

## A new species of stag beetle from sand dunes in west Texas, and a synopsis of the genus *Nicagus* (Coleoptera: Lucanidae: Aesalinae: Nicagini)

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### Abstract

A new species of stag beetle, *Nicagus occultus* **n. sp.**, is described from the Monahans Sandhills of western Texas. Previously, the genus *Nicagus* contained only two species: *N. obscurus* (LeConte) from the eastern and central United States and southern Canada, and *N. japonicus* Nagel from Japan. The discovery of *N. occultus* represents both an unexpected range extension and an unusual habitat (unvegetated sand dunes) for the family Lucanidae. A synopsis (diagnosis and distribution) for each *Nicagus* species is given, including detailed distributional information for *N. obscurus*.

**Key words:** Lucanidae, *Nicagus*, Texas, United States, Japan, sand dunes

### Introduction

The family Lucanidae is a well-known and avidly collected family of beetles. Although there are approximately 1000 species of stag beetles worldwide (Krajcik 2001), the Nearctic region is home to only 23 species in eight genera (Smith 2003). The last new species of Nearctic lucanid was described by Benesh (1942) over sixty years ago. Stag beetles are generally found in forested habitats, where the larvae feed on decaying wood (Ratcliffe 2002). Some stag beetles are known from sandy habitats along bodies of water, such as the eastern North American *Nicagus obscurus* (LeConte) (see Discussion). However, only one Nearctic species, *Lucanus mazama* (LeConte), has been previously reported from sand dunes (Hardy & Andrews 1974), and then only from the dune periphery near dead vegetation. Here we report the discovery of an undescribed species of *Nicagus* (Aesalinae: Nicagini, Fig. 1) found on active, unvegetated sand dunes in west