

# Profile

## Big Cypress Fox Squirrel

*Sciurus niger avicenna*

Fox Squirrels are found throughout most of Florida except in the Keys.

Three subspecies of Fox Squirrels live in Florida: the Big Cypress Fox Squirrel is found from the Caloosahatchee River in Lee County south and then east to the southern part of Dade County; Sherman's Fox Squirrel is found in the rest of the peninsula; and the Carolina Fox Squirrel is found in the panhandle and northwards.

Contrary to two common names sometimes given – Mangrove Fox Squirrel and Everglades Fox Squirrel – the Big Cypress Fox Squirrel is not common in either mangroves or Everglades. They are most common in open pinelands, live oak forests, and stands of bigger bald cypress.

Fox Squirrels have large overlapping home ranges and are non-territorial. Ranges vary from 8-32 acres depending on habitat conditions. Males have larger home ranges than females.

They spend more time on the ground than Gray Squirrels and are slower moving, so they require habitats with an open understory.

Fox Squirrels weigh from one to three pounds and color variations range from a buff to gray to an orange-brown, and in some instances black. The under parts are usually lighter, and the noses are typically white with black faces. They have long, bushy tails and strong hind legs which allow them to leap easily from tree to tree.

They are highly adapted for climbing trees and fatal falls are rare. The tails are used for balance when running and leaping between trees, and are held over the back when resting.

Fox Squirrels have a wide field of vision and very good eyesight even in dim light. They also have well developed senses of smell and hearing. As with other rodent species, the incisors continuously grow to compensate for the enormous amount of wear that comes from a herbivorous diet.

Fox Squirrels may mate any time of year, but they typically have two breeding seasons. Males collect in the home range of a female when she begins estrus. Dominance hierarchies form among the males to determine mating privilege. Mating chases involve one female and a number of males, with the successful male guarding the female to prevent others from mating with her.

Both sexes remain reproductively active throughout their lives. Males reach sexual maturity in 10-11 months and females in about eight months. Females can produce two litters in a year, although one is the norm.

Fox Squirrels nest in cypress, cabbage palms, and pines, and they typically use three different types of nests: winter dreys, summer dreys, and dens.

Dreys are round conspicuous twig and leaf nests generally built in the upper third of the canopy and are seldom in isolated trees. They are waterproof and made of an outer layer of interwoven twigs with a softer inner lining of moss, bark, leaves, fur, feathers, lichen or other similar material. Summer dreys are less elaborate than winter dreys and may be no more than twig and leaf saucer shaped platforms.

Tree dens are another nest. These are holes or cavities in the main trunks of trees which are also lined with soft material. Squirrels often use dens in winter months and dreys in summer months.

After a month and a half gestation period, young are born, weaned in two months, and independent in three months. Males do not help raise the young.

Juvenile males are more likely to leave the natal area and disperse than are juvenile females. Dispersal usually occurs during the fall and is a high cause of mortality among males, which results in a slightly female biased sex ratio.

Squirrels threaten one another by an upright stance with their tail over their back, followed by a quick flick of the



tail. Scent-marking is another form of intraspecies communication.

When threatened or alarmed, they make a barking call or chatter while rapidly waving the tail from side to side. The Gray Squirrel shows similar behavior, but its call is of higher pitch.

Fox Squirrels are generalist feeders; diet depends on the area in which they are found. They forage on the ground and in trees, eating pine and cypress seeds, cabbage palm fruit, berries, and figs. Nuts are opened by a levering technique of the lowering incisors.

They will also eat the inner bark of trees as well as flowers, fruits, seeds, and buds from a variety of trees including maple and oak. Fungi are also consumed when readily available in summer. Animal food items include bones, bird eggs, nestlings, gall insects, moths, beetles, frogs, and even dead fish.

Feeding territories are marked with scents from glands on the sides of the mouth that are rubbed against trees.

Fox squirrels are scatterhoarders (they cache seeds in a scattered fashion). Nuts and seeds are carried in their jaws and buried in various locations within the home ranges. Olfaction and memory are used in locating their caches, but only a portion of the nuts they bury are found, so they plant many species of nut and seed producing trees and shrubs.

Fox Squirrels live from four to seven years of age on average in natural conditions. Owls, hawks, foxes, the coyote, and the bobcat are major predators.

Big Cypress Fox Squirrels are a threatened species and Sherman's Fox Squirrel is a species of special concern.