

# HIDE BEETLE

## INTRODUCTION

This beetle's common name comes from hides and skin being the preferred food of adults and larvae. It has been widely distributed via the shipping trade and is now found worldwide.

## RECOGNITION

Adults about 1/4-3/8" (5.5-10 mm) long; elongate oval. Color **black**, sometimes reddish brown; pronotal margins colored with white hairs (setae); **abdominal venter whitish with black spots at basal sides** of segments 1-4, segment 4 of male with central black pit with brush of hairs (setae), segment 5 (last/terminal) mostly black. Head **without a median ocellus**. Antenna short, clubbed, fitting in groove below side of pronotum. **Elytron** (wing cover) **with apical margin serrate** (sawtoothed), **ending in a small spine on inner margin**.

Larvae up to about 5/8" (15 mm) long; dark brown, covered with long brown hairs (setae), with a broad yellow dorsal median length-wise stripe extending from head to near end of body. Head in dorsal view with 2 tubercles (small projections), one each between midline and antennal base. Abdominal 9th segment (next to last) with urogomphi (paired dorsal processes) sharp-pointed, curved forward and upward in side view.



## DAMAGE AND SIGNS OF INFESTATION

Skin or hide damaged primarily on its inner surface with holes cut by larvae to reach inner surface; hair loosened by hide destruction on inner surface; molt skins dark brown with numerous brown hairs, 2

sharply pointed anteriorly and upward curved spines near rear end; fecal pellets long and slender, 1/64" - 1/8" (0.5-3 mm) long by 1/128" (0.2 mm) wide.

To pupate, mature larvae bore into hard substances such as woolen goods, hair brushes, cork, tea chests, woodwork, and structural timbers. Width of hole about 1/8" (3-4 mm).

## BIOLOGY

Adult females lay their eggs (creamy, about 1/16"/2 mm long) in batches of 2-20 in cracks, skins, and hides; number of eggs ranges from 648-845. At about 85°F/29°C, eggs hatch in 2-3 days and the larvae go through an average of 7 molts in 30-35 days. The pupal stage lasts 7 days, and the adult requires 5 days before egg laying.

Developmental time (egg to adult) ranges from a minimum of 35 days in summer to a maximum of 238 days; about 60-70 days at average temperatures and humidity. The number of molts varies from 5 at high relative humidity to 11 under adverse conditions. Adults live for about 60-90 days.

## HABITS

The preferred food material is skins and hides where they feed primarily on the inner surface. However, both adults and larvae will feed on such materials as smoked meat, hams, cakes, dried cheese, and carrion; they are often used to remove the flesh from bones for museum collections. They often infest chicken houses where they feed on feathers, dead birds, chicken feed, and droppings. Adults are cannibalistic on young larvae and older larvae on fresh pupae.

Most of the damage is done by larval feeding, but adults also feed on skins and hides. The mature larvae wander in search of hard substrate in which to pupate, at times up to 26-36 ft (7.3-11 m). They bore into the hard substrate to make a pupal chamber. When the selected substrate is wood, severe damage can result when the population is large and/or uncontrolled. They prefer to bore into the softer spring wood.

The primary breeding areas are quite diverse and may include places such as wall/ceiling voids where yellowjackets, honey bees, etc. lived or where cluster flies, box- elder bugs, etc. overwintered. Other primary breeding areas include rodent bait left in attics, crawl spaces, or basements, wasp and hornet nests in attics, under eaves, around windows, etc., dead insects and spiders in the attic or elsewhere, animal trophies or rugs, stored items made of leather and/or fur, dead animals in the chimney flue, etc. In such places, the larvae feed on the animal and/or plant material present.

The larvae shun light (negatively phototactic) but are very active. In contrast the adults are attracted to light and can often be found at windows. The adults are strong, active fliers and feed on a variety of flowers. They often gain entrance to structures by flying in through open doors and windows as well as crawling in through other openings. In heated structures, hide beetles can be found year-round but are usually more abundant in the spring and summer.