

# Big Brown Bat



**Description:** A medium-sized bat with upperparts rich chestnut brown; ears relatively small, thick, leathery, and black; membranes blackish; under-parts paler than back; ears and membranes devoid of hair, or nearly so; wing short and broad, length of fifth metacarpal almost equal to that of third. External measurements average: total length, 114 mm; tail, 46 mm; foot, 11 mm; forearm, 47 mm. Weight, 13-20 g, rarely to 30 g.



**Habits:** This species is normally a forest dweller, but it does not hesitate to utilize attics and crevices in buildings, caves, and crevices in rocks for daytime retreats. Favorite roosts are under the loose bark of dead trees and in cavities of trees. These bats emerge rather early in the evening and feed among the trees, often following a regular route from one treetop to another and back again. In contrast to red bats, big brown bats prefer to forage among the crowns of the trees rather than under the forest canopy. Their flight is relatively slow and direct.

Big brown bats are relatively ferocious when captured. They usually squeal when handled and produce a rapid ratchet like sound; they continually try to bite and usually draw blood when they succeed in doing so. They cannot produce a serious wound, however. In the water they swim well, but they cannot take off from the surface as can some of the smaller bats. In winter they migrate or seek hibernation quarters in caves or buildings.

Their food is entirely insects, which they capture in flight. Fecal pellets of these bats have shown that they feed on beetles, bees and their allies, flies, stone flies, May flies, true bugs, nerve-wings, scorpion flies, caddis flies, and cockroaches. Peculiarly, moths are seldom found. Food items vary, of course, from one region to another.

These bats mate in the fall, and the one or two young are born from May to August. Four embryos have been found in a female, but it is unlikely that they all would have survived because the mother has only two teats. Big brown bats in the eastern part of the United States usually produce two young per litter, whereas in the Rocky Mountains and westward only one young is produced. Since Texas spans both of these ranges, it is probable that bats in the Trans-Pecos have one young, whereas those of the Piney woods typically produce twins. No fetal counts are available for East Texas specimens, but bats captured in the Trans-Pecos have contained only one fetus.



At birth, the young bats weigh about 3.0 g and grow quickly, gaining as much as 0.5 g per day. Maternity colonies are often located in buildings and may contain from 20 to 300 individuals. Adult males usually are not present in maternity colonies until the young mature, when they may begin using maternity colonies more frequently. At 4 weeks of age the young bats begin foraging for themselves and reach adult size approximately 2 months after birth.