

The Stag Beetles of Oklahoma (Coleoptera: Lucanidae)*

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A survey of the stag beetles of Oklahoma showed only six species in the state and three of these have only been found once. Keys, descriptions, and distribution data are presented for these species.

Lucanidae is a small but interesting family of beetles which is closely related to the scarab beetles. They have clubbed antennae but the segments of the club are rigid and cannot be held tightly together as in the scarabs. The mandibles of the males are larger than those of the females and in some species are half as long as the body and branched like the antlers of a stag.

Stag beetles are found in or near wooded areas and most are collected at lights or in black-light traps. The larvae resemble white grubs and are found in decaying wood. Only six of the 30 U.S. species are known to occur in Oklahoma and none can be considered common; three species have been collected only once.

Literature useful in identifying Oklahoma stag beetles includes Fuchs (1), Blatchley (2), Benesh (3,4), and Arnett (5). Synonymy can be found in Blackwelder and Arnett (6) and is not included here.

Key to the Species

1. Elytra smooth or punctate; large beetles, 22-40 mm in length2
 Elytra distinctly striate and punctate; smaller beetles, 10-20 mm in length excluding mandibles4
2. Mandibles of male as long as abdomen or nearly so (Fig. 1); elytra of females lightly punctate; legs black or dark reddish-black,*Lucanus elaphus*
 Mandibles of male no longer than thorax; femora of females light orange-brown; elytra lightly punctate3
3. Femora light orange-brown; elytra lightly punctate, shining; male mandibles with one tooth near middle (Fig. 2)*Pseudolucanus capreolus*
 Femora dark reddish-black; elytra more heavily punctate, dull; male mandibles with two or more teeth (Fig. 3)*Pseudolucanus placidus*
4. Eyes strongly divided by ocular canthus (Fig. 4)5
 Eyes almost entire, canthus lacking (Fig. 5)*Platycerus virescens*
5. Humeral angles of elytra each with a small tooth projecting outward (Fig. 6)..... *Dorcus parallelus*
 Humeral angles each with a large tooth projecting forward and outward (Fig. 7).....*Dorcus brevis*

Subfamily Lucaninae

Lucanus elaphus Fab.

Males are easily recognized by the elongate mandibles with two large and several small teeth internally (Fig. 1). Females are recognized by the combination of reddish-brown color, shiny, nearly smooth elytra, and dark legs. We have four specimens from southeastern Oklahoma. Length, excluding mandibles, 25-40 mm.

County records: McCurtain and McIntosh. June 5 to July 26.

Pseudolucanus capreolus (L.)

Males are distinguished by the single internal tooth on each mandible (Fig. 2). Both sexes are reddish-brown in color with smooth, shiny elytra and orange-brown femora. This species is not really common but is the most common species in the state and the only species that has been collected west of the eastern edge of Oklahoma. Length, excluding mandibles, 23-33 mm.

County records: Adair, Alfalfa, Choctaw,

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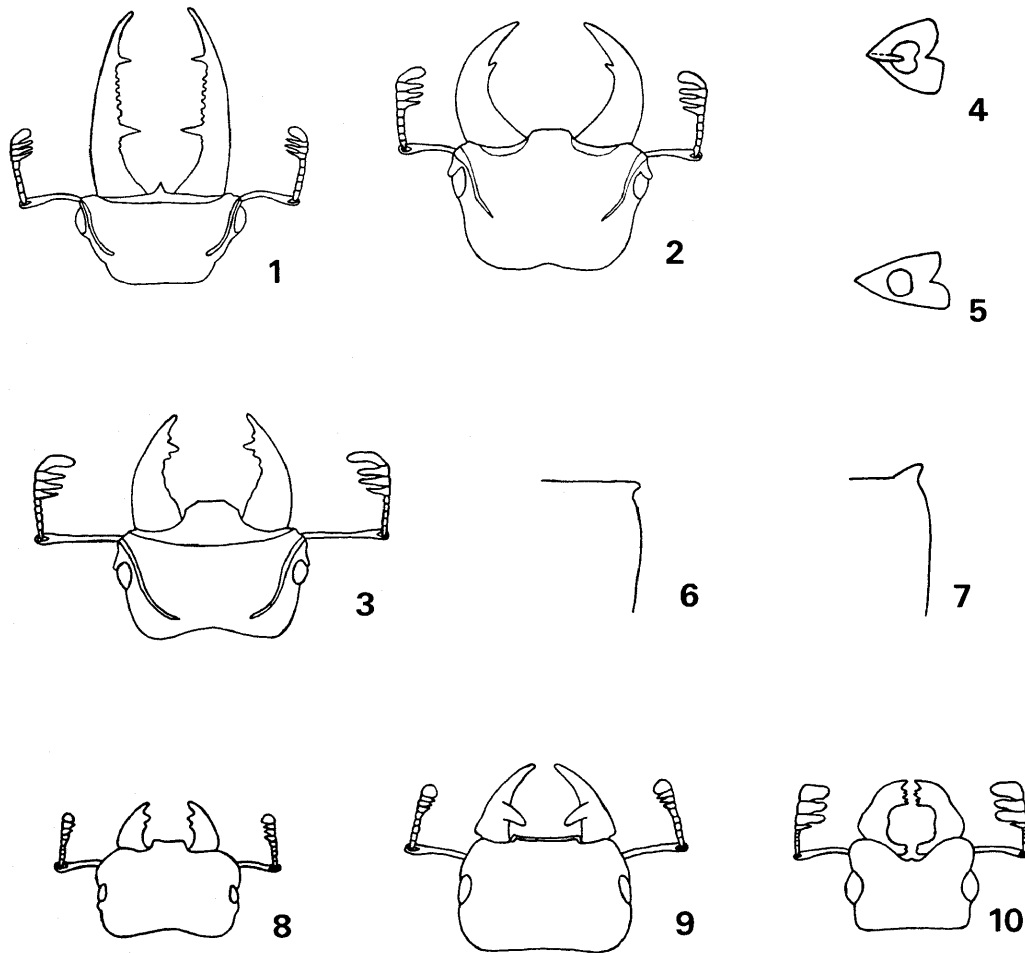


PLATE 1, FIGURE 1. *Lucanus elaphus* Fab. Head of small male. FIGURE 2. *Pseudolucanus capreolus* (L.). Head of male. FIGURE 3. *Pseudolucanus placidus* (Say). Head of male. FIGURES 4, 7, 8. *Dorcus brevis* (Say). 4, head, lateral view; 7, base of right elytron; 8, head of male. FIGURES 5, 10. *Platycerus virens* (Fab.). 5, head, lateral view; 10, head of male. FIGURES 6, 9. *Dorcus parallelus* (Say). 6, base of right elytron; 9, head of male.

Cimarron, LeFlore, McCurtain, Ottawa, and Pawnee. June 1 to August 9.

Pseudolucanus placidus (Say)

Males are distinguished by having several small, internal teeth on each mandible (Fig. 3). Both sexes are darker in color than the preceding species, usually almost black, and have dark reddish-black legs. The elytra are moderately heavily punctured and rather dull. This species has been taken in only one location in northeastern Oklahoma but a black-light trap there took three in 1982, six in 1984, and three in 1985. Length, excluding mandibles, 22-28 mm.

County records: Tulsa. May 22 to June 13.

Subfamily Dorcinae *Dorcus brevis* (Say)

A medium-sized, dark reddish-black species with distinct striae on the elytra. The head and thorax are rather heavily punctured. Males have two or three more or less distinct internal teeth on each mandible (Fig. 8). Length 15-18 mm.

County records: Ottawa Co., 6 June 1931, Costner and Davis (Benesh, 3).

Dorcus parallelus (Say)

This species is quite similar to *D. brevis* but averages a little darker and larger. Males have only one tooth on each mandible and it is usually large and distinct (Fig. 9). Length 17-20 mm.

County records: Kiamichi River, 8 miles west of state line, LeFlore Co., 18 June 1927 (Hatch, 7).

Subfamily Platycerinae

Platycerus virescens (Fab.)

A small species with distinct striae on the elytra and punctures on the head and thorax. It is dark reddish-black in color. The male mandibles have several small teeth near the apex and a blunt projection near the base (Fig. 10). Length 9-11 mm.

County records: Rich Mountain, LeFlore County, 15 April 1935, J.W. Angell (Benesh, 4).

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