genre noveau de Dytiscidae. Soc. Linn. Lyon 11(1):10–13.
- THE INTERNATIONAL COMMISSION OF ZOOLOGICAL NOMENCLATURE.
  1961. International Code of Zoological Nomenclature Adopted
  by the XV International Congress of Zoology. 176 pages.
  Suffolk: Richard Clay and Company, Ltd.
- ZIMMERMAN, ALOIS. 1928. Neuer Beitrag zur Kenntnis der Schwimmkafer. Weiner Ent. Zeit. 44(3&4):165–187.



Spangler, P J. 1973. "The Nomenclature Bionomics And Distribution Of Notaticus fasciatus Coleoptera Dytiscidae Aubehydrinae." *Proceedings of the Biological Society of Washington* 86, 495–500.

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