Colorado Insects of Interest

Milkweed Longhorns

Scientific Names: Tetraopes annulatus LeConte; Tetraopes femoratus LeConte; Tetraopes mandibularis Chemsak; Tetraopes tetrophthalmus (Forster) (red milkweed beetle); Tetraopes pilosus Chemsak; Tetraopes discoideus LeConte

Order: Coleoptera (Beetles) **Family:** Cerambycidae (Longhorned Beetles)



Figure 1. Tetraopes femoratus adult

Identification and Descriptive Features: The most common species are primarily reddish to reddish-orange with black spotting and range from about 10-16 mm in length. *Tetraopes pilosus* is lighter colored with fine hairs covering the wing covers; *T. tetrophthalmus* is darker red than other species and known by the common name "red milkweed beetle". *Tetraopes discoideus* is much smaller than the other species (7-9 mm) with heavily marked wing covers. Substantial variation in patterning and coloring is common in most species.



Figure 2. *Tetraopes discoideus*, a small milkweed longhorn associated with horsetail milkweed.

Distribution in Colorado: *Tetraopes femoratus* and *T. annulatus* are widespread and can be found throughout most of the state in association with its milkweed hosts. *Tetropes pilosus* occurs across the eastern plains; *T. discoideus* and is found in southeastern Colorado. *T. tetrophthalmus*, the most common species in the eastern US, ranges into eastern Colorado and is most commonly found in the southeastern counties. Relatively recently T. mandibularis has also been recognized as occuring in eastern Colorado. The occurrence of suitable species of milkweed (*Asclepias* spp.) and soil type affect local distribution.

Life History and Habits: All of the milkweed longhorns feed and develop on milkweeds (*Asclepias* spp.). Some may feed on a single milkweed species, such as the association of *T*. *discoideus* with horsetail milkweed (*Asclepias subverticillata*). Others are capable of development on two or more milkweed species.

Adults spend most all of their time on milkweed, where they rest, feed, and mate. Mating is commonly observed, particularly on cooler and more overcast days. Feeding can occur on all above ground parts of the plants, particularly young leaves, flower buds, and blossoms. The adults typically live about a month.

The site of egg laying is a subject of continued discussion and apparently varies among species. Most lay their eggs at the root crown and the female may cut the stem before inserting her eggs. The larvae then tunnel into soil or make shallow tunnels into the epidermis of the stem while



Figure 3. The four species of larger milkweed longhorns that most commonly occur in Colorado. From left to right: *Tetraopes annulatus*, *T. femoratus*, *Tetraopes pilosus*, *Tetraopes tetrophthalmus*.

migrating to the roots. At least one species, *T. tetrophthalmus*, may lay eggs on dried stubs of the milkweed plant or even adjacent grasses; larvae of this species then crawl to the base of milkweed plants and tunnel to the roots.

Larval development occurs on the roots. On milkweed with small roots larvae live in the soil and chew roots. Milkweeds that produce large taproots may be tunneled by the larvae. Feeding occurs through late summer, fall and likely extends into early spring. When full grown the larvae move a few inches away from the plant, form an oval chamber of tamped soil and pupate. About a month later the adults emerge. One generation is produced annually. Milkweed longhorns are capable of sound production. A "squeaking" noise may be produced if they are held, apparently produced as a warning signal. A second "purring" noise has also been reported by some species, that may be used in communication between potential mates.