



# Delmarva Fox Squirrel

*Sciurus niger cinereus*



John White Photo

**CURRENT STATUS:** In Pennsylvania, this subspecies is listed as endangered, but may actually be extirpated; It is protected under the Game and Wildlife Code, and also listed nationally as an endangered species.

**POPULATION TREND:** At one time, the range of the Delmarva fox squirrel (*Sciurus niger cinereus*) included the entire Delmarva Peninsula and northward into southern Pennsylvania and New Jersey. It has disappeared from many of its historic sites, but the squirrel, as a direct result of protection and reintroductions, can now be found in Delaware and Virginia and in all counties on the Eastern Shore of Maryland except Cecil. They were considered extirpated from Pennsylvania around 1900. Reintroductions were attempted throughout its historic range between 1978 and 1992. Reintroductions in southern Chester County, Pennsylvania, in 1987-1988 were considered unsuccessful because of heavy predation and dispersal. However, unofficial reports in the mid-1990s suggested that a small population may have been established. There is talk that the squirrel could be listed as "threatened" if it continues to make population gains south of the Mason-Dixon line.

**IDENTIFYING CHARACTERISTICS:** A very large squirrel, averaging up to 2 ½ to 3 pounds, it resembles the much more common gray squirrel. Buffy-gray to steel gray along the back, the hairs are often black-tipped. The feet and toes are cream- to buff-colored as are the nose and ears. The long hairs of the tail are generally black with white tips. While body color may serve to distinguish this species, its large size is the most significant characteristic. It is much larger than a gray squirrel.

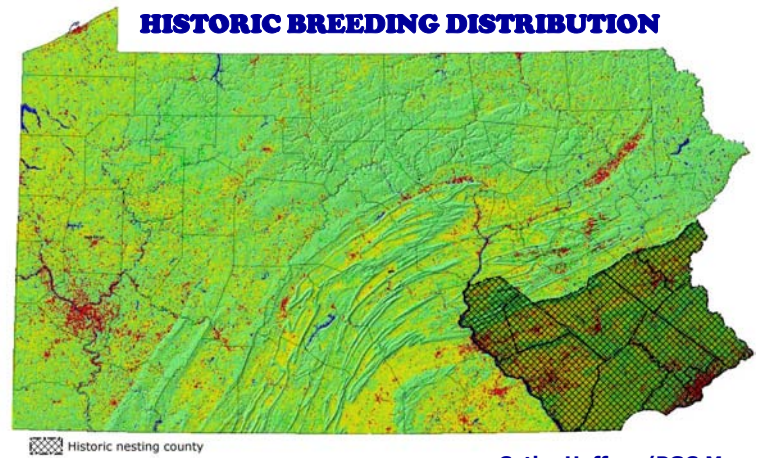
**BIOLOGY-NATURAL HISTORY:** The fox squirrel feeds on seeds of pine, oaks, beech, walnut, and hickories, and also consumes insects and birds eggs. Like gray squirrels, fox squirrels scatter-hoard food in individual, widely dispersed cache sites. Fox squirrels also feed heavily on buds and flowers during spring when energy demands are high and food availability is low. They usually travel across open ground rather than through the tree canopy. The species is active year-round, but activity levels vary with the season. Fox squirrels breed primarily between December and January and, if food is available, again in late spring and summer. Gestation is 44 to 45 days and litter sizes range from one to seven. Mortality of young



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is particularly high, but drops significantly for adult squirrels, which can live up to 12½ years in the wild.

**PREFERRED HABITAT:** Like most subspecies of *Sciurus niger*, the Delmarva fox squirrel prefers open stands of forests with little understory, often associated with agricultural fields. This subspecies is most likely to be found on sites with larger trees, a low percentage of shrubby ground cover, and lower understory density. The Chester County reintroduction site was suitable habitat with significant patches of mature forest and open understory, surrounded by extensive agriculture.



Cathy Haffner/PGC Map

**REASONS FOR BEING ENDANGERED:** The Delmarva fox squirrel was first listed as federally endangered species in 1967, at which time it was estimated that remaining populations occupied less than ten percent of the subspecies' historic range. The primary reason for its decline was the loss of suitable forested habitat, caused primarily by agricultural expansion, then human development. Hunting pressure also was considered a potential factor leading to the initial decline of this subspecies. Secondary threats to Delmarva fox squirrel populations are predation, traffic mortality, and competition from gray squirrels. Predation may have been a significant factor in the failure of some reintroductions.

**MANAGEMENT PROGRAMS:** Because this species is likely extirpated from Pennsylvania, no management plan has been identified at this time. Without dispersal corridors to and from other stable populations, further reintroductions are not advised. Research possibilities include surveys and live-trapping to determine whether descendants of the 1988 reintroduction survive in Chester County and genetic comparisons to determine the relative distinctiveness of fox squirrel subspecies.

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