

The Coleopterists Society

Distribution and Biology of the Tenebrionid *Ulus maritimus* Casey in Florida

Author(s): Charles A. Triplehorn and Barry D. Valentine

Source: *The Coleopterists Bulletin*, Vol. 33, No. 1 (Mar., 1979), p. 68

Published by: [The Coleopterists Society](#)

Stable URL: <http://www.jstor.org/stable/4000161>

Accessed: 09/01/2011 20:22

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=cole>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



The Coleopterists Society is collaborating with JSTOR to digitize, preserve and extend access to *The Coleopterists Bulletin*.

DISTRIBUTION AND BIOLOGY OF THE TENEBRIONID
ULUS MARITIMUS CASEY IN FLORIDA

CHARLES A. TRIPLEHORN AND BARRY D. VALENTINE

Departments of Entomology and Zoology respectively,
The Ohio State University, Columbus, OH 43210

Ulus maritimus Casey was described in 1890. Casey mentions (p. 414) that the species is "... peculiar to the sand dunes which line the ocean beaches ..." and that he took it "... in considerable abundance at Galveston [Texas]". T. J. Spilman (Systematic Entomology Laboratory, USDA) informs us (*in litt.*) that the Casey collection (USNM) contains six specimens from Galveston and one from Florida. The latter has a partial label "dar Key Fl." which he interprets as Cedar Key, Levy County, Florida. The National Museum of Natural History (Spilman, *in litt.*) has additional specimens identified as *Ulus maritimus* from the following Texas localities: Laredo (Webb Co.), Carrizo Springs (Summit Co.), Goliad (Goliad Co.), Corpus Christi (Nueces Co.), and Galveston (Galveston Co.). Only the last two localities have marine sand dune habitats. Since the determinations were not confirmed by us, and *Ulus elongatulus* Casey is common in the lower Rio Grande Valley of Texas, some of the above records may prove to be that species. The Ohio State University collection has ten specimens of *U. maritimus* from Mobile, Alabama, collected by H. P. Löding. The species was listed by Löding (1945, p. 89) from both Mobile and Baldwin Counties, Alabama with the notation "Bay shore. Under logs."

A series of twelve specimens of *U. maritimus* was taken 23 March, 1978 on the north end of Gasparilla Island, Charlotte Co., Florida; four specimens were taken 10 miles east of Destin, in Walton Co., Florida on 21 March, 1973, both lots by B. D. Valentine and family; all were on beach sand dunes at night. Except for the unique in the Casey collection and one from St. Andrews State Park (Bay County) in the Florida State collection of Arthropods, these are the only known specimens from Florida. The series from Gasparilla Island was collected at night with headlamps, at the base of low beach dunes facing the Gulf of Mexico. Vegetation was early dune succession, mostly *Uniola paniculata* (sea oats), with a variety of other halophilous and xerophilous plants. The beetles were partly exposed in the loose white sand, usually immersed up to or just over the prothoracic and elytral margins, with the legs invisible in the sand. When motionless they resembled partly buried plant seeds; when active, the leg movements were invisible and the beetle appeared to swim along the sand surface with no visible means of propulsion. The 1973 collection near Destin in western Florida was made in loose white sand on the landward side of the dunes nearest the Gulf. There was no vegetation except some sea oats on the dune top; the beetles were at the dune base. Their behavior was not observed in detail, but sand-swimming was noted. At Gasparilla Island the only associated arthropod was a pale lycosid spider; at the Destin site, *Ulus* occurred with three other tenebrionids: *Blapstinus metallicus* (Fabricus), *Polypleurus geminatus* Solier, and *Pseudephalus brevicornis* Casey.

It is reasonable to suppose that *U. maritimus* occurs along the Gulf Coast wherever suitable habitat exists. Collecting along dunes at night or pit-fall trapping would probably yield specimens from many places where the species is as yet unknown. Both techniques were successful for *Ulus fimbriatus* Casey, at Monahans, Texas, where 18 specimens were collected on 16 July, 1972 by C. A., W. E., and B. W. Triplehorn; no specimens were collected during daylight hours despite vigorous conventional searching.

LITERATURE CITED

- CASEY, T. L. 1890. Coleopterological Notices. II. Ann. New York Acad. Sci. 5:307-504, pl. IV.
LÖDING, H. P. 1945. Catalogue of the beetles of Alabama. Geol. Survey Alabama Monograph 11:1-172.