

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service****50 CFR Part 17**

[Docket No. FWS-R4-ES-2010-0010]

[MO 92210-0-0008-B2]

**Endangered and Threatened Wildlife and Plants; 90-Day Finding on a Petition to List the Southern Hickorynut Mussel (*Obovaria jacksoniana*) as Endangered or Threatened****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Notice of 90-day petition finding.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, announce a 90-day finding on a petition to list the southern hickorynut mussel (*Obovaria jacksoniana*) as threatened or endangered under the Endangered Species Act of 1973, as amended. Based on our review, we find that the petition does not present substantial scientific or commercial information indicating that listing the southern hickorynut mussel may be warranted. Therefore, we will not be initiating a further status review in response to this petition. However, we ask the public to submit to us any new information that becomes available concerning the status of, or threats to, the southern hickorynut mussel or its habitat at any time.

**DATES:** The finding announced in this document was made on March 23, 2010.

**ADDRESSES:** This finding is available on the Internet at <http://www.regulations.gov>. Supporting documentation we used in preparing this finding is available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, 6578 Dogwood View Parkway, Jackson, Mississippi 39213. Please submit any new information, materials, comments, or questions concerning this finding to the above address.

**FOR FURTHER INFORMATION CONTACT:** Paul Hartfield at the Jackson, MS, Ecological Services Field Office (see **ADDRESSES**), by telephone (601-321-1125) or by facsimile to 601-965-4340. If you use a telecommunications device for the deaf (TDD), please call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:****Background***Petition History*

On October 15, 2008, we received a petition, dated October 9, 2008, from WildEarth Guardians, Santa Fe, NM, requesting that the southern hickorynut mussel and five other mussel species be listed as threatened or endangered under the Act. The petition clearly identified itself as such and included the requisite identification information of the petitioner required at 50 CFR 424.14(a). In a November 26, 2008, letter to the petitioner, we acknowledged receipt of the petition and stated that the petition for the six mussel species was under review by staff in our Southwest (Region 2) and Southeast (Region 4) Regional Offices. Region 2 already addressed 5 of the 6 petitioned species including smooth pimpleback, Texas pimpleback, false spike, Mexican fawnsfoot, and Texas fawnsfoot, in a separate finding (74 FR 66260; December 15, 2009). This finding addresses the petition to list the southern hickorynut mussel.

*Legal Requirements for Petition Review*

Section 4(b)(3)(A) of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*), requires that we make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information to indicate that the petitioned action may be warranted. We are to base this finding on information provided in the petition, supporting information submitted with the petition, and information otherwise available in our files at the time the petition is received. To the maximum extent practicable, we are to make this finding within 90 days of our receipt of the petition, and publish our notice of the finding promptly in the **Federal Register**.

Our standard for substantial scientific or commercial information within the Code of Federal Regulations (CFR) with regard to a 90-day petition finding is, "that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted" (50 CFR 424.14(b)). If we find that substantial information was presented, we are required to promptly commence a review of the status of the species (status review), which is subsequently summarized in a 12-month finding.

We base this finding on information provided by the petition that we determined to be reliable after reviewing sources referenced in the petition and information available in our files at the time of the receipt of the petition. We

have been accumulating information on mussel species of concern, including the southern hickorynut, for a number of years; therefore, we have considerable information in our files regarding this species. We evaluated all information in accordance with 50 CFR 424.14(b). Our process for making this 90-day finding under section 4(b)(3)(A) of the Act and 50 CFR 424.14(b) of our regulations is limited to a determination of whether the information in the petition meets the "substantial information" threshold.

*Species Information*

The southern hickorynut is a medium-sized mussel growing to 55 millimeters (2 inches) in length. The shell is moderately thick, smooth, and oval to subtriangular in shape; the beaks are raised above the hinge line. Shell color is brown to black, sometimes with dark green rays. The interior of the shell is white in color, iridescent along the margin; the beak cavity is moderately deep. For a more detailed description, see Williams *et al.* 2008, p. 463. The southern hickorynut can be confused with the Alabama hickorynut (*Obovaria unicolor*), the ovate clubshell (*Pleurobema perovatum*), and the black clubshell (*P. curtum*) in the Mobile River drainage (Williams *et al.* 2008, p. 464); the Ouachita creekshell (*Villosa arkansasensis*) in the Ouachita and White river drainages (WildEarth Guardians 2008, p. 10; NatureServe 2008); and round hickorynut (*Obovaria subrotunda*) in the Lower Mississippi River drainage (Hartfield and Ebert 1986, p. 23; Hartfield and Rummel 1985, p. 118). Taxonomic problems with identification of the species have been recently noted. Phylogenetic analysis suggests that Ouachita creekshell (*Villosa arkansasensis*) may be the same species as the southern hickorynut (Inoue *et al.* 2008, unpaginated). It has also been suggested that populations of southern hickorynut from the east and west sides of the Mississippi river may be taxonomically distinct (Inoue *et al.* 2008, unpaginated).

The southern hickorynut is found in small streams to large rivers in stable sand and gravel substrates, and in slow to moderate currents (Williams *et al.* 2008, p. 464). Fish hosts for the species are unknown.

The southern hickorynut is widely distributed in streams of the Gulf Coastal plain from the Mobile River Basin west to the Neches River in Eastern Texas (Williams *et al.* 2008, p. 464), and north into Arkansas, Oklahoma, southeastern Missouri, and western Tennessee (NatureServe 2008). The species occurs sporadically within this area. Known drainage populations

include the Buttahatchee and East Fork Tombigbee Rivers and Yellow Creek (Mississippi), and the Sipsey River and Lubbub Creek (Alabama) in the Mobile River drainage (Williams *et al.* 2008, p. 464); the Big Black, Bayou Pierre, and Pascagoula Rivers in Mississippi, the Pearl River in Mississippi and Louisiana, and the Amite River in Mississippi and Louisiana (Hartfield and Ebert 1986, p. 23; Hartfield and Rummel 1985, p. 118; Jones *et al.* 2005, p. 90; NatureServe 2008); the Tickfaw, Tangipahoa, Tensas, Boeuf, Ouachita, Dugdemonia, Little, Cane, Sabine, and Neches Rivers, and Bayou Dorcheat and Kisatchie Bayou in Louisiana (Vidrine 1993, p. 207); the South Fourche LaFave, Strawberry, Arkansas, Ouachita, and White river systems in Arkansas (Harris *et al.* 1997, pp. 80-81; NatureServe 2008); the Kiamichi, Little, Mountain Fork, and Glover Rivers in Oklahoma (NatureServe 2008); the Neches River drainage in Texas (Howells *et al.* 1996, p. 86); the Hatchie River of west Tennessee (Parmalee and Bogan 1998, p. 163); and the Whitewater River and Cane Creek in Missouri (Oesch 1984, p. 162).

Status of the species in most historically occupied stream drainages is poorly known, but the southern hickorynut is apparently extirpated from the Cahaba River, Alabama (McGregor *et al.* 2000, p. 230), and the Saint Francis and Black Rivers, Missouri (NatureServe 2008). It is likely extirpated from the mainstem Tombigbee River in Alabama and Mississippi (e.g., McGregor and Garner 2001, p. 7), and the mainstem Alabama River in Alabama (e.g., Hartfield and Garner 1998, p. 15). The southern hickorynut is considered uncommon to rare in all States where it occurs; however, status is poorly known and threats have not been adequately assessed (NatureServe 2008). The species is reported as locally common in the Ouachita River and tributaries in Arkansas (Anderson 2006, p. 971), and Vidrine (2008, p. 127) notes the species is common in Kisatchie Bayou and in numerous streams of the Calcasieu River in Louisiana.

#### Five-Factor Analysis

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR 424, set forth the procedures for adding species to the Federal List of Endangered and Threatened Wildlife and Plants. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or

curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence.

In making this 90-day finding, we evaluated whether information regarding the southern hickorynut, as presented in the petition and other information available in our files, is substantial, thereby indicating that the petitioned action may be warranted. Our evaluation of this information is presented below.

#### A. *The Present or Threatened Destruction, Modification, or Curtailment of the Species' Habitat or Range*

The petition asserts that the range of the southern hickorynut is declining, especially in Louisiana, and that it has been extirpated from two sites in Alabama (WildEarth Guardians 2008, pp. 11–12). The petition asserts that the southern hickorynut is declining at a short-term global rate of 10 to 30 percent, and is threatened by loss of habitat (WildEarth Guardians 2008, pp. 11–12) attributed to sedimentation, channelization, impoundment, sand and gravel mining, and chemical runoff (WildEarth Guardians 2008, pp. 21–26).

#### Evaluation of Information in the Petition and Our Files

The southern hickorynut continues to be reported throughout its geographical range, which includes Mississippi, Alabama, Oklahoma, Missouri, Texas, Tennessee, and Louisiana (NatureServe 2008, WildEarth Guardians 2008, pp. 11–12). There is evidence that some population segments have become extirpated in the Mobile River Basin. For example, the species has not been collected in the Cahaba River since 1973, apparently due to historical episodes of water quality degradation (McGregor *et al.* 2000, p. 230); and surveys in recent years have also failed to locate southern hickorynut in the Alabama River (Hartfield and Garner 1998, p. 15) or the mainstem Tombigbee River (Hartfield and Jones 1989, p. 10; McGregor and Garner 2001, p. 7), which have been impounded and channeled for navigation. However, there are several population segments of southern hickorynut known to persist in the Mobile River Basin that were not recognized in the petition, including the Buttahatchee and East Fork Tombigbee Rivers and Yellow Creek in Mississippi, the Sipsey River and Lubbub Creek in Alabama, and Bayou Pierre in

Mississippi (Hartfield and Ebert 1986, p. 23; Williams *et al.* 2008, p. 464, McGregor and Haag 2004, p. 22).

The petition specifically notes a decline in the abundance and range of southern hickorynut in Louisiana (WildEarth Guardians 2008, p. 11), based on the NatureServe (2008) account of , suspected extirpations from most historically occupied streams in Louisiana, and a conclusion that the species is uncommon to rare throughout its range (WildEarth Guardians 2008, p. 11).

NatureServe (2008) reports that occurrences of the species have declined from 16 streams in Louisiana (Vidrine 1993, p. 207), to only two streams, based on a publication by Brown and Banks (2001, p. 195). Information in our files does not support this assertion. Brown and Banks (2001, p. 195), surveyed only portions of 3 of the 16 streams referenced by Vidrine's comprehensive report (1993, p. 207). There is no information presented in NatureServe, the petition, or in our files to document that the southern hickorynut has declined or become extirpated from any of the other 13 streams cited by Vidrine (1993) as occupied by the species. Rather, information in our files includes a recent report that the southern hickorynut is considered common in Kisatchie Bayou as well as in numerous streams of the Calcasieu River in Louisiana (Vidrine 2008, p. 127). This report, as well as an account that the species is locally common in the Ouachita River and tributaries in Arkansas (Anderson 2006, p. 971), contradicts the petition assertion that the species is uncommon to rare throughout its range.

Therefore, the information provided by the petition, along with NatureServe records, appears to reflect a lack of recent survey effort and information on the status of the southern hickorynut throughout most of its range rather than the documentation of a range-wide decline. While there is evidence that the species has been locally extirpated from some historical collection sites, information in our files indicates the southern hickorynut continues to persist throughout most of its historical range.

The petition provides general information and references on impacts of sand and gravel mining to freshwater mussels and other invertebrates (e.g., WildEarth Guardians 2008, pp. 21–22, citing National Marine Fisheries Service 1996, Brim Box and Mossa 1999, pp. 103–104; Roell 1999). Information in our files document past events of instream sand and gravel mining in the Amite and Tangipahoa Rivers in

Louisiana, and stream capture by floodplain mines in the Buttahatchee River in Mississippi, along with detrimental effects to the mussel communities in those streams (Hartfield 1993, pp. 135–138). The decline in abundance of southern hickorynut in the Buttahatchee River, however, occurred prior to stream capture by the mines and was attributed to geomorphic effects from the construction of the Tennessee–Tombigbee Waterway, and/or sedimentation from headwater kaolin mines (Hartfield and Jones 1990, pp. 22–24). The kaolin mines that were the suspected source of sedimentation in the Buttahatchee have since been stabilized, sand and gravel mining is now regulated and Best Management Practices have been developed and implemented to protect water and habitat quality (e.g., Louisiana Department of Environmental Quality 2007). Neither the petition nor our files contain any site-specific threats to the southern hickorynut from current sand and gravel mining activities.

The petition provides general information and references on impacts of dredging and channelization to freshwater mussels (e.g., WildEarth Guardians 2008, pp. 22–23, citing Aldridge 2000, p. 247), but no information on activities conducted within streams occupied by the southern hickorynut. Information in our files suggests channelization has impacted mussel faunas in areas known to be occupied by the southern hickorynut in the Big Black, Yazoo, and Buttahatchee Rivers, and Luxapalila Creek in Mississippi (Hartfield 1993, pp. 132–138); however, the southern hickorynut continues to persist in these drainages. Although there has been a documented decline from historical population levels in the Buttahatchee River (Hartfield and Jones 1990, pp. 22–24), the primary causes of the decline have been stabilized, and this population segment of southern hickorynut has continued to persist over the past two decades. We have no information that any additional channel work is planned for these streams, and the petition does not contain any site-specific threats to southern hickorynut from dredging and channelization.

The petition provides general information and references on impacts of impoundment to freshwater mussels (e.g., WildEarth Guardians 2008, pp. 23–24, citing Burlakova and Karatayev 2007, pp. 290–291; Vaughn and Taylor 1999, p. 912; Watters 1999, pp. 261 and 268); however, the petition provides no information specific to the streams occupied by the southern hickorynut. Information in our files suggests

impoundment contributed to the apparent extirpation of southern hickorynut from the mainstem Tombigbee and Alabama Rivers (e.g., Hartfield and Jones 1989, p. 10; Hartfield and Garner 1998, p. 15). However, we have no information on threats of impoundment to streams currently occupied by southern hickorynut.

The petition notes the harmful effects of water fluctuation in impoundments to mollusk fauna inhabiting reservoirs (WildEarth Guardians 2008, p. 24). The southern hickorynut is not known to currently or historically inhabit any impounded areas, so this is not a historical or current documented threat to the species.

The petition provides general information and references on impacts of excessive sediments to freshwater mussels (WildEarth Guardians 2008, pp. 24–25). The petition notes the contribution of activities such as logging, agriculture, ranching, mining, urban development, and construction activities to excessive sediment rates in some streams, along with the potential impacts of excessive sediments on freshwater mussel communities. However, the petition does not provide, nor do our files contain, any specific evidence of detrimental rates of sedimentation to any southern hickorynut mussel population segment.

The petition states that pollutants pose a threat to the hickorynut (WildEarth Guardians 2008, p. 12); however, the petition provides only general information and references on impacts of contaminants and polluted runoff to freshwater mussels (WildEarth Guardians 2008, pp. 25–26, citing Foster and Bates 1978, p. 958). No information is provided, nor are we currently aware of information on, any specific contaminant or pollution threats to the southern hickorynut in the stream drainages known to be occupied by the species.

In summary, we find that the information provided in the petition, as well as other information in our files, does not present substantial scientific or commercial information indicating that the petitioned action may be warranted due to the present or threatened destruction, modification, or curtailment of the species' habitat or range, especially given its continued persistence in seven States and numerous stream drainages, information that it is locally common in Louisiana and Arkansas, and in the absence of documented threats to habitat or range of extant populations.

#### *B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes*

The petition did not provide any information concerning this factor. Information in our files shows that mussels have historically been, and continue to be, commercially exploited for their shells in some States; however, southern hickorynut is not considered a commercial species and has little value in commerce. Additionally, all States within the range of the southern hickorynut either regulate or restrict mussel harvest. For example, the State of Mississippi is closed to any mussel harvest, and the State of Alabama prohibits mussel harvest in streams currently known to be occupied by the southern hickorynut. All States within the range of the hickorynut require permits to take mussels for scientific purposes. Therefore, there is no evidence that overutilization is a threat to southern hickorynut.

#### *C. Disease or Predation*

The petition did not provide any information concerning this factor. Information in our files indicates that disease in freshwater mussels is poorly known, and there is no evidence of disease in any population of southern hickorynut. Freshwater mussels are consumed by various vertebrate predators, including fishes, mammals, and possibly birds. Predation by naturally occurring predators is a normal aspect of the population dynamics of a mussel species and is not known to be a threat to any of the existing populations of the southern hickorynut. Therefore, there is no information provided in the petition, or other information in our files, that presents substantial scientific or commercial information indicating that the petitioned action may be warranted due to disease or predation.

#### *D. The Inadequacy of Existing Regulatory Mechanisms*

The petition asserts that the southern hickorynut is not protected under any existing Federal or State Law, and therefore, current regulatory mechanisms are inadequate for conservation. The petition references the need to protect mussels from commercial harvest.

#### *Evaluation of Information in the Petition and Our Files*

Contrary to the assertion in the petition, the southern hickorynut is identified as a species of conservation concern in all States where it occurs. This recognition extends some level of consideration under State and Federal

environmental laws when project impacts are reviewed. Although, current State and Federal regulations regarding pollutants are generally assumed to be protective of freshwater mollusks, we do have information to indicate that some pollutant standards may not be protective for freshwater mussels (e.g., Augspurger *et al.* 2007, p. 2026). However, there is no information in our files to suggest specific pollution threats to the southern hickorynut in any specific area, and the petition provided no information to support the assertion therein that existing regulatory mechanisms are inadequate to protect the species. Furthermore, as noted under Factor B, above, the southern hickorynut is not considered a commercial species, has little value in commerce, and all States within the range of the southern hickorynut either regulate or restrict mussel harvest.

In summary, we find that the information provided in the petition, as well as other information in our files, does not present substantial scientific or commercial information indicating that the petitioned action may be warranted due to the inadequacy of existing regulations.

#### *E. Other Natural or Manmade Factors Affecting the Species' Continued Existence*

The petition asserts that fragmentation of freshwater mussel stream habitat makes mussel species more vulnerable to droughts and floods attributed to climate change (e.g., WildEarth Guardians 2008, p. 27, citing Hamlet and Lettenmaier 2007, p. 43).

#### *Evaluation of Information in the Petition and Our Files*

The petition provided no information on habitat fragmentation or changes in the frequency of droughts and floods within the range of the southern hickorynut, or on specific detrimental effects of habitat fragmentation, droughts, or floods to the hickorynut. Information in our files documents mollusk declines within small perennial streams that have lost flow as a direct result of drought (for example, Golladay *et al.* 2004, p. 494; Haag and Warren 2008, p. 1165). However, most recent site records of the southern hickorynut are from medium to large perennial stream channels (e.g., the Big Black, Buttahatchee, Amite, Pearl, Tickfaw, Neches, Arkansas, White, Ouachita, and Hatchie Rivers) that are less susceptible to total loss of flow by drought. In addition, the wide distribution of the species reduces its vulnerability to extinction due to local stochastic threats. Therefore, information provided

by the petition and in Service files does not indicate or document a threat to southern hickorynut mussels due to drought or floods.

#### **Finding**

We have reviewed the petition and supporting information provided with the petition and evaluated that information in relation to other pertinent literature and information, and we have evaluated the information to determine whether the sources cited support the claims made in the petition. We recognize that many freshwater mussel species are experiencing declines in both range and population abundances due to the generalized threats identified by the petition. However, review of the information provided in the petition and in our files indicates that this species is not declining range-wide.

In considering what factors might constitute threats, we must look beyond the mere exposure of the species to the factor to determine whether the species responds to the factor in a way that causes actual impacts to the species. If there is exposure to a factor, but no response, or only a positive response, that factor is not a threat. If there is exposure and the species responds negatively, the factor may be a threat and we then attempt to determine how significant a threat it is. If the threat is significant, it may drive or contribute to the risk of extinction of the species such that the species may warrant listing as threatened or endangered as those terms are defined by the Act. This does not necessarily require empirical proof of a threat. The combination of exposure and some corroborating evidence of how the species is likely impacted could suffice. The mere identification of factors that could impact a species negatively may not be sufficient to compel a finding that listing may be warranted. The information shall contain evidence sufficient to suggest that these factors may be operative threats that act on the species to the point that the species may meet the definition of threatened or endangered under the Act. We found no information to suggest that threats are acting on the southern hickorynut such that the species may become extinct now or in the foreseeable future.

Based on this review and evaluation, we find that the petition does not present substantial scientific or commercial information to indicate that listing the southern hickorynut under the Act as threatened or endangered may be warranted at this time. Although we will not commence a status review at this time, we encourage interested parties to continue to gather data that

will assist with the conservation of the species. If you wish to provide information regarding the species, you may submit your information or materials to the Field Supervisor, Mississippi Ecological Services Field Office (see **ADDRESSES** section) at any time.

#### **References Cited**

A complete list of references cited is available on the Internet at <http://www.regulations.gov> and upon request from the Mississippi Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

#### **Author**

The primary author of this notice is Paul Hartfield (see **ADDRESSES**).

#### **Authority**

The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: March 9, 2010.

**Daniel M. Ashe,**

*Acting Director, U.S. Fish and Wildlife Service.*

[FR Doc. 2010-6111 Filed 3-22-10; 8:45 am]

**BILLING CODE 4310-55-S**

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## **DEPARTMENT OF THE INTERIOR**

### **Fish and Wildlife Service**

#### **50 CFR Part 17**

[Docket No. FWS-R4-ES-2010-0007]  
[MO 92210-0-0008-B2]

#### **Endangered and Threatened Wildlife and Plants; 90-Day Finding on a Petition to List the Striped Newt as Threatened**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of petition finding and initiation of status review.

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**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), announce a 90-day finding on a petition to list the striped newt (*Notophthalmus perstriatus*) as threatened under the Endangered Species Act of 1973, as amended (Act). We find that the petition presents substantial scientific or commercial information indicating that listing the striped newt may be warranted. Therefore, with the publication of this notice, we are initiating a review of the status of the species to determine if listing the species is warranted. To ensure that this status review is comprehensive, we are requesting scientific and commercial data and other information regarding