

## **Delmarva Peninsula Fox Squirrel**

*(Sciurus niger cinereus)*

### **Questions and answers about the proposal to delist**

**September 19, 2014**

The U.S. Fish and Wildlife Service (Service) has completed a review of all available information about the Delmarva Peninsula fox squirrel, more commonly called the Delmarva fox squirrel, and concluded that it is recovered, and accordingly proposes to remove it from the List of Threatened and Endangered Wildlife. The Service's review found the squirrel's abundance and distribution is sufficient to withstand current and future threats, and it is no longer endangered and is not likely to become so in the foreseeable future.

**1. Why is the Service proposing to delist the Delmarva fox squirrel?** The Service's analysis of the best available data concludes that the Delmarva fox squirrel is not in danger of extinction throughout all or a significant portion of its range (endangered), and that it is not likely to become endangered within the foreseeable future (threatened). The Delmarva fox squirrel's abundance and distribution is sufficient to withstand current and future threats. In addition, populations have enough suitable habitat to continue expansion and movement between populations. Delmarva fox squirrels occur over a large area and occupy a variety of mature forest types from mostly upland hardwoods to wet woods of mixed pines and hardwoods. The overall abundance and distribution of the species make it resilient to losses that might occur from sea level rise or other threats.

**2. What helped recover the Delmarva fox squirrel?** Establishing new populations through translocations and overall growth of the range-wide population primarily reduced the risk of extinction and contributed to its recovery. Another factor -- the closing of a squirrel-targeted hunting season after listing -- also reduced mortality and probably enabled populations in some areas to rebuild. Over time, populations increased, and young squirrels dispersed to new areas of occupied forest.

With more than 80 percent of this squirrel's home on private land, Delmarva residents played a major role in the recovery of this species. Some private landowners are hosting new translocated populations of squirrels on their farms, and many others are providing habitat for squirrels on private lands across the range. In addition, much of the discovery of new populations is thanks to knowledgeable observers, including foresters, hunters and other residents.

The species' greater abundance and larger distribution have substantially reduced the risk of extinction. In addition, many state laws and programs are protecting large areas of forest and will continue to do so in the future.

Several well-established programs have protected forest from development. These programs, along with state and federal ownership, protect an estimated 39,524 acres of Delmarva fox squirrel-occupied forest throughout the squirrel's range. Several state laws and regulatory

programs, including Maryland's Critical Area Law, Forest Conservation Act, and wetlands laws, will continue to protect forest habitat.

In 2004, a forest inventory identified 434,056 acres of mature forest suitable for the species, with 17 percent currently occupied and more than 80 percent of mature forest available for expansion. Although these numbers and locations will change over time with timber harvest and forest growth, this provides a good baseline assessment of recent habitat patterns and indicates that mature forest is well distributed and available. There is ample unoccupied mature forest to enable further expansion of the DFS rangewide population.

**3. Why was the Delmarva fox squirrel listed as endangered?** The Delmarva fox squirrel was listed because its distribution decreased to just 10 percent of its range, which historically included the Delmarva Peninsula (Delaware, Maryland and Virginia) and southern Pennsylvania. At the time of its 1967 listing, the Delmarva fox squirrel primarily occurred in three Maryland counties (Dorchester, Talbot and Queen Anne's) with a small population in a fourth (Kent). The reasons for this decline likely included clearing of forest for agriculture and development, short-rotation timber harvest and over-hunting.

**4. What is the estimated population of the Delmarva fox squirrel?** The Service estimates that about 17,000 to 20,000 squirrels are distributed across the species' current range. To establish this estimate, biologists determined the average density of squirrels in each county and applied this to the amount of forest acres occupied by squirrels. In addition, more than 20 years of capture-mark-recapture efforts at various locations support our understanding of the squirrel's population dynamics and persistence.

**5. What is the current range of the Delmarva fox squirrel?** Populations of the squirrel now span 10 counties across the Delmarva Peninsula. Since the squirrel was listed, the Service has worked with state, federal and private partners to translocate animals and successfully establish 11 new populations across the three states. Additional populations, likely attributed to natural expansion, have been discovered in many other areas as well. Delmarva fox squirrels now occur on about 135,000 acres of forest across the Delmarva Peninsula, an increase of about 32,000 acres from the forest occupied in 1990.

**6. Can the Service delist a species before reclassifying it as threatened?** The ESA does not require a species to be reclassified to threatened, called downlisting, before being delisted. An endangered species' path to recovery may follow a step-wise process with many years between its status of endangered, threatened and finally recovered. In these cases, downlisting may be appropriate. However, in some cases, a species' status may change directly from endangered to recovered, or a species' status may continue to improve from endangered to threatened to recovered before formal rulemaking is initiated to change its classification. In these cases for a species listed as endangered, the Service would proceed directly to a delisting rulemaking.

**7. How did the Service determine the species has recovered?** The ESA requires the Service to review each threatened or endangered (listed) species every five years to ensure the accuracy of its classification. The Service uses the best scientific and commercial data available at the time of this five-year review, and analyzes whether the species is endangered or threatened due to the

[five factors outlined in the ESA](#). This is the same analysis that is conducted when a species is listed or delisted.

The Service's [2007 five-year review](#) of the Delmarva fox squirrel concluded that the species was near recovery and recommended that it be reclassified to threatened. However, the review acknowledged that new information on habitat availability based on lidar (light detection and ranging) data was becoming available and could indicate recovery, so it recommended that reclassification rulemaking wait until the new information was analyzed.

The [2012 five-year review](#) included that new information, and a new analysis of the five factors, and it was determined that delisting is warranted. In addition, the analysis included a review of the recovery criteria in the species' recovery plan ([PDF](#)). To change a species' classification, the Service must complete a formal rulemaking process that includes peer review and the opportunity for public comment. The proposed rule provides the five-factor analysis of threats and a review of the recovery criteria in the recovery plan. [Learn more about the recovery process](#).

**8. Did the Service consider sea level rise and climate change in our review?** Yes. The Service reviewed and analyzed all known threats, including habitat loss from development, sea-level rise and timber harvest; over-utilization such as hunting, disease or predation; sufficiency of state and local laws or programs to protect habitat and the species; and other natural or manmade factors such as vehicle strikes or forest pests. We concluded that these natural or manmade threats, taken individually or together, do not place the Delmarva fox squirrel in danger of extinction throughout all or a significant portion of its range and are not likely to do so within the foreseeable future.

**9. Does a species have to be restored to its entire historical range before it can be delisted?** No. The ESA does not require that a species be restored to its entire historical range or any specific amount of its historical range. The listing or delisting of an animal or plant from the list of endangered and threatened species is based on a five-factor analysis of the potential threats to a species' current range and its risk of extinction.

**10. How would delisting impact project planning and consultation?** Under the ESA, proponents of new construction projects must consider the possible effects to federally listed threatened and endangered wildlife and plants occurring in their project areas. If any federally listed species are potentially affected, project proponents must consult with the Service on ways to reduce or offset the negative impacts.

Should the squirrel be delisted, this ESA evaluation would no longer include effects to the Delmarva fox squirrel. Planners for residential and commercial development or other projects that involve permanent clearing of occupied Delmarva fox squirrel forest habitat would no longer be required to consult with the Service. However, federal, state and local laws that are not dependent on the species' federal status would continue to be in effect, including the Maryland Forest Conservation Act and Maryland Critical Area Law that protect forest habitat.

**11. What's next, and when will the final rule on delisting be published?** The Service will receive public comments until November 24, 2014. Following review of the comments, we will then make a final determination on the proposal. Depending on the information received during the peer review and public comment period, the whole process from proposed rule to final determination may take about one year to complete.

**12. If the Delmarva fox squirrel is removed from the endangered species list, will it be legal to hunt or kill them?** Deliberate killing of any animal is permissible only during an open hunting season defined under state law in Maryland, Delaware and Virginia. States would be responsible for opening any hunting seasons once the squirrel is removed from the endangered species list, and any future hunting seasons would specify strict limits and locations where hunting is considered sustainable.

**13. How can I see the proposed rule, provide comments or find more information about the Delmarva fox squirrel?** For more information about the Delmarva fox squirrel, see its [data base page](#) or the Chesapeake Bay Field Office's [Delmarva fox squirrel website](#). Starting September 23, you can see the proposed rule and supporting documents and provide comments regarding this proposal at regulations.gov (enter docket no. FWS-R5-ES-2014-0021). The proposal can be viewed September 22 at <https://www.federalregister.gov/public-inspection>. Copies of the proposal and related documents will be available September 19 on our [Chesapeake Bay Field Office website](#). Following review of the comments, the Service will make a final determination on the delisting proposal and publish it in the Federal Register.

A post-delisting monitoring plan is also available and outlines how the Service and partners would ensure that the Delmarva fox squirrel remains secure from the risk of extinction if the ESA protections no longer apply.