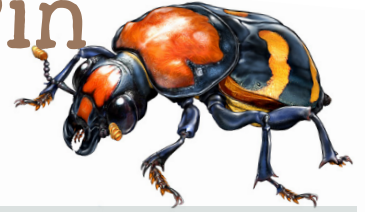


2023 Certification Pin

American Burying Beetle



Scientific & Common Names

Nicrophorus americanus & giant carrion beetle

Family

Silphidae (carrion beetles) in the order Coleoptera (beetles)

Description

The American burying beetle is a bright, shiny beetle with an orange-and-black pattern on its wing covers. To tell this species from other members of its genus (which look very similar), look for a distinctive reddish-orange mark on the shieldlike plate (pronotum) just behind the head (its similar-looking relatives have black pronota). There are orange marks on the face and antennae tips, as well. Like other burying beetles, the wing covers are wider in back than toward the front, and they are not long enough to cover the tip of the abdomen. In flight, they seem like bumblebees.

Because reintroduction efforts are under way, you may hopefully start to see this species in the wild. Meanwhile, you are much more likely to see other burying beetles, such as the tomentose burying beetle (*Nicrophorus tomentosus*). There are about 15 species in the genus *Nicrophorus* in North America.

Habitat and Conservation

This species once lived in 35 states but declined as habitat changed and natural communities were disturbed. By 1923 they were dwindling, and when they were placed on the Federal Endangered Species List in 1989, they had disappeared from all but four states. Today the species remains in only a handful of states and had been extirpated from Missouri. In 2012, about 300 pairs of zoo-bred beetles were released at Wah'Kon-Tah Prairie in Cedar and St. Clair counties.

Because of national conservation effort and to the success of partnership-driven efforts to restore this interesting beetle to native habitats, in 2020 the species' federal status was changed from "endangered" to "threatened."

Life Cycle

Adults typically emerge late in the summer and feed until fall, when they bury themselves in the soil to overwinter. In Missouri, they reemerge in May and begin mating. The male and female both assist in burying the carcass of a mouse or other small animal. The female then lays 10–30 eggs near the carcass. Assisted by both parents, the larvae feed on the carcass until they mature, then emerge as adults to feed on other carcasses until winter. This species is nocturnal.

Food

These beetles eat dead animals — mice, birds, or other creatures. Using organs located on the tips of their antennae, the beetles can smell dead animal carcasses from far away. They fly to the carrion, crawl beneath it, then dig the soil out from under it. The dead animal eventually is buried as soil piles up around it. After further preparation of the corpse, the adults lay eggs nearby. The adults remain, guarding their young, and feed them regurgitated carrion.

Human Connections

This beetle is of great interest to science. It is one of the few beetles in which both parents care attentively for the young. It is also useful to study its response to changing ecosystems. By competing with fly maggots for food, they can help reduce populations of annoying flies.

Ecosystem Connections

These little scavengers perform a valuable if not glorious service to the natural community by burying dead animals and then consuming them. They help return nutrients to the soil and, by lessening possible contact with decaying animal tissues, reduce disease among the living. Their visual similarity to stinging insects (buzzing heavily like bumblebees in flight, plus the bright red-and-black coloration), no doubt help these harmless beetles to evade predators.