

QUESTIONS & ANSWERS **about the:**

Proposed Change in Status and Critical Habitat Designation for the Flatwoods Salamander

- 1. When was the flatwoods salamander listed under the Endangered Species Act (ESA)?** The U.S. Fish and Wildlife Service listed the flatwoods salamander as threatened on April 1, 1999 (64 FR 15691).
- 2. Why is the flatwoods salamander now considered two species?** Recent genetic and biological data on the species' structure and form show a major east-west disjunction at the Apalachicola-Flint River drainage, the salamander has been split into two species, the frosted flatwoods salamander and the reticulated flatwoods salamander. The Apalachicola River is a common break in the distribution of many species and this taxonomic change is accepted within the scientific community. This research was published in *Molecular Ecology*, a peer-reviewed journal, in 2007.
- 3. Why is the reticulated flatwoods salamander being proposed as an endangered species?** Due to the species split, we have re-assessed the status of the reticulated and frosted flatwoods salamanders and determined that the reticulated flatwoods salamander warrants endangered status. There are only 21 known reticulated salamander populations, and most (71 percent) of these populations are supported by only one breeding site. This species is in danger of extirpation due to its: small population sizes, vulnerability of surviving populations to natural or human-induced changes in the habitat, isolation of populations, and restricted ability to recolonize historically occupied habitat. In addition, the largest reticulated flatwoods salamander population remaining is currently threatened by an evacuation road proposed by the Northwest Florida Transportation Corridor Authority (NFTCA) on Eglin Air Force Base. This road would destroy or degrade 44 percent of the known reticulated flatwoods salamander breeding sites.
- 4. What is critical habitat?** Critical habitat is a term defined and used in the Endangered Species Act. It refers to specific designated geographic areas containing features essential to the conservation of a threatened or endangered species and that may require special management consideration or protection. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. It does not allow government or public access to private lands. The term critical habitat in this legal context should not be confused with an informal usage of the phrase to describe a type of habitat that is 'critical' to individuals of the species.
- 5. Why is critical habitat being designated for the two species of flatwoods salamander?** As the result of a court order, the Service re-assessed whether critical habitat would be prudent for these species, and found that it was; therefore, we are proposing critical habitat, as required by the Endangered Species Act.
- 6. In what geographic area and type habitat do the two species of flatwoods salamander occur?** The two species of flatwoods salamander are distributed across the lower Coastal Plain of Florida, Georgia, and South Carolina. Populations of the frosted flatwoods salamander occur east of the Apalachicola River to near Jacksonville, Florida and

north into the coastal counties of Georgia and South Carolina from north of the Altamaha River to the Francis Marion National Forest and Santee Coastal Preserve. Populations of the reticulated flatwoods salamander occur in the panhandle of Florida to the Apalachicola River and north into extreme southwest Georgia, east of the Flint River. Flatwoods salamander habitat is open, moist, pine flatwoods, often characterized by wiregrass ground cover, containing appropriate seasonal wetlands that are used as breeding ponds. Flatwoods salamanders are **not** found in cultivated fields, pastures, or within urban settings.

7. What are the specific areas proposed for designation as critical habitat for the two species of flatwoods salamander? Seven units encompassing a total of approximately 23,132 acres are being proposed as critical habitat for the frosted flatwoods salamander. These proposed critical habitat subunits are located in five counties (Baker, Franklin, Jefferson, Liberty, and Wakulla) in Florida, and three counties (Berkeley, Charleston, and Jasper) in South Carolina. Ten units encompassing a total of approximately 7,496 acres are being proposed as critical habitat for the reticulated flatwoods salamander. The proposed critical habitat subunits are located in seven counties (Calhoun, Holmes, Jackson, Okaloosa, Santa Rosa, Walton, and Washington) in Florida, and two counties (Baker and Miller) in Georgia. Of the combined proposed critical habitat for both species, 21,395 acres are in federal ownership, 1,415 acres in State ownership, 25 acres in local government ownership, and 7,793 acres in private ownership.

8. How can I find out if my land is within critical habitat proposed to be designated for the two species of flatwoods salamander? The proposed rule published in the *Federal Register* includes maps showing the proposed critical habitat subunits. If you are unsure if your property is included within one of these subunits, contact your local Fish and Wildlife Ecological Services Field Office, as described below.

Panhandle of Florida, Panama City Field Office, Hildreth Cooper, 850/769-0552, ext. 221
Baker County, Florida, Jacksonville Field Office, Annie Dziergowski, 904/232-2580, ext. 116
Baker and Miller counties, Georgia, Brunswick Field Office, Robert Brooks, 912/265-9336, ext. 25

Jasper and Berkeley counties, South Carolina, Charleston Field Office, Lora Zimmerman, 843-727-4707, ext. 226

9. Is habitat supporting all populations of the flatwoods salamander included in proposed critical habitat? No. In fact, we are excluding a total of 5,283 acres of occupied habitat on military lands in Georgia with Integrated Natural Resource Management Plans. Of these acres, 5,121 acres are on Fort Stewart Military Installation and 162 acres are on Townsend Bombing Range.

10. Will both species of flatwoods salamander still be protected if they are outside of designated critical habitat? Yes. Because both species of flatwoods salamander are listed species, they are protected regardless of whether they are inside or outside of an area designated as critical habitat. When critical habitat is designated, federal agencies also are required to ensure that their activities will not destroy or adversely modify critical habitat.

As listed species, both species of flatwoods salamander are protected from “take” throughout their range regardless of whether critical habitat has been designated. “Take” is defined to include harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect; or to attempt any of these. Harm is further defined in the Service’s regulations (50 CFR 7.3) to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

11. How did the Service determine which areas to designate as critical habitat? The proposed critical habitat designations are based on the best scientific information available concerning the species' present and historic range, habitat, biology, and threats. The Service reviewed and summarized the current information available for both species of flatwoods salamander. The information used included known locations; the final listing rule for the flatwoods salamander; recent biological surveys and reports; aerial photography of historically and currently occupied habitat; peer-reviewed literature; and discussions and recommendations from species experts. Biologists identified the physical and/or biological habitat features needed for life and successful reproduction of the species:

- space for individual and population growth and for normal behavior, cover or shelter,
- food, water, air, light, minerals, or other nutritional or physiological requirements,
- sites for spawning and rearing offspring, and,
- habitats that are protected from disturbances or are representative of the historic geographical and ecological distributions of a species.

By law, the Service is required to identify sufficient areas containing these characteristics to ensure the conservation of the species.

12. What kind of habitat is considered critical to the two species of flatwoods salamander? Based on the Service's current knowledge of the life history, biology, and ecology of the species and the requirements of the habitat to sustain its essential life history functions, it determined that the habitats needed for the conservation of the reticulated and frosted flatwoods salamanders are:

(1) Standing bodies of freshwater that are geographically isolated from other water bodies, are sometimes flooded, occur within pine flatwoods or savanna communities, and function as flatwoods salamander breeding ponds. These small, seasonally-flooded, open and grassy, depressional wetlands typically have a burrowing crayfish fauna but lack large, predatory fish.

(2) Upland, moderately moist, and open pine flatwoods and savanna habitat, within 1,500 feet from adjacent and accessible flatwoods salamander breeding ponds. These uplands contain crayfish burrows or other below-ground habitat that the flatwoods salamander depends upon for food, shelter, and protection from the elements and predation.

(3) Dispersal habitat between uplands sites and breeding locations that allows for movement of flatwoods salamanders between such sites. This habitat will be a mix of vegetation types that represent a transition between wetland and upland vegetation (ecotone). An open canopy and abundant native herbaceous species are components of the site. Moist soils, as described above, and below-ground structures such as deep litter cover or burrows are necessary shelter for flatwoods salamanders during their seasonal movements within these areas.

13. Does a critical habitat designation affect all activities that occur within the designated area? No. An area designated as critical habitat is not a refuge or a sanctuary for the species. Activities that do not involve a federal action that may affect critical habitat, will be unaffected by the designation. Private land use activities, such as farming and silviculture, would be unaffected. Federal activities, or actions permitted, licensed, or funded by federal agencies, will require consultation with the Service if they are likely to adversely modify critical

habitat. In such cases, the Service will work with the federal agency to identify alternatives where the project may proceed without adverse modification to critical habitat.

14. What does “consultation” mean?

Consultation is a process by which federal agencies use the Service’s expertise to evaluate the potential effects of a proposed action on ESA listed species and their critical habitats. Consultation may also identify alternatives to the proposed action to avoid adverse effects on listed species and their habitats. Federal agencies are already required to consult with the Service under the ESA whenever a proposed action might impact a listed species or its habitat. Thus, the designation of critical habitat will not increase the consultation burden to either the federal agency or the permit applicant.

15. Will the critical habitat designation lengthen the consultation process? Probably not, unless adverse modification (see question number 18) is determined. Under the ESA, the Service has 135 days in which to complete the consultation process with action agencies. This time frame remains the same whether or not there is critical habitat within the project area. In addition, the outcome of issuing federal permits or providing federal funding for research will not be altered due to critical habitat designation unless adverse modification is determined. Designation of critical habitat for the flatwoods salamander notifies the federal action agencies and the public that permits and other authorizations for activities within these designated critical habitat areas must comply with section 7 consultation requirements. For each section 7 consultation, the Service already reviews the direct and indirect effects of the proposed projects on the flatwoods salamander, and will continue to do so for critical habitat, if it is designated.

16. What activities could adversely affect critical habitat and may require special management considerations for the flatwoods salamander? Activities that may affect critical habitat include, but are not limited to, the following:

- dredging;
- dredged material disposal;
- release of chemicals or biological pollutants into breeding ponds by point sources or dispersed non-point sources;
- draining or changing the hydrology of a breeding pond;
- converting pine flatwoods to cultivation, pasture, or urban development;
- timber management that does not follow the guidelines provided in the final listing rule;
- construction or widening of highways.

17. How will the designation of critical habitat for the flatwoods salamander impact the forest industry? The Service believes the management and harvest of pine flatwoods for wood products, and protecting and managing the flatwoods salamander and its habitat are not mutually exclusive. In fact, timber management is the land use activity that has the greatest compatibility with the continued existence of the flatwoods salamander. Those management techniques which duplicate the natural ecological processes of the historical longleaf pine ecosystem, such as burning and selective timber harvest, would provide the most benefit to flatwoods salamander populations. The following silviculture practices would reduce the potential for take of flatwoods salamanders:

- Thinning and tree harvest outside of the breeding and dispersal period from October - April. Timber activities that occur during dry periods, that do not compact or rut the soils or alter the native herbaceous ground cover or hydrology;

- Natural regeneration of pine flatwoods forests using planting methods that do not require mechanical preparation (for example, not using techniques such as rollerchopping, disking, bedding, or root-raking). Planning planting densities, thinnings, and growth to maintain an open understory and dense ground cover (60 percent maximum canopy closure);
- Use of fire for site preparation and midstory and understory hardwood control;,
- Use of herbicides and fertilizers during non-breeding seasons and dry periods according to Best Management Practices and manufacturers recommendations. Direct application of herbicides (e.g., hand-spraying, injecting, etc.) is preferred. The Service urges minimal use of chemicals (herbicides, fertilizers) in areas of flatwoods salamander breeding ponds and habitat until such time as research better characterizes their effects on the species.

18. What does it mean to “destroy” or “adversely modify” critical habitat? Pursuant to current national policy and the statutory provisions of the ESA, destruction or adverse modification is determined on the basis of whether, with implementation of the proposed federal action, the affected critical habitat would remain functional (or retain the current ability for the species’ essential habitat or biological elements to be functionally established to serve the intended conservation role for the species.

19. Are all areas within the critical habitat boundaries for the flatwoods salamander considered critical habitat? In order for an area to be designated as critical habitat, the area has to contain the physical and biological elements essential to support the life cycle needs of the species. Critical habitat does not include existing developed sites such as homes or other urban structures, agricultural areas, highways, or other similar structures.

20. Must federal agencies consult with the Service even where critical habitat has not been designated? Even when there is no critical habitat designation, federal agencies must consult with the Service on actions that may affect listed species, in order to ensure that any action they carry out, fund or authorize is not likely to jeopardize a listed species continued existence. Where critical habitat is designated, a consultation also ensures that the critical habitat is not destroyed or adversely modified.

21. Does the ESA consider economic consequences as a part of designation critical habitat? Yes. Unlike ESA listing decisions, the Service must take into account the economic impact, as well as any other relevant impacts, of specifying any particular area as critical habitat. The Service may exclude any area from critical habitat if it determines the benefits of excluding it outweigh the benefits of specifying the area as a part of critical habitat, unless the Service determines the failure to designate the area as critical habitat will result in the extinction of the species. The draft economic analysis is being announced with proposed designation of critical habitat and is now available for public review and comment. The draft economic analysis is available at <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Mississippi Field Office, 6578 Dogwood View Parkway, Jackson, MS 39213; telephone: 601-321-1121; facsimile: 601-965-4340. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

22. What did the draft economic analysis find? The draft economic analysis estimates that, over the 20-year period 2009 to 2028, post-designation costs for frosted and reticulated flatwoods salamander conservation-related activities could range between \$3.88 million and

\$6.40 million (using a three percent discount rate) and \$2.49 million to \$4.38 million (using a seven percent discount rate). In annualized terms, potential impacts may range from \$261,000 to \$430,000 at three percent or \$235,000 to \$413,000 at seven percent.

23. How many species have critical habitat designations? As of May 13, 2008, the Service has designated critical habitat for 506 of the 1,352 species federally listed as threatened or endangered in the United States. The proposed critical habitat for the frosted and reticulated flatwoods salamanders does not overlap any other currently designated critical habitat.

24. Who should you contact for more information? Linda LaClaire at 601-321-1126 or Connie Light Dickard at 601-321-1121, both at the same address: U.S. Fish and Wildlife Service, Mississippi Field Office, 6578 Dogwood View Parkway, Suite A, Jackson, MS 39213.