

## **Q&A: Final Listing and Proposed Critical Habitat Designation for the Elfin-Woods Warbler with an Associated Draft Economic Analysis**

### **Q: Why is the Service listing the elfin-woods warbler as threatened under the Endangered Species Act?**

A: The Service analyzed the best available science and determined the elfin-woods warbler is threatened throughout all of its range by the following factors:

1. Habitat modification on private lands under agricultural and other land use that involve vegetation clearance.
2. Other natural or manmade factors, such as restricted distribution, lack of connectivity, genetic drift, hurricanes, human-induced fire, and climate change.

### **Q: Where does this bird live?**

A: The elfin-woods warbler is only found in Puerto Rico and currently known only from El Yunque National Forest in eastern Puerto Rico to the Maricao Commonwealth Forest and adjacent private lands in western Puerto Rico. Its habitat is humid montane forests with high rainfall, high humidity, low sun exposure, low temperatures, and constant winds. It is found on the summits of the mountains and its habitat is composed of dense stands of short, small diameter and twisted trees and shrubs.

### **Q: How do you know it is in danger of extinction?**

A: Service scientists and biologists have been examining a significant volume of historical and modern day research about the elfin-woods warbler.

Biologists and researchers have determined the bird is disappearing from some of its previously known locations (see maps). They also have learned more about the habitats that best support the species and have determined listing is required to halt its decline.

When the species was discovered in 1968, the elfin-woods warbler was thought to occur only in the Luquillo Mountains at El Yunque National Forest in eastern Puerto Rico. During the early 1970s, the warbler was reported in the Maricao Commonwealth Forest in western Puerto Rico, Toro Negro Commonwealth Forest in the central mountain range of the Island, and in the Carite Commonwealth Forest in east-central Puerto Rico. Only one record of the elfin-woods warbler exists for the Toro Negro Commonwealth Forest; and in the Carite Commonwealth Forest, the warbler was last seen more than 15 years ago.

### **Q: What can people do to help?**

- Promote local shade-grown coffee and encourage the creation or restoration of shade grown coffee plantations.
- Learn more about the many birds in Puerto Rico. There are about 350 species you may see here. Of those, over a hundred species make their nests and grow their young here in the many habitats Puerto Rico offers.

- If you are a landowner with land near the Maricao Commonwealth Forest or the El Yunque National Forest and would like to follow-up on any of these options, please contact the Service's Caribbean Ecological Field Office at Post Office Box 491, Boquerón, Puerto Rico, 00622, or contact Deputy Field Supervisor Marelisa Rivera at (787) 851-7297, or [marelisa\\_rivera@fws.gov](mailto:marelisa_rivera@fws.gov) to learn what you can do to provide warbler habitat.
- Support establishing additional agreements and partnerships with landowners near Maricao Commonwealth Forest to protect elfin-woods warbler habitat.
- Protect and support existing shade-grown coffee plantations, and encourage restoration of sun-grown coffee into shade-grown coffee plantations in areas where the warbler has been recorded near the Maricao Commonwealth Forest.
- Support and initiate habitat restoration projects to provide effective corridors for the elfin-woods warbler dispersal throughout the central mountains of Puerto Rico.
- Support additional landscape surveys to identify additional areas where the bird occurs in Puerto Rico.
- Support efforts to learn the possible causes of the warbler's declining status at El Yunque National Forest.

**Q: What kinds of substantive comments did the Service receive on the proposal to list the elfin-woods warbler?**

A: The Service reviewed all comments received from the peer reviewers for substantive issues and new information regarding the listing of elfin-woods warbler. The peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve the final rule. Two reviewers recommendations resulted in adding new information regarding:

(1) the observation of the elfin-woods warbler between Jayuya and Adjuntas, and

(2) a nest building activity by the elfin-woods warbler at the Maricao Commonwealth Forest that was recorded on May 5, 2002. These were added to the final listing rule.

Another peer reviewer was concerned about bird watchers using recorded audio units to attract birds. At this time the Service does not have sufficient information to consider this action as a threat to the elfin-woods warbler. However, it will be monitoring the species and will keep track of the effect of these actions. Once this final rule takes effect in 30 days, regulations under the Act and the Commonwealth of Puerto Rico will address actions that may result in take (which is to kill, harass, disturb, or harm) of the species.

Another peer reviewer recommended using automated recording units which automatically record bird sounds for later computer analyses. These units have tremendous potential for surveying the more inaccessible sites. The Service concurs with the peer review and has initiated a project with academia and local non-governmental organizations using Autonomous Recording Units to assess the presence of the elfin-woods warbler at the Carite Commonwealth Forest and El Yunque National Forest.

One peer reviewer made reference to the description of the elfin-woods warbler included in the proposed listing rule, indicating that adult and sub-adult elfin-woods warbler do not have a stripe above the eyes. We had described the elfin-woods warbler in the proposed listing rule based on Raffaele (1989, p. 168). However, considering the expertise of this peer reviewer on the elfin-woods warbler, we included this detailed information and specified that adult and sub-adult elfin-woods warbler do not have a stripe above the eyes.

Two peer reviewers recommended that coffee tree seasonal pruning be conducted from July 1-February 28, and that care should be taken using pesticides. These were also incorporated into the final listing and the exemptions.

The Commonwealth of Puerto Rico indicated it does not expect any significant impacts on the elfin-woods warbler as a result of the projects it conducts. However, the agency asked to be contacted should additional information on the habitat and location of the species become available in order to prevent potential impacts in the future. Such information will be made available.

The Service received three public comments. All supported the listing but did not provide substantive comments for any response.

**Q: What changes did the Service make from the proposed listing rule to the final listing decision?**

A: Based upon our review of the comments from peer reviewers, and the Commonwealth agencies, and the public, we reevaluated our proposed rule and made changes as appropriate. During the comment period the Service received clarifications and additional information on the elfin-woods warbler's description, distribution, breeding season, and nesting activity, which it incorporated into the final listing rule.

- (1) The Service modified the information in the rule regarding the species description to specify that adult and sub-adult elfin-woods warblers do not have a stripe above the eyes (see Species Description and Taxonomy).
- (2) The Service added information regarding the report of the elfin-woods warbler between the municipalities of Adjuntas and Jayuya as part of the species range (see Historical and Current Distribution).
- (3) The Service modified the information regarding the breeding season of the elfin-woods warbler to include the entire months of July and August (see Life History).
- (4) The Service modified the provisions and exemptions in the 4(d) rule indicating that coffee tree seasonal pruning and other activities will be conducted from July 1 to February 28 (see **4(d) Rule**).
- (5) The Service added information regarding an additional elfin-woods warbler nest building activity at the Maricao Commonwealth Forest (see Life History).

**Q: What has been done to help this bird already?**

A: In 2014, the Service, the Puerto Rico Department of Natural and Environmental Resources and the U.S. Forest Service signed a Candidate Conservation Agreement (CCA) to work together

to conserve the elfin-woods warbler and restore suitable habitat in the El Yunque National Forest and Maricao Commonwealth Forest. With this CCA, the parties agreed to promote, develop, and implement best management practices to avoid any potential threat to suitable and occupied warbler habitat and populations.

Other conservation actions benefitting the elfin-woods warbler include agreements with private landowners through the Natural Resources Conservation Service's Farm Bill Programs, and the Fish and Wildlife Service's Partners for Fish and Wildlife and Coastal Programs to implement habitat conservation and restoration practices on agricultural lands adjacent to the Maricao Commonwealth Forest. Between 2007 and 2014, about 1,290 acres of tropical upland forest, and 13 miles of riverbank buffers were conserved and restored through the Partners for Fish and Wildlife in collaboration with Natural Resources Conservation Service, Farm Service Agency, Puerto Rico Department Natural and Environmental Resources, Envirosurvey, Inc., and other partners.

**Q: What is critical habitat?**

A: Critical habitat is a term in the Endangered Species Act that identifies geographic areas containing features essential to the conservation of a listed species and which may require special management considerations or protection. Specifying the location of habitat essential to the conservation of the species helps federal agencies identify areas to utilize their authorities to benefit listed species. The designation also allows efforts of other conservation partners, such as state and local governments, non-governmental organizations and individuals to be focused on areas that will provide the greatest benefit to the species.

However, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not support recovery of the species. Federal agencies will continue to consult with the Service on any action they conduct, fund and/or permit that might affect the species regardless of whether the action occurs within designated critical habitat.

When critical habitat is designated, this responsibility broadens to include consideration of any destruction or adverse modification to critical habitat that could result from the proposed federal action. Designation of critical habitat also provides non-regulatory benefits by informing the public of areas that are important to the species' recovery and identifying where conservation actions would be most effective. For more information on critical habitat please visit: [http://www.fws.gov/endangered/esa-library/pdf/critical\\_habitat.pdf](http://www.fws.gov/endangered/esa-library/pdf/critical_habitat.pdf).

**Q: What is the purpose of critical habitat?**

A: Critical habitat is a tool to identify areas that are important to the conservation and recovery of a listed species. It is also used to notify federal agencies of areas that must be given special consideration when they are planning, implementing, or funding activities. Federal agencies are required to consult with the Service to ensure actions they carry out, authorize, fund, or permit are not likely to result in the destruction or adverse modification of critical habitat. A critical habitat designation has no effect when a federal agency is not involved. For example, a landowner undertaking a project on private land that involves no federal funding or permitting has no additional responsibilities if his or her property falls within critical habitat boundaries.

**Q: Why is the U.S. Fish and Wildlife Service seeking to designate critical habitat for the elfin-woods warbler?**

A: Under the ESA, when the Service determines that any species is threatened or endangered, it must designate critical habitat “to the maximum extent prudent and determinable” (Section 4(a)(3)(A)). The Service is proposing to designate these areas because the review of available information indicates they are necessary for the conservation and recovery of the species.

**Q: What were previous federal actions regarding this species?**

A: Previous federal actions are outlined in the proposed rule to list the elfin-woods warbler as a threatened species under the ESA published in the *Federal Register* on September 30, 2015 (80 FR 58674).

**Q: What are the biggest threats to the elfin-woods warbler?**

A: Current information indicates that the elfin-woods warbler has a limited distribution, with only two known populations, one in El Yunque National Forest in eastern Puerto Rico and a second one in Maricao Commonwealth Forest and adjacent private lands in western Puerto Rico. Threats include: access road maintenance (vegetation clearing and/or expansion), vegetation removal for the construction of new low level dams for water supply systems, and development of additional recreational areas in forested areas. In lands that are used for agriculture, an activity that could represent a possible threat to the species’ habitat is the loss, fragmentation and degradation of habitat due an unsustainable agricultural practice (e.g., conversion of shade-grown coffee to sun (unshaded) coffee plantations). In addition, hurricanes, climate change, and human induced fires also threaten the warbler’s survival.

**Q: What areas are proposed for critical habitat designation for the elfin-woods warbler?**

A: The Service is proposing three units as critical habitat for the elfin-woods warbler in Puerto Rico. In total, it is proposing to designate critical habitat on approximately 27,125 acres. It considers approximately 89 percent of the proposed critical habitat currently occupied and the balance as currently unoccupied.

The areas are within El Yunque National Forest, Carite Commonwealth Forest, and Maricao Commonwealth Forest and adjacent areas. Municipalities included in these units are: Caguas, Canóvanas, Cayey, Ceiba, Guayama, Las Piedras, Maricao, Naguabo, Patillas, Rio Grande, San Germán, San Lorenzo, Sabana Grande, and Yauco. Land ownership within the proposed critical habitat area consists of federal (42 percent), Commonwealth (43 percent), and private (15 percent).

**Q: How were these areas chosen?**

A: Biologists considered physical or biological features needed for life processes and successful reproduction of the species. These include: space for individual and population growth and for normal behavior; cover or shelter; food, water, air, light, or other nutritional or physiological requirements; and sites for breeding and rearing offspring. Forests with elfin-woods warblers have high rainfall, high humidity, low insolation, low temperatures, and constant winds.

Warblers are found on the summits of the mountains with dense stands of short, small diameter, twisted trees and shrubs.

**Q: Why is the Service proposing to designate one critical habitat area that is currently unoccupied by the elfin-woods warbler?**

A: The unoccupied unit is in the Carite Commonwealth Forest, which is part of the warbler's historical distribution. Although it has been more than 15 years since the species was seen there, the area still has suitable habitat to allow the elfin-woods warbler to survive and could be a likely site for potential future reintroductions to help the species recover.

**Q: What does the economic analysis mean to private landowners in the area?**

A: It is unlikely private landowners will incur costs associated with this critical habitat designation.

Only activities authorized, funded, or carried out by a federal agency require consultation with the Service, and only those projects that are likely to destroy or adversely modify critical habitat may need further consultation or modification. Most of the cost measures factored into the economic analysis relate to the increase in administrative costs to federal agencies, and only apply when consultations are anticipated for projects that may appreciably diminish the conservation value of habitat conditions essential for the species conservation.