

# Arkansas Natural Heritage Commission

### Rare Insect Fact Sheet IICOL08010

## Giant Stag Beetle - *Lucanus elaphus*

Family: Lucanidae

**Identification:** A large (2.5 - 5.0 cm), shiny, reddish brown beetle. Males possess long antler-like mandibles used against other males in courtship battles. Females are smaller than males with mandibles barely longer than their head.

### Status:

G3G5 - Apparently secure globally, though it may be rare in parts of its range S2 - Imperiled in Arkansas due to rarity

**Current Distribution:** Virginia into Illinois, extending into Oklahoma and south to Louisiana. In Arkansas, the county-level distribution of this species is not well known. It is infrequently collected and may be more common than currently thought.

### Habitat: Forests

**Diet:** Adults feed on tree sap and aphid honeydew. Larvae feed on moist, decaying wood.

**Reproduction:** Females lay eggs in crevices on downed trees and stumps. Larvae tunnel through dead, decaying wood and may require up to six years to develop into adults. One brood is produced per year with adults living two years or more.

**Threats and Conservation:** Giant stag beetles are *saproxylic*, a term applied to those species that are dependent upon dead wood, wood-decaying fungi, or other organisms within dead wood for some portion of their life-cycle. Due to their dependence upon dead, decaying wood for egg-laying sites and larval development, the elephant stag beetle could be negatively impacted by some forest management and land use practices. Removal, or reductions, of dead wood in forests could be harmful to the giant stag beetle and other insects dependent upon large, dead trees. Retention of late successional stage forests, that typically harbor higher amounts of dead wood, would help to maintain populations of this, and other saproxylic species.







Distribution of Known Arkansas Occurrences