



# American Burying Beetle

## *Oklahoma Ecological Service Field Office*

### American Burying Beetle

*Nicrophorus americanus*

#### Description

The American burying beetle (ABB) is a large (0.98-1.4 inches) shiny black beetle, with hardened protective wing covers (elytra) that meet in a straight line down the back. Each elytron has 2 scalloped-shaped orange-red markings. Its most distinguishing feature is the large orange-red marking on the raised portion of the pronotum (shield over the mid-section between head and wings), which is circular, with raised central portion and flattened margins. The ABB has orange-red frons (a mustache-like feature) and a single orange-red mark on the clypeus (face). This mark is triangular in females and rectangular in males. The ABB has large antennae with notable orange clubs at tips.

#### Distribution

Rhode Island, South Dakota, Nebraska, Kansas, Arkansas, Texas, and Oklahoma, with 2 introduced populations in Massachusetts, and Missouri.

#### Life History

The ABB lives for just one year, it is nocturnal (active only at night), a strong flier, usually reproduces only once, and undergoes complete metamorphosis. The ABB is active in summer and inactive during winter. During winter months when temperatures are below 60°F (15°C), ABB bury themselves in the soil to overwinter. When temperatures are above 60°F (15°C) they emerge from the soil and begin mating and reproduction. ABB are scavengers dependent on carrion for their life cycle and must compete with vertebrate and other invertebrate species for carrion. Reproduction involves burying a small vertebrate carcass (1-9 ounces; 35-250 grams), laying eggs beside the carcass, and feeding the larvae from the carcass until mature. Both parents provide care to their young.

#### Habitat

Considered to be feeding habitat generalists, their reproductive habitat is believed to be more specialized. Habitat requirements for ABB, particularly



*American Burying Beetle.* © Roger Williams Park Zoo

reproductive habitat requirements are not fully understood. The ABB has been found in various habitat types including open fields and grasslands, oak-pine woodlands, oak-hickory forest, bottomland hardwoods, and natural edge habitats.

#### Conservation

Federally-listed as endangered (54 FR 29652; July 13, 1989). Critical habitat has not been designated. At the time of listing in 1989, there were only two known populations - Latimer County, Oklahoma and on Block Island, Rhode Island.

The ABB has disappeared from over 90% of its historic range and is currently restricted to the eastern and western extremities of its historic range. Habitat loss, alteration, and degradation have been attributed to the decline. In Oklahoma, the ABB is currently known to occur in 27 eastern counties. Of particular concern for ABB conservation is soil disturbances from construction projects because it is believed that the ABB stays underground or under leaf litter during the daytime and can easily be killed if soil is compacted or removed.

#### References

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#### For Further Information

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