

## **FOR IMMEDIATE RELEASE**

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### **U.S. Fish and Wildlife Service Lists Neosho Mucket as Endangered and Rabbitsfoot as Threatened**

The U.S. Fish and Wildlife Service is listing the Neosho mucket as endangered and the Rabbitsfoot as threatened under the Endangered Species Act (ESA). Both species are freshwater mussels found in river systems in the eastern half of the United States.

The Neosho mucket has been eliminated from about 62 percent of its historic range with only nine of 16 historic populations remaining. Only one of these populations is known to be reproducing. The Neosho mucket is currently found in Arkansas, Kansas, Oklahoma, and Missouri.

The Rabbitsfoot has disappeared from about 64 percent of its historic range. While 51 of the 140 historic populations remain, only 11 populations (22 percent of its existing populations or eight percent of the historic populations) are viable; 23 populations (45 percent of the existing populations) are at risk of elimination; and 17 populations (33 percent of the current populations) show limited reproduction with little evidence of sustainability. The Rabbitsfoot is currently found in Alabama, Arkansas, Kansas, Kentucky, Illinois, Indiana, Louisiana, Mississippi, Missouri, Oklahoma, Ohio, Pennsylvania, and Tennessee. The Rabbitsfoot is no longer found in Georgia and West Virginia.

Within the State of Oklahoma, the Neosho mucket presently occurs in the Illinois River upstream of Lake Tenkiller, and in the Spring River upstream of Grand Lake. It was more widespread historically, being known also from the Caney, Verdigris, and Neosho rivers. The Rabbitsfoot presently occurs in the Illinois River upstream from Lake Tenkiller, the Verdigris River upstream of the McClellan-Kerr Arkansas River Navigation System, the Little River of southeastern Oklahoma, the Glover River, and the Mountain Fork River. The Rabbitsfoot also occurred historically in the Spring, Neosho, and Blue rivers in Oklahoma.

In listing the two mussels, the Service evaluated factors that could lead to their extinction. Threats to these mussels include loss and degradation of stream and river habitat due to impoundments, channelization, chemical contaminants, mining and sedimentation. Freshwater mussels require clean water; their decline often signals a decline in the water quality of the streams and rivers they inhabit.

The Service's final rule listing the Neosho mucket and the Rabbitsfoot appears in the September 17, 2013, *Federal Register*. The protection for these mussel species under the ESA becomes effective 30 days after the rule is published in the *Federal Register*. The

ultimate goal of the ESA is the recovery of these listed species, so that they no longer need the protective measures of the ESA. The next step is development of a recovery plan that provides a guidebook for the Service and its conservation partners to address threats to the species survival and recovery. When completed, the recovery plan will be available on the Service's website (<http://www.fws.gov/endangered>)

It is illegal under the ESA to kill, harm or otherwise "take" a listed species, or to possess, import, export or conduct interstate or international commerce without authorization from the Service. The ESA also requires all federal agencies to ensure actions they authorize, fund, or undertake do not jeopardize the existence of listed species.

On October 16, 2012, and May 9, 2013, the Service opened public comment periods on its proposal to list these mussels under the ESA. Twelve comments were received on the proposed rule. The Service did not receive any requests for a public hearing during either comment period. However, we held public information meetings in Joplin, Missouri, on May 21, 2013, and Greenville, Missouri, on May 23, 2013.

For more information regarding the listing of these two freshwater mussels, please contact Chris Davidson, U.S. Fish and Wildlife Service, Arkansas Ecological Services Field Office, 110 South Amity Road Suite 300, Conway, AR 72302; telephone 501-513-4481; facsimile 501-513-4480. Also, please visit <http://www.fws.gov/arkansas-es/> or Docket #FWS-R4-ES-2012-0031 on <http://www.regulations.gov/>. For information specifically on Oklahoma populations of the species, or projects in Oklahoma portions of their ranges, please contact David Martinez, U.S. Fish and Wildlife Service, Oklahoma Ecological Services Field Office, 9014 East 21<sup>st</sup> Street, Tulsa, OK 74129; telephone 918-382-4508.

The U.S. Fish and Wildlife Service is the principal federal agency responsible for conserving, protecting and enhancing fish, wildlife and plants and their habitats for the continuing benefit of the American people. For more information on our work and the people who make it happen, visit [www.fws.gov](http://www.fws.gov). Connect with us on Facebook at [www.facebook.com/usfws](http://www.facebook.com/usfws), follow our tweets at [www.twitter.com/usfwshq](http://www.twitter.com/usfwshq), watch our YouTube Channel at <http://www.youtube.com/usfws>, and download photos from our Flickr page at <http://www.flickr.com/photos/usfwshq>.

**Frequently Asked Questions  
Final Listing Rule for the  
Neosho Mucket and Rabbitsfoot**

**September 2013**

**Q1: Which two freshwater mussels are listed under the Endangered Species Act (ESA)?**

**A1:** The U.S. Fish and Wildlife Service listed the Neosho mucket as endangered and the Rabbitsfoot as threatened under the Endangered Species Act of 1973, as amended (ESA). The Service opened two public comment periods on the proposal to list these mussels under the ESA on October 16, 2012, and May 8, 2013.

**Q2: Where are the Neosho mucket and rabbitsfoot found?**

**A2:** The Neosho mucket is found only in portions of Cottonwood, Elk, Fall, Illinois, Neosho, Shoal, Spring, North Fork Spring, and Verdigris Rivers in Arkansas, Kansas, Missouri, and Oklahoma. The Rabbitsfoot is found only in portions of 51 streams in the lower Great Lakes subbasin and Ohio, Cumberland, Tennessee, lower Mississippi River, White, Arkansas, and Red River basins in 13 states (Alabama, Arkansas, Kansas, Kentucky, Illinois, Indiana, Louisiana, Mississippi, Missouri, Oklahoma, Ohio, Pennsylvania, and Tennessee). The Rabbitsfoot has disappeared from Georgia and West Virginia.

**Q3: Why do these two mussels need protection under the ESA?**

**A3:** The Neosho mucket no longer exists across 62 percent of its historic range with only nine of the 16 historic populations remaining. Eight of nine remaining populations are declining with only one large viable population (Spring River, Missouri) remaining. The Rabbitsfoot has been eliminated from approximately 64 percent of its historic range. While 51 of 140 historic populations remain, only 11 populations (22 percent of extant populations or eight percent of the historical populations) are viable; 23 populations (45 percent of extant populations) are at risk of elimination; and 17 populations (33 percent of the current populations) show limited reproduction with little evidence of sustainability. Threats to these two mussels include impoundments, channelization, mining, oil and gas exploration, sedimentation, chemical contaminants, temperature alterations, population fragmentation and isolation, loss of fish hosts, and invasive, non-natives species.

**Q4: What is a freshwater mussel?**

**A4:** Mussels are freshwater animals from the mollusk family, including clams, oysters, scallops, snails, slugs, and squid, as well as freshwater mussels.

Mussels generally live embedded in the bottom of rivers, streams, and other bodies of water. They siphon water into their shells and across four gills that are specialized for respiration and food collection. They primarily feed on disintegrated organic debris, algae, and bacteria. Adults are filter feeders and generally orient themselves on or near the substrate surface to take in food and oxygen from the water above them. Juveniles typically burrow completely beneath the substrate surface and are pedal (foot) feeders (bringing food particles inside the shell for ingestion that adhere to the foot while it is extended outside the shell) until the structures for filter feeding are more fully developed.

**Q5: When does the listing of the two mussels become official?**

A5: The protection under the ESA for the Neosho mucket mussel as an endangered species and the rabbitsfoot mussel as a threatened species becomes effective 30 days after the rule is published in the *Federal Register*.

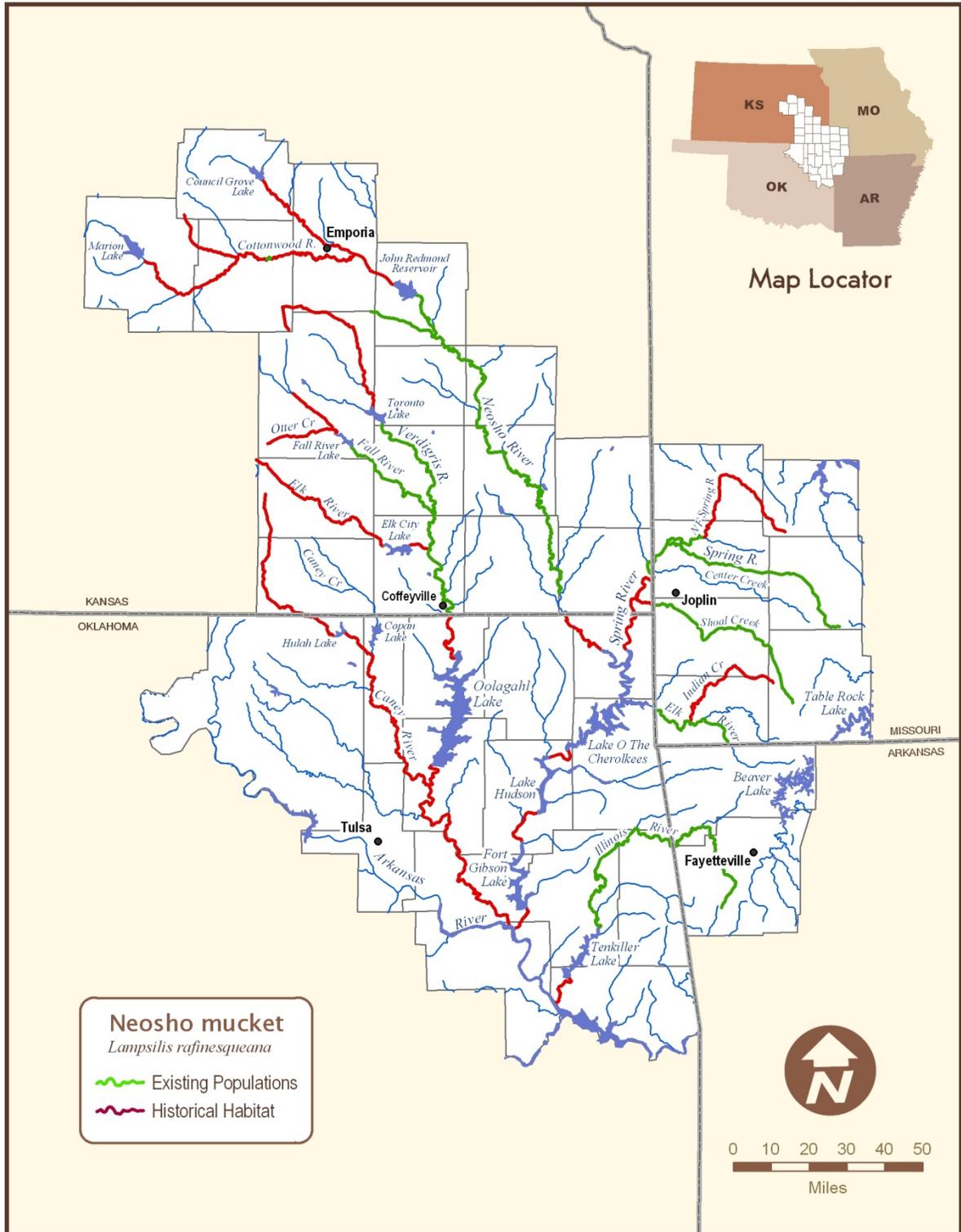
**Q6: Now that the mussels will be protected, what is the next step?**

A6: The primary purpose of the ESA is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal is the recovery of these listed species, so that they no longer need the protective measures of the ESA. The Service will develop a recovery plan that provides a guidebook for the Service and its conservation partners to address threats to the species survival and recovery. When completed, the recovery plan will be available on the Service's website (<http://www.fws.gov/endangered>).

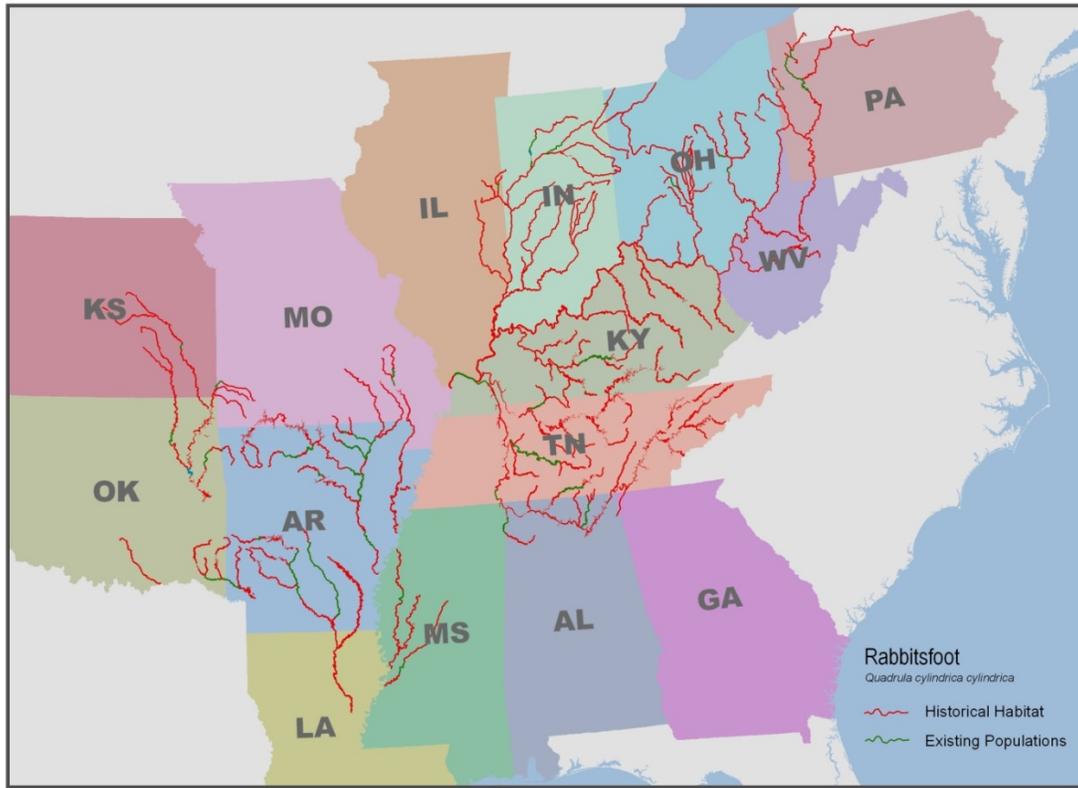
**Q7: Who can I contact for more information regarding the final listing and recovery efforts for the Neosho mucket and rabbitsfoot?**

A7: For more information concerning the listing of these two freshwater mussels under the ESA, please contact Chris Davidson, U.S. Fish and Wildlife Service, Arkansas Ecological Services Field Office, 110 South Amity Road Suite 300, Conway, AR 72302; telephone 501-513-4481; facsimile 501-513-4480. Also, please visit <http://www.fws.gov/arkansas-es/> or Docket #FWS-R4-ES-2012-0031 on <http://www.regulations.gov/>

# NEOSHO MUCKET



# RABBITSFOOT



## NEOSHO MUCKET



*M. C. Barnhart*

Photo of Neosho mucket by M.C. Barnhart, University of Missouri

## RABBITSFOOT



Photo of Rabbitsfoot by Bob Butler, U.S. Fish and Wildlife Service