



Frequently Asked Questions

Proposed 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 and that may require special management consideration or protection. 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. For instance, we modified proposed culvert replacements on streams by installing fencing to reduce silt entering the streams. This prevents harm to mussels and fish. It helps maintain water quality and reduces water treatment expenses for downstream towns, cities, and businesses. Therefore, as required by the ESA, the Service is designating critical habitat for these two mussels.



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

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

For the Neosho mucket, the Service is proposing to designate critical habitat in seven stream segments where the mussel is found, comprising approximately 484 river miles in Arkansas, Kansas, Missouri and Oklahoma. For the rabbitsfoot, the Service is proposing to designate critical habitat in 35 stream segments where the mussel is found, comprising approximately 1,655 river miles in Alabama, Arkansas, Indiana, Illinois, Kansas, Kentucky, Mississippi, Missouri, Ohio, Oklahoma, Pennsylvania, and Tennessee.

Are the areas proposed as critical habitat occupied by these mussels?

Yes. All areas proposed as critical habitat are occupied by the two mussels.

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. 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) Either no competitive or predaceous invasive (nonnative) species, or such 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 18 marginal populations not included in critical habitat for rabbitsfoot. All existing Neosho mucket populations are included in proposed critical habitat.

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 on critical habitat and work to avoid or minimize impacts through conservation measures. In most cases these conservation measures would be carried out regardless of whether or not critical habitat is designated.

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.

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

Activities that cause the critical habitat to no longer support the species have destroyed or adversely modified the habitat.

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 its critical habitat that the species needs to recover. 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 or, if needed, a biological opinion. 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 often does not result in additional conservation measures beyond what would already be required because of the listing itself in areas occupied by the species.

How does critical habitat designation affect consultation with federal agencies?

The Service has consulted with federal agencies for decades on actions in Arkansas because of the presence of other listed mussels, such as the pink mucket and the winged mapleleaf, found in the same rivers as proposed critical habitat for the rabbitsfoot. The vast majority of the consultations were handled efficiently and informally by the Arkansas Ecological Services Field Office. In fact, 99 percent of the consultations completed in the last five years with other Federal agencies such as the Natural Resources Conservation Service and Farm Service Agency were done in less than 30 days. These informal consultations did not delay any projects. This is important trend data that demonstrates a productive track record in Arkansas. 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, if it is designated.

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.

What federal activities could adversely affect or destroy critical habitat?

- Coal and gravel mining
- Natural gas and oil exploration
- Timber harvest
- Agricultural activities (row crops and livestock)
- Construction and maintenance of roadways
- Nonpoint source pollution
- Loss of river bank buffers
- Gas, water, electrical power-line, and sewer easements and/or pipelines
- Water diversion and/or withdrawal from streams and springs
- Off-road vehicle use

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.

Who can I contact for more information regarding the final listing and recovery efforts for the Neosho mucket and rabbitsfoot?

For more information concerning the listing of the two mussels, please contact:

Jim Boggs, Arkansas Field Supervisor
501/513 4475 or jim_boggs@fws.gov

Additional information is available at:
www.fws.gov/southeast/species/invertebrate/neosho_mucket.html

and

www.fws.gov/southeast/species/invertebrate/rabbitsfoot.html