



# Frequently Asked Questions

## *Critical Habitat Rule for the Neosho Mucket and Rabbitsfoot*

### When were the Neosho mucket and rabbitsfoot mussels listed under the Endangered Species Act (ESA)?

The U.S. Fish and Wildlife Service listed these two mussels on September 17, 2013. The Neosho mucket is listed as endangered and the rabbitsfoot is listed as threatened.

### What is critical habitat?

Critical habitat is a geographic area containing features essential to the survival of a threatened or endangered species. The Service is required under the ESA to consider whether critical habitat is needed for a species' recovery. Designation of critical habitat does not affect land ownership, does not allow the government to take or manage private property, nor does it establish a refuge, wilderness, reserve, preserve, or other conservation area. It does not allow government or public access to private lands.

### Why is critical habitat being designated for these two mussels?

At the time of listing, the Service assessed whether critical habitat would be prudent for these species. For designation of critical habitat to be prudent under the ESA, the Service must determine that it would not likely increase the degree of threat to the species and may provide some measure of benefit. The Service determined that in the case of the two mussels it is prudent. Critical habitat designations benefit listed species. Therefore, as required by the ESA, the Service is designating critical habitat for these two mussels by identifying areas important for the conservation of the species.

### How much critical habitat has been designated for the Neosho mucket and rabbitsfoot and where is it located?

For the Neosho mucket, the Service designated critical habitat in seven separate areas where the mussel is found, comprising approximately 483 river miles in Arkansas, Kansas, Missouri, and Oklahoma. For the rabbitsfoot, the Service designated critical habitat in 31 separate areas where the mussel is found, comprising approximately 1,437 river miles in Alabama, Arkansas, Indiana,



*Left to right: Neosho mucket and rabbitsfoot, credit M.C. Barnhart and Bob Butler/USFWS*

Illinois, Kansas, Kentucky, Mississippi, Missouri, Ohio, Oklahoma, Pennsylvania, and Tennessee. The critical habitat is limited to the river itself, below the normal high water mark, and not the watersheds.

### Are the areas designated as critical habitat occupied by these mussels?

Yes. All areas designated as critical habitat are occupied by one or both mussels.

### How do the final critical habitat designations differ from what was proposed?

The critical habitat designations are smaller than what was proposed in September 2012. The Service altered the critical habitat designations after receiving new relevant information. The final designations result in a net reduction of approximately two river miles for Neosho mucket and 217 river miles for rabbitsfoot. The most notable reduction in critical habitat occurs in Arkansas. New information results in a 27 percent net decrease in the final designation of critical habitat from what was originally proposed for the rabbitsfoot in Arkansas.

### For Arkansas, how much of the State is designated as critical habitat?

The Service is designating critical habitat in 12 units in 10 Arkansas rivers, comprising approximately 566 river miles. The critical habitat is limited to the river itself, below the normal high water mark and not the watersheds. In Arkansas this is about two percent of the State's total perennial stream miles as defined by the Arkansas Department of Environmental Quality.

### How did the Service determine which areas to designate as critical habitat?

Critical habitat designations are based on the best scientific information available concerning the species' present and historical range, habitat, biology, and threats. The Service reviewed the current information available for the two mussels, including 269 peer-reviewed and agency-generated scientific publications and 95 comments received during four comment periods, totaling 210 days. The information included: known locations; the final listing rule for the species; 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 the survival and successful reproduction of the two species:

- 1) River channels and banks with habitats that support a diversity of freshwater mussel and native fish.
- 2) Rivers that are connected to the floodplain, allowing the exchange of nutrients and sediment for maintenance of the mussels' and fish hosts' habitat, food availability, spawning habitat for native fishes, and the ability for newly transformed juveniles to settle and become established in their habitats.
- 3) Water and sediment quality necessary to sustain the mussels' various life stages.
- 4) The presence and abundance of fish hosts necessary for recruitment.
- 5) Competitive or predatory invasive (nonnative) species, in quantities low enough to have minimal effect on survival of freshwater mussels.

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

### **Is habitat supporting all populations of these two mussels included in critical habitat?**

No. All sizeable and small rabbitsfoot populations and three marginal populations (Fish Creek, Allegheny River, and Red River) are included in critical habitat. There are 19 marginal populations not included in the critical habitat designation for rabbitsfoot. All existing Neosho mucket populations are included in the critical habitat designation.

### **Will these two mussels still be protected if they are found outside of designated critical habitat?**

Yes. Because both mussels are listed species, they are protected regardless of whether they are inside or outside of an area designated as critical habitat. Federal agencies are required to consult with the Service on their actions that may affect listed species regardless of whether the area is designated as critical habitat and work to avoid or minimize impacts. In most cases conservation measures would be carried out regardless of whether or not critical habitat is designated due to the species presence.

As listed species, the mussels are protected from “take” throughout their range regardless of whether critical habitat has been designated. “Take” includes 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.

### **Does critical habitat affect all activities that occur within the designated area?**

No. Designating critical habitat has no impact on landowner activities that do not require federal funding or federal permits.

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.

### **How will critical habitat for the mussels affect private landowners?**

The critical habitat designations for the two mussels will not add any additional restrictions to landowners above those already required by the listing itself. The mussels are protected by the conservation measures that have been in place since their listing under the ESA in 2013. The designations do not affect land ownership nor do they allow government or public access to private land. Designating critical habitat has no impact on landowner activities that do not require federal funding or federal permits.

### **What does it mean to “destroy” or “adversely modify” critical habitat?**

Critical habitat is “destroyed” or “adversely modified” if an activity causes the critical habitat to no longer support the species.

### **What does “consultation” mean?**

Under the ESA, federal agencies are required to consult with the Service to ensure that their actions do not jeopardize the continued existence of a listed species or adversely modify the critical habitat of the species. The Service works with federal agencies through a consultation process to avoid or minimize impacts to a species and critical habitat by developing appropriate conservation measures that can be incorporated into the project. In most cases, these conservation measures would be carried out regardless of whether critical habitat is designated because the species is listed. Interagency consultation on critical habitat for these mussels will not result in additional conservation measures beyond what would already be required because of the listing itself.

### **How does critical habitat designation affect consultation with federal agencies?**

The Service has consulted with federal agencies for decades on actions within the mussels’ range because of the presence of other listed mussels, such as the pink mucket and the winged mapleleaf, that are designated in the same rivers as critical habitat. The vast majority of the consultations were handled efficiently and informally by the Service. Additionally, the Service already is reviewing the direct, indirect and cumulative effects of federal projects on the Neosho mucket and rabbitsfoot due to their listing and will continue to do so for critical habitat.

For large federal projects, such as dredging the White River, the Service has 135 days to complete the formal consultation process. If the project is likely to adversely modify critical habitat, then the Service works with federal agencies to avoid or minimize impacts to critical habitat by developing appropriate conservation measures that can be incorporated into a biological opinion.

### **Must federal agencies consult with the Service even where critical habitat has not been designated?**

Yes. 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.

### **Where can I find more information regarding critical habitat recovery efforts for the Neosho mucket and rabbitsfoot?**

Additional information is available at: [www.fws.gov/southeast/species/invertebrate/neosho\\_mucket.html](http://www.fws.gov/southeast/species/invertebrate/neosho_mucket.html) and

[www.fws.gov/southeast/species/invertebrate/rabbitsfoot.html](http://www.fws.gov/southeast/species/invertebrate/rabbitsfoot.html)