

Introduction

The family Scydmaenidae, comprising 22 genera and 181 described species in America north of Mexico (Arnett 1963), was revised by LeConte (1852) and again by Casey (1897). Since the appearance of Casey's work, only 13 species have been added to the North American fauna (Schaeffer 1905 [1], Blatchley 1910 [1], Fall 1912 and 1926 [2], Marsh 1956 [8], Franz 1985 [1]). Nearly all of the genera need to be revised, and relatively little is known of the biology of any North American species. Though the larval stages have been recently treated for European genera (Brown and Crowson 1979, De Marzo 1984, Klausnitzer 1978, Schmid 1988b), the larval stages have been described for only four of the 181 species (Böving and Craighead 1931, Wheeler and Pakaluk 1985), and the only definitive works on scydmaenid biology discusses the feeding behavior of adults of European species (Schmid 1988a, Schuster 1966a and 1966b).

The genus *Lophioderus* consists of 36 species restricted to North America; 35 occur in the western United States and Canada from central and northern California, Oregon, Washington, Idaho, southern Alaska, and western British Columbia. A single species occurs in the Appalachian Mountains of the Eastern United States.

Specimens of *Lophioderus* are collected commonly from forest floor leaf litter in mountainous regions. Nearly all the specimens examined in this study were collected by sifting leaf litter under various conifer and hardwood tree species and processing these samples through modified Berlese funnels. Adult *Lophioderus* most often are collected in moist leaf material found along the edges of rotten logs, in tree holes, or in other shaded microhabitats that remain relatively cool and moist.