



U.S. Fish & Wildlife Service

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, has hardened protective wing covers (elytra) that meet in a straight line down the back. Each elytron has 2 scalloped shaped orange-red markings. Most diagnostic 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 in shape with flattened margins and raised central portion. Has orange-red frons (a mustache-like feature) and single orange-red marking on top of head (triangular in females and rectangular in males), large antennae with notable orange clubs at tips.

Distribution

Rhode Island, Massachusetts, South Dakota, Nebraska, Kansas, Arkansas, Texas, and Oklahoma.

Life History

The ABB is an annual species (lives for just one year), nocturnal (active only at night), a strong flier, usually reproduces only once, and undergoes complete metamorphosis. 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, then larvae feeding on 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 reproductive habitat requirements are not fully understood. The ABB has been



American Burying Beetle. © Roger Williams Park Zoo

found in various habitat types including open fields and grasslands, oak-pine woodlands, oak-hickory forest, and edge habitat.

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 is currently restricted to the eastern and western extremities of its historic range, ABB have disappeared from over 90% of their historic range. Habitat loss, alteration, and degradation have been attributed to the decline. In Oklahoma, ABB is currently known to occur in over 21 counties. Of particular concern for ABB conservation is earth disturbances from construction projects because ABB are usually underground or under leaf litter during the daytime and can easily be killed if soil is compacted or removed.

References

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- Sikes, D.S. and R. J. Raithe. 2002. *A review of hypotheses of decline of the endangered American burying beetle (Silphidae: Nicrophorus americanus Olivier)*. Journal of Insect Conservation 6:103-113.

For Further Information

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