

# Hispid Cotton Rat

*Sigmodon hispidus*

The Hispid Cotton Rat gets its name from the grizzled appearance of its fur which is a mix of dark brown and black hairs with lighter brown or grey hairs. The underparts are white to grayish; the tail is sparsely haired. *Hispid* means “covered with stiff hair or bristles.”

It is a smallish rat with an average body length of about 5-1/2 inches. Unlike most other mice and rats, the tail is considerably shorter than the combined length of the head and body. It has large eyes and ears, although the ears are almost



hidden by their fur. Males are slightly longer than females.

It looks a bit like a gerbil or baby rabbit with a short tail, and if “rat” weren’t part of its name, people would be more disposed think kindly of it.

Its diet is composed largely of plant matter. It is a grassland species, so it is usually not going to be found in barns or buildings like the exotic Norway Rat.

In the United States, it can be found throughout Texas and the southeastern U.S. from Nebraska east to Virginia and south to Florida.

The Hispid Cotton Rat inhabits a broad variety of habitats where suitable cover is present, such as dense grassy fields, weedy old fields, roadside ditches, marshy areas, brushy or weedy forest edges, pastures with dense grass growth, and other similar habitats that are not subject to flooding.

Beneath a canopy of grasses or weeds, it creates interconnected runways radiating out from the nest site that are marked by grass cuttings and piles of droppings. These runways, some worn to the ground by constant use, are made above fallen vegetation and ground debris and are not under lit-

ter. The runways are also used by other small mammals.

The Hispid Cotton Rat’s principal diet is the stems, shoots, and leaves of grasses and sedges, but occasionally it will eat insects, and rarely the eggs and young of ground-nesting birds.

Hispid Cotton Rats do not cache food. When feeding on tall plants, they cut down the plant near its base then cut the whole plant into smaller sections. They drink water but do not require a permanent water source in their habitat.

Hispid Cotton Rats are active year-round and during all hours of the day. Maximum activity is concentrated from late afternoon to about midnight.

Although heavy rains decrease their activity, light or moderate rains have little or no effect.

Temperature also influences activity, which decreases during extreme cold. During the hottest months, they become more nocturnal.

Interactions are limited to the breeding season, when older males have some dominance over the younger males. They also show cooperative behavior in cooler months, huddling together for warmth. They tend to be ag-

gressive towards other rodent species occupying the same habitat.

Spherical nests are constructed using dry grass, fibers stripped from larger plants, and other materials. They are built under logs and rocks for protection.

*S. hispidus* has the potential to breed year-round and does so in tropical and semi-tropical portions of its range. In temperate regions, breeding seems to be determined by temperature.

In non-pregnant females, heat occurs about every seven to nine days. The gestation period is about 27 days. A single adult female typically produces three to four litters per year which average five to seven young per litter. Newborns can be reproductively active in 35 to 40 days. However, most do not reproduce until two months and they are fully grown at five months.

The young stay in the nest until they are about three weeks old when they are weaned and begin to care for themselves.

Hispid Cotton Rats, like many rodents, are not long lived in the wild. Not many live beyond six months.

They try to avoid predation by staying in their runways, being alert, and taking advantage of their cryptic coloration. Their rate of reproduction is high, suggesting that they may quickly replace individuals lost to predation.

They are preyed on by a wide variety of predators including owls, hawks, foxes, bobcats, raccoons, coyotes, domestic cats, dogs, and snakes. This makes them an important food source.

Some researchers suggest that their abundance and availability as prey means they may act as a food buffer between predators and game animals.