

Clerid Beetles (Checkered Beetles)

Order: Coleoptera (Beetles)

Family: Cleridae (Checkered Beetles)

Identification and Descriptive Features:

Adult clerid beetles have an elongated body with the head and prothorax narrower than back of the body. They range in size from 5-14 mm with smaller species tending to be somewhat ant-like. Most are covered with fine hairs and are brightly colored, often with patterns lending them the common name “checkered beetles”. Some of the largest species are bright red (*Enoclerus spinolai* (LeConte)) or with alternating red-orange and black bands (*Trichodes simulator* Horn). A few species, including the common bark beetle associate known as the **blackbellied clerid**, *Enoclerus lecontei* (Wolcott), have more muted grayish patterning.



Figure 2. Clerid beetle, *Enoclerus coccineus*



Figure 1. Clerid beetle, *Enoclerus ornatus*.

One species of unusual appearance is *Monophylla terminata* (Say), sometimes known as the **paddle-shaped antennae beetle**. It has a more elongated body form and a prothorax edged with yellow but its distinguishing feature is the very long, flattened terminal segment of the antenna. In addition, at least two European species of the genus *Necrobia* have been reported in the state and these are colored metallic bluish-green.

Distribution in Colorado: Representatives of this family can be found throughout the state.

Most are found in forested areas but a few are common in grasslands areas. At least 13 species have been reported from Colorado (Table 1).

Life History and Habits: Almost all clerid beetles are predators of insects. Larvae usually feed on wood borers, bark beetles, and other insects that occur under bark, which they pursue by traveling down the tunnels of their prey. In some situations they are considered to be highly beneficial in the control some pest bark beetles. Some species of *Trichodes* found in grassland

areas will finish development by feeding on eggs in grasshopper egg pods or on the pollen stores and larvae of ground nesting bees.



Figure 3. *Enoclerus spinolai*, a large clerid beetle that occurs in grassland areas.

Most clerid beetles spend winter in the larval stage. Pupation occurs the following spring and adults are present during late spring through late summer. They can be seen on bark and foliage where they will feed on small flies, aphids and other insects they can capture. Adults may also emerge indoors during cool months when developing in firewood that is stored in a warm area.

At least two introduced species in the genus *Necrobia* have a scavenging habit. They are most commonly associated with dried carrion; one species, *N. rufipes* (DeGeer), is known as the **redlegged ham beetle** and also will damage dried meats. These clerid beetles will feed on fly larvae and other insects that are associated with the carrion, but also will tunnel into and feed as scavengers.



Figure 4. The redlegged ham beetle, a clerid beetle associated with dried meats and carrion.



Figure 5. Three gray colored clerid beetles. **Left to Right:** *Enoclerus sphegus*, *E. lecontei*, *E. moestus*.



Figure 6. Three Colorado clerid beetles. **Left to Right:** *Trichodes simulator*, *T. ornatus*, *T. nuttalli*.

Table 1. A Checklist of Clerid Beetles known from Colorado. *Primary Source:* Colorado State University Gillette Museum of Arthropod Diversity Collection.

Cymatodera bicolor (Say)
Cymatodera longicornis LeConte
Cymatodera morosa LeConte
Cymatodera umbrina Fall
Cymatodera fuchsii Schaeffer
Cymatodera scitula Barr
Cymatodera tricolor Skinner
Cymatodera tuta Wolcott
Cymatodera undulata (Say)

Enoclerus coccineus coccineus (Schenkling)
Enoclerus cordifer LeConte
Enoclerus lecontei (Wolcott) (**blackbellied clerid**)
Enoclerus laetus (Klug)
Enoclerus moestus (Klug)
Enoclerus nigripes (Say)
Enoclerus quadrisignatus (Say)
Enoclerus sphegus (Fabricius)
Enoclerus spinolai (LeConte)

Monophylla terminata (Say) (**paddle-shaped antennae beetle**)

Necrobia violacea (L.)
Necrobia rufipes (DeGeer) (**redlegged ham beetle**)

Pennasolis merkeli (Horn)

Phlogistrosternus dislocatus (Say)

Phyllobaenus humeralis (Say)
Phyllobaenus unifasciatus (Say)
Phyllobaenus subfasciata (LeConte)
Phyllobaenus pallipennis (Say)
Phyllobaenus tricolor (Schaeffer)
Phyllobaenus fallax Wolcott
Phyllobaenus pubescens (LeConte)
Phyllobaenus scabra (LeConte)
Phyllobaenus scaber LeConte

Thanasimus undulatus (Say)
Thanasimus dubius (F.)

Trichodes simulator Horn
Trichodes ornatus Say
Trichodes nuttalli (Kirby)

Wollcottia pedalis (LeConte)

Zenodosus sanguineus (Say)
