

# Sunshine Act Meetings

Federal Register

Vol. 54

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

## FEDERAL ELECTION COMMISSION

**DATE AND TIME:** Tuesday, October 3, 1989, 10:00 a.m.

**PLACE:** 999 E Street NW., Washington, DC.

**STATUS:** This meeting will be closed to the public.

### ITEMS TO BE DISCUSSED:

Compliance matters pursuant to 2 U.S.C. § 437g.  
Audits conducted pursuant to 2 U.S.C. § 437g, § 438(b), and title 26, U.S.C.  
Matters concerning participation in civil actions or proceedings or arbitration.  
Internal personnel rules and procedures or matters affecting a particular employee.

[54 FR 31286]

**PREVIOUSLY ANNOUNCED DATE AND TIME:** Wednesday, October 4, 1989, 10:00 a.m.

By direction of the Federal Election Commission, the Open Hearing scheduled for October 4, 1989, concerning Loans From

Lending Institutions to Candidates and Political Committees, has been cancelled.

**DATE AND TIME:** Thursday, October 5, 1989, 10:00 p.m.

**PLACE:** 999 E Street NW., Washington, DC (Ninth Floor).

**STATUS:** This meeting will be open to the public.

### MATTERS TO BE CONSIDERED:

Setting of Dates for Future Meetings.  
Correction and Approval of Minutes.  
Draft Advisory Opinions—  
Draft AO 1989-16  
Mary C. Rich on behalf of MBank PAC and Deposit Insurance Bridge Bank PAC  
Draft AO 1989-18  
William C. Clohan, Jr., on behalf of the Association of Independent Colleges and Schools PAC  
Administrative Matters.

### PERSON TO CONTACT FOR INFORMATION:

Mr. Fred Eiland, Information Officer,  
Telephone: (202) 376-3155.

Marjorie W. Emmons,  
*Secretary of the Commission.*

[FR Doc. 89-23077 Filed 9-26-89; 2:19 pm]

BILLING CODE 6715-01-M

## FEDERAL RESERVE SYSTEM

Committee on Employee Benefits of the Federal Reserve System; Meeting

**TIME AND DATE:** 4:00 p.m., Monday, October 2, 1989.

**PLACE:** Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets, N.W., Washington, D.C. 20551.

**STATUS:** Open.

### MATTERS TO BE CONSIDERED:

1. Budget review of the Office of Employee Benefits.
2. Any items carried forward from a previously announced meeting.

### CONTACT PERSON FOR MORE

**INFORMATION:** Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204.

Dated: September 25, 1989.

William W. Wiles,

*Secretary of the Board.*

[FR Doc. 89-22982 Filed 9-25-89; 8:45 am]

BILLING CODE 6210-01-M

The purpose of the Staircase Act Meetings is to provide a forum for the exchange of ideas and information among the members of the Staircase Act community. The meetings are held on a regular basis and are open to all members of the community. The meetings are held in a comfortable and convenient location and are held at a time that is convenient for most members. The meetings are held in a comfortable and convenient location and are held at a time that is convenient for most members. The meetings are held in a comfortable and convenient location and are held at a time that is convenient for most members.

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**14 CFR Part 93**

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Thursday  
September 28, 1989

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**Part II**

**Department of  
Transportation**

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**Federal Aviation Administration**

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**14 CFR Part 93**

**High Density Traffic Airports Slot  
Allocation and Transfer Methods; Final  
Rule**



Department of  
Transportation

Part II

Department of  
Transportation

United States Department of Transportation

in one part of

Highway, Public Works, and  
Transportation

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 93

[Docket No. 25758; Amdt. No. 93-59]

## High Density Traffic Airports Slot Allocation and Transfer Methods

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation, (DOT).

**ACTION:** Final rule; partial suspension of effective date.

**SUMMARY:** On August 22, 1989, the FAA published a final rule which made several technical amendments to the regulations pertaining to the allocation and transfer of air carrier and commuter operator slots at Kennedy International Airport, LaGuardia Airport, O'Hare International Airport, and Washington National Airport. Among other revisions, the final rule changed the definition of aircraft authorized for operations in "scheduled commuter" slots from any aircraft with a maximum passenger seating capacity of less than 56 seats to propeller-driven aircraft with less than 75 seats. This action delays the effectiveness of the rule only insofar as it would prohibit turbojet aircraft with a maximum certificated seating capacity of less than 56 seats to operate the scheduled commuter slots.

**EFFECTIVE DATE:** September 21, 1989.

**FOR FURTHER INFORMATION CONTACT:** David L. Bennett, Office of the Chief Counsel, AGC-230, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591 Telephone: (202) 267-3491.

**SUPPLEMENTARY INFORMATION:**

## Availability of Document

Any person may obtain a copy of this document by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Information Center, APA-430, 800 Independence Avenue, SW., Washington, DC 20591; or by calling (202) 267-8058. Communications must identify the amendment number of the document.

## Background

The High Density Traffic Airports Rule (14 CFR part 93, subpart K) limits the number of operations during certain hours or half hours at four airports: Kennedy International, LaGuardia,

O'Hare International, and Washington National. The final rule published on August 22, 1989, (54 FR 34904; corrected 54 FR 37303, September 8, 1989) amended § 93.123(c) of subpart K of the Federal Aviation Regulations to change the maximum passenger seating capacity authorized for operations in scheduled commuter slots from "less than 56 [seats]" to "less than 75 [seats]," with the addition of a limitation to reciprocating the turboprop aircraft.

After the publication of the final rule, the FAA received new information that certain aircraft manufacturers had plans to produce turbojet commuter aircraft with a 50 seat capacity. Such aircraft could have been operated using commuter slots under the old High Density Rule, but would be restricted under the Amendment 93-57 to operation with air carrier slots, even though the aircraft are intended for use in commuter markets.

In consideration of the commuter-oriented nature of the planned 50-seat aircraft, and the fact that such aircraft would have been permitted to use commuter slots under the prior rule, the FAA believes it appropriate to suspend the effectiveness of the new rule to the extent it would prohibit such operations, pending further review of this issue.

## Regulatory Evaluation

The delay of effective date for the amended § 93.123(c) contained in this rulemaking with respect to the maximum passenger seating capacity authorized for operations using commuter slots preserves the status quo and will have no effect on the actual operations of carriers currently using aircraft having fewer than 56 seats in these slots. Accordingly, no further regulatory evaluation will be prepared.

## Regulatory Flexibility Analysis

As discussed above under Regulatory Evaluation, the impact on all operators will be minimal, and there will be no disproportionate impact on smaller operators. Accordingly, the FAA has determined that the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

For the reasons set forth above, the FAA has determined that this amendment is not a "major rule" under Executive Order 12291; and is not a "significant rule" under Department of Transportation Regulatory Policies and

Procedures (44 FR 11034; February 26, 1979). I certify that under the criteria of the Regulatory Flexibility Act, this rule will not have a significant economic impact on a substantial number of small entities.

## Federalism Determination

The amendment set forth herein would not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this regulation does not have federalism implications warranting the preparation of a Federalism Assessment.

## List of Subjects in 14 CFR Part 93

Aviation safety, Air traffic control.

## Suspension of Effectiveness

Accordingly, part 93 of the Federal Aviation Regulations (14 CFR part 93) is amended as follows:

**PART 93—SPECIAL AIR TRAFFIC RULES AND AIRPORT TRAFFIC PATTERNS**

1. The authority citation for part 93 continues to read as follows:

**Authority:** 49 U.S.C. 1302, 1303, 1348, 1354(a), 1421(a), 1424, 2402, and 2424; 49 U.S.C. 106 (Revised Pub. L. 97-449, January 12, 1983).

**§ 93.123 [Amended]**

2. The effective date of Amendment 93-57, to the extent it relates to aircraft with a maximum certificated seating capacity of less than 56 seats, is suspended indefinitely. Amendment 93-57 retains an effective date of September 21, 1989, with respect to aircraft with a maximum certificated seating capacity of 56 or more seats. Therefore, the following note is added to the end of § 93.123:

**Note:** The effective date of paragraph (c), to the extent it defines turbojet aircraft with a maximum certificated seating capacity of less than 56 seats as air carrier aircraft, is suspended indefinitely.

Issued in Washington, DC, on September 21, 1989.

Samuel K. Skinner,

Secretary of Transportation.

[FR Doc. 89-22835 Filed 9-22-89; 4:54 pm]

BILLING CODE 4910-13-M



It is a well-known fact that the medical profession has been the subject of much criticism and attack in recent years. This is due to many causes, but one of the most important is the fact that the public has become more educated and more critical of the medical profession than in the past.

The medical profession has been accused of many things, including ignorance, incompetence, and dishonesty. However, it is important to remember that the medical profession has always been a profession of men and women who have dedicated their lives to the service of their fellow men. They have spent years of study and hard work to acquire the knowledge and skills necessary to practice their profession.

It is true that there have been instances of medical malpractice and other errors. However, these are the exception rather than the rule. The vast majority of medical practitioners are honest, competent, and dedicated to the highest standards of their profession.

One of the main reasons for the criticism of the medical profession is the fact that the public has become more aware of the costs of medical care. This is due to the fact that medical care has become more expensive in recent years, and the public has become more conscious of the need to control costs.

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# Endangered Species

Thursday  
September 28, 1989

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## Part III

## Department of the Interior

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### Fish and Wildlife Service

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#### 50 CFR Part 17

**Endangered and Threatened Wildlife and  
Plants; Pygmy Sculpin, Cracking Pearly  
Mussel, *Rhus Michauxii*, and Eastern and  
Western Prairie Fringed Orchids; Final  
Rules**



## DEPARTMENT OF THE INTERIOR

## Fish and Wildlife Service

## 50 CFR Part 17

RIN 1018-AB31

## Endangered and Threatened Wildlife and Plants; Pygmy Sculpin Determined To Be Threatened

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

**SUMMARY:** The Service determines the pygmy sculpin, *Cottus pygmaeus*, to be a threatened species under the authority of the Endangered Species Act of 1973, as amended (Act). This fish is known to exist in only Coldwater Spring and the spring run in Calhoun County, Alabama. Groundwater contamination and restricted population represent major threats to this small sculpin. Water sampling has revealed low levels of trichloroethylene in Coldwater Spring.

**EFFECTIVE DATE:** October 30, 1989.

**ADDRESSES:** The complete file for this rule is available for inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Jackson Mall Office Center, 300 Woodrow Wilson Avenue, Suite 316, Jackson, Mississippi 39213.

**FOR FURTHER INFORMATION CONTACT:** James Stewart at the above address, (601/965-4900 or FTS 490-4900).

## SUPPLEMENTARY INFORMATION:

## Background

The pygmy sculpin was first collected from Coldwater Spring, Calhoun County, Alabama, in 1963 and described in 1968 (Williams 1968). This species rarely exceeds 45 millimeters (1.8 inches) in total length. The head is large, body moderately robust and the lateral line is incomplete. Coloration varies by sex, maturity, and breeding condition, while pigmentation is generally consistent (Williams 1968). Pigmentation generally consists of up to three dorsal saddles and mottled or spotted fins. Juveniles have a grayish black body with three light colored saddles. With maturity, the body color becomes lighter, with the grayish black color that remains forming two dark saddles. In juveniles, the head is black, changing to white with small scattered melanophores in adults. In breeding males, the dark spots in the spinous dorsal fin enlarge and become more intense and the fin margin becomes reddish orange. The entire body becomes suffused with black pigment which almost completely conceals the underlying pattern. The

breeding color of females tends to be slightly darker than in non-breeding females.

The only known population of pygmy sculpins is in Coldwater Spring and the spring run. Coldwater Spring is impounded to form a pool of over one acre, 2 to 4 feet deep (McCaleb 1973). The spring run is up to 60 feet wide and 500 feet long to where it is joined by Dry Creek. Below this confluence, the stream is known as Coldwater Creek until it joins Choccolocco Creek. The spring flows from the brecciated zone of the Jacksonville fault in the Weisner formation (Williams 1968, McCaleb 1973, Scott *et al.*, 1987). The average flow is 32 million gallons per day with a fairly constant temperature of 16 to 18 degrees centigrade (61° to 64°F). The bottom is gravel and sand with large rocks where the spring boils occur. Large mats of vegetation are present in the spring pool and along the edges of the spring run. Water excess to needs of the Anniston Water Department flows over a low weir dam that is approximately 22 feet wide, to form the spring run. The downstream limit of the pygmy sculpin population occurs at the confluence of Dry Creek. This small stream drains the area of Anniston Army Depot and of a clay mining operation. Water quality degradation has been a long-term problem in Dry Creek. Historic records are not available to document if the pygmy sculpin occurred below the confluence of dry Creek prior to the water quality degradation.

The City of Anniston owns Coldwater Spring, the spring run, and approximately 240 surrounding acres. The spring pool serves as the primary water supply for Anniston. The average daily withdrawal by Anniston is 16.5 million gallons with an average spring flow of 31.2 million gallons (Scott *et al.* in 1987). The recharge area for Coldwater Spring is estimated at 90 square miles. This area includes portions of Anniston Army Depot, Fort McClellan, the Cities of Anniston and Jacksonville, several smaller towns, and private lands.

Previous Service actions on this species include a notice of review on March 18, 1975 (40 FR 12297); a proposal to list the pygmy sculpin and three other fishes as endangered with critical habitat on November 20, 1977 (42 FR 60765); notice of extension of the comment period and public hearing on February 6, 1978 (43 FR 4872); notice of withdrawal of critical habitat on March 6, 1979 (44 FR 12382); reproposal of critical habitat and notice of public meeting on July 27, 1979 (44 FR 44418); notice of withdrawal of proposed rule on January 24, 1980 (45 FR 5782); notices

of review on December 30, 1982 (47 FR 58454), and September 18, 1985 (50 FR 37958); and proposed rule on February 7, 1989 (54 FR 5986). The pygmy sculpin was placed in category 3C for the 1982 notice and in category 1 for the 1985 notice. Category 3C candidates are defined as taxa that have proven to be more abundant or widespread than was previously believed and/or those that are not subject to any identifiable threat. In the 1985 notice, category 1 candidates are defined as comprising taxa for which the Service currently has information on hand to support the biological appropriateness of proposing to list as endangered or threatened.

The November 1977 listing proposal was based on threats to the pygmy sculpin from restricted distribution, pollution in Coldwater Creek, the effects of aquatic vegetation control, the potential for excessive water pumping to meet future demands, and no commitment from the Anniston Water Works and Sewer Board to protect the sculpin.

Public meetings on the 1977 proposal were held in Birmingham, Alabama, on March 15, 1978, and in Anniston, Alabama, on August 28, 1979. Numerous individuals spoke at these meetings both for and against the proposal. The opposition was based upon the fear of economic impacts and loss of the spring as a water supply. Some individuals expressed doubt that the pygmy sculpin was confined to just Coldwater Spring. Former Governor Wallace opposed the proposal to list the pygmy sculpin and three other fish species based upon questions concerning the listing procedures, and the potentially adverse economic impact that he perceived would result from the listing of two species other than the pygmy sculpin. The Anniston Water Works and Sewer Board opposed the proposal because they did not believe there was sufficient data to support the listing. The Service discontinued efforts to list the species, and, on November 29, 1979, 2 years after publication in the *Federal Register*, the species had not been listed and was therefore automatically withdrawn from proposed status in accordance with provisions of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and 50 CFR part 424. The most recent proposed rule and this final rule determination is based upon new threats to the species.

## Summary of Comments and Recommendations

In the February 7, 1989, proposed rule and associated notifications, all interested parties were requested to submit factual reports or information



that might contribute to the development of a final rule. The comment period expired on April 10, 1989. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. A newspaper notice was published in the "Gadsden Times" on February 17, 1989, in "The Anniston Star" on February 19, 1989; and in the "Montgomery Advertiser/Alabama Journal" on February 25, 1989, which invited general public comment.

Comments were received from a Federal agency, a local government agency and one private organization and are discussed in the following summary. The State of Alabama provided a comment in support of the proposed listing during the Service's pre-proposal coordination but did not comment during the proposed rules comment period.

The Anniston Army Depot did not consider listing of the pygmy sculpin to be appropriate since, in their view, the species was not threatened by any activities of their installation and that, in their view, their past and present actions have enhanced the species' protection. The Service agrees that removal of toxins that could degrade water quality in the Coldwater Spring's aquifer is beneficial to this species and we support the Depot's efforts in this regard. We disagree with the Depot's position that the species is not presently threatened by their activities. Cleanup of the shallow aquifer involves the removal of large quantities of groundwater that could affect flows at Coldwater Spring. After treatment, this water is released on the surface representing a loss of flow to the spring. While the cleanup of contaminants is necessary, it is important that spring flows not be significantly impacted. Since September 1987, the Depot has been very cooperative in providing the Service information on cleanup activities, and the Service expects to continue this cooperation. The determination to list this species is based on several factors other than just those involving the Depot, as discussed below in the section titled "Summary of Factors Affecting the Species."

The City of Anniston Water Works and Sewer Board recommended the special rule allow the removal of all spring flow above 3 cubic feet per second and they provided water flow data that documents these flow levels are not adverse to the pygmy sculpin. The Service concurs and has so amended the special rule. The 6 cubic feet per second specified in the

proposed rule was based upon records of previous minimum flows that apparently were adequate for the sculpin. However, low flows measured during the recent drought indicate that sculpin survival was not affected when spring outflow was reduced to half the amount of previously recorded minimums. The change in outflow has no bearing upon sculpin survival in the impounded springhead.

The Wildlife Information Center, Inc., commented that the Service yielded to local and State political influence and that the species should be listed as endangered with critical habitat. The Service's decision to propose the threatened classification for the pygmy sculpin was based on a scientific evaluation of the threats to the species. Although the pygmy sculpin's habitat is vulnerable to degradation, threats to the species' survival do not appear to be imminent. Therefore, the Service believes that the category of threatened is biologically more accurate for this species than the category of endangered, as these terms are defined in the Endangered Species Act (Act). It should be noted that the degree of protection afforded to threatened species by section 7(a)(2) of the Act is the same that is given to endangered species.

Critical habitat was not designated for the pygmy sculpin because the Service believes that no additional benefits would accrue in this case from such a designation. Because the area occupied by the pygmy sculpin is limited, any adverse effects to its habitat from Federal activities would likely jeopardize its survival and be considered a violation of section 7(a)(2).

It should be emphasized that the listing proposal was based solely on the Service's evaluation of biological factors, as required by the Act. After the Service notified interested parties that the pygmy sculpin was under review for possible listing, the Alabama Department of Conservation and Natural Resources agreed that listing the pygmy sculpin would be appropriate, and it did not express a preference as to endangered or threatened status. On September 17, 1987, the Service also made a presentation on the merits of a listing proposal to the Commissioners of the Anniston Water and Sewer Board (Board), which owns the species' entire range. At the meeting and in a subsequent letter to Senator Howell Heflin of Alabama, the Board expressed its general agreement to listing the species. The Board made no distinction between a designation of endangered or threatened.

#### Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that the pygmy sculpin (*Cottus pygmaeus*) should be classified as a threatened species. Procedures found at section 4(a)(1) of the Endangered Species Act and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act were followed. A species may be determined to be endangered or threatened due to one or more of the five factors described in section 4(a)(1). These factors and their application to the pygmy sculpin (*Cottus pygmaeus*) are as follows:

##### A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

The pygmy sculpin is known to exist in only Coldwater Spring and the spring run. It has never been collected below the confluence of Dry Creek after water from these two streams has completely mixed. Thus, its present range is also the known historic range. However, the historic range may have extended downstream of the Dry Creek confluence prior to the occurrence of environmental pollution, as discussed in Factor E.

The pygmy sculpin and its habitat are threatened by the proposed construction of a highway bypass from Interstate Highway 20 to the City of Anniston. The Alabama Highway Department has identified three alternate routes for the proposed Anniston Bypass. The early planning preferred route is along the side of Coldwater Mountain immediately above and to the east of Coldwater Spring. The second alternate is to the west of Coldwater Spring. The third alternate is an enlargement of the existing road immediately adjacent to and west of Coldwater Spring and the spring run (Carwile *in litt.*). All three of these proposed routes pass through the recharge area for Coldwater Spring (Scott *et al.* 1987). Water in subsurface aquifers moves along fissures, faults and cracks in reaching the aquifer and in returning to the surface. The recharge area for Coldwater Spring is estimated at 90 square miles and includes Coldwater Mountain. Construction of alternate one will be along the side of Coldwater Mountain and will undoubtedly require the use of explosives in carving out the roadway. This use of explosives might result in the shifting and closing of cracks and fissures which allow water to surface at Coldwater Spring.



An additional threat posed by the completion of alternate one is the accidental spillage of toxic substances. Coldwater Mountain is so steep and the underlying rock formations of such relatively low permeability that the susceptibility for contamination from the mountain is low. However, parallel to Coldwater Mountain and in the valley, is the Jacksonville Fault. The valley has a thick residual mantle with underlying cavernous carbonate rocks over the Fault. This area is highly susceptible to contamination because sinkholes and depressions on the land surface are common in parts of this recharge area (Scott *et al.* 1987). Any accidental spill from the proposed roadway into this highly permeable area would likely result in rapid contamination of Coldwater Spring to the detriment of the pygmy sculpin. Alternates two and three are to the west of Coldwater Spring and do not pose the same magnitude of threat as alternate one. However, they are still within a portion of the recharge area and the potential for contamination by accidental spillage does exist.

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

Coldwater Spring and the spring run are owned and protected from trespassing and collecting by the Anniston Water Works and Sewer Department. As long as this protection exists, this species should not be overutilized.

#### *C. Disease or Predation*

Although the pygmy sculpin may be a prey species for larger carnivorous fish and water snakes, and may be afflicted by diseases and parasites common to fish, there is no evidence to indicate that natural mortalities from these sources are a problem at present.

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

The State of Alabama requires a scientific collector's permit if species such as the pygmy sculpin is to be collected. This species is listed as threatened by the Alabama Nongame Conference (Mount 1986) and is designated a nongame species by the State of Alabama. As a nongame species, it is unlawful to possess more than four individuals without a scientific collection permit. The difficulty of enforcing the permit requirement and the priority demands for law enforcement officers' time virtually eliminate any protection for this species. Therefore, the most effective protection is provided by a Cooperative Agreement between the Anniston Water Works and

Sewer Board and the Service that no action will be taken which would endanger the pygmy sculpin. While this good faith agreement provides protection from actions under the control of the Board, it does not provide protection from water contamination and construction projects discussed in Factors A and E, or from other factors beyond the Board's control.

#### *E. Other Natural or Manmade Factors Affecting Its Continued Existence*

Water contamination is occurring in surface water and the subsurface aquifer and is affecting both Coldwater Spring and Dry Creek. Water sampling on and adjacent to the Anniston Army Depot indicates hexavalent chromium is discharged to Dry Creek and that chlorinated hydrocarbons are in the ground water at the Depot (Schalla *et al.* 1984). Schalla *et al.* conclude that the migration of chlorinated hydrocarbon is not of immediate concern but may have long-range impacts. Trichloroethylene occurs in strong concentrations (up to 120,000 parts per billion) in test wells on the Depot and up to 3.4 parts per billion in Coldwater Spring (Environmental Science and Engineering, Inc. 1986). Sampling in 1986 did not find phenols and hexavalent chromium in Coldwater Spring, yet these chemicals may be migrating in the aquifer since they are found in test wells 2 and 4 on the Depot. Shallow ground water in the area of these wells likely contributes to the recharge of the Jacksonville fault zone (Kangas 1987). Kangas' assessment indicates that water is lost from the shallow aquifer between the Depot boundary and test well 2. This indicates that water from the Depot's shallow aquifer is sinking to a deeper aquifer and possibly surfacing at Coldwater Spring. The 90 square mile recharge area includes several potential contamination sources, including a chemical manufacturing industry, Fort McClellan, the City of Anniston, at least one landfill, and the proposed highway connecting Interstate 20 and State Highway 202.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to make this rule final. Based on this evaluation, the preferred action is to list the pygmy sculpin as threatened. The determination of threatened status for the pygmy sculpin was based on a scientific evaluation of the threats to the species. Although the pygmy sculpin's habitat is vulnerable to degradation, threats to the species' survival do not appear to be imminent. Therefore, the

Service believes that the category of threatened is biologically more accurate for this species than the category of endangered, as these terms are defined in the Endangered Species Act. Critical habitat is not designated for reasons given in that section.

#### **Critical Habitat**

Section 4(a)(3) of the Act requires, to the maximum extent prudent and determinable, that the Secretary designate critical habitat at the same time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not presently prudent for this species, owing to lack of benefit from such designation. No additional benefits would accrue from a critical habitat designation that do not already accrue from the listing. The only landowner, the City of Anniston, is aware of the pygmy sculpin's occurrence and has provided protection for several years under a Conservation Agreement with the Service. Protection of this species' habitat will be addressed through the recovery process and through the section 7 jeopardy standard. Therefore, it would not now be prudent to determine critical habitat for the pygmy sculpin.

#### **Available Conservation Measures**

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to



destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

Federal involvement with this species is expected to include the Federal Highway Administration relative to highway construction, and the Environmental Protection Agency and Department of Defense relative to pollution of the subsurface aquifer.

The Act and implementing regulation found at 50 CFR 17.21 and 17.31 set forth a series of general prohibitions and exceptions that apply to all threatened wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect; or to attempt any of these), import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving threatened wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22, 17.23, and 17.32. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connection with otherwise lawful activities. For threatened species, there are also permits for zoological exhibition, educational purposes, or special purposes consistent with the purposes of the Act.

A special rule is provided to clarify the continued use of Coldwater Spring as a municipal water supply for the City

of Anniston, Coldwater Spring and the spring run contain the only known population of this species. The withdrawal of substantial quantities of water from the spring has not adversely impacted this species, as evidenced by the continued stable population in the spring and spring run. Under the conditions of the special rule, the use of this spring by the City of Anniston is harmless to the pygmy sculpin and continues the protection provided to the species by having a continuous presence on the property.

#### National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

#### References Cited

- Environmental Science and Engineering, Inc. 1986. Off-post investigation of Anniston Army Depot summary of preliminary results. Report to U.S. Army Toxic and Hazardous Materials Agency. 35 pp and appendices.
- Kangas, M.J. 1987. Draft Anniston Army Depot endangerment assessment. Contract Report to Anniston Army Depot. 66 pp and appendix.
- McCaleb, J.E. 1973. Some aspects of the ecology and life history of the pygmy sculpin, *Cottus pygmaeus* Williams, a rare spring species of Calhoun County, Alabama (Pisces: Cottidae). Thesis to Auburn Univ. 82 pp.
- Mount, R.H. 1986. Vertebrate animals of Alabama in need of special attention. Alabama Agri. Exp. Sta. 124 pp.
- Schalla, R., G.L. McKown, J.M. Meuser, R.G. Parkhurst, C.M. Smith, F.W.

Bond, and C.J. English. 1984. Source identification, contaminant transport simulation, and remedial action analysis, Anniston Army Depot, Anniston, Alabama. Report to Anniston Army Depot. 55 pp.

Scott, J.C., W.F. Harris, and R.H. Cobb. 1987. Geohydrology and susceptibility of Coldwater Spring and Jacksonville Fault areas to surface contamination in Calhoun County, Alabama. U.S. Geological Survey, Tuscaloosa, AL. Water-resources Investigations Report 87-4031. 29 pp.

Williams, J.D. 1968. A new species of sculpin, *Cottus pygmaeus*, from a spring in the Alabama River Basin. *Copeia* 1968:334-342.

#### Author

The primary author of this rule is James H. Stewart (see "ADDRESSES" section).

#### List of Subjects in 50 CFR Part 17

Endangered and threatened species, Fish, Marine mammals, Plants (agriculture).

#### Regulations Promulgation

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

#### PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1543; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. Amend § 17.11(h) by adding the following, in alphabetical order under FISHES, to the List of Endangered and Threatened Wildlife:

#### § 17.11 Endangered and threatened wildlife.

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
FISHES							
Sculpin, pygmy	<i>Cottus pygmaeus</i>	U.S.A. (AL)	Entire	T	364	NA	17 44(u)

3. Add the following paragraph (u) as special rule to § 17.44.

#### § 17.44 Special rules—fishes.

\* \* \* \* \*

(u) Pygmy sculpin (*Cottus pygmaeus*). The City of Anniston Water Works and Sewer Board will continue to use Coldwater Spring as a municipal water

supply. Pumpage may remove all spring flow in excess of 3 cubic feet per second (1,938,000 gallons per day).



Dated: September 14, 1989.

Bruce Blanchard,

Acting Director, Fish and Wildlife Service.

[FR Doc. 89-22846 Filed 9-27-89; 8:45 am]

BILLING CODE 4310-55-M

## 50 CFR Part 17

RIN 1018-AB23

### Endangered and Threatened Wildlife and Plants; Designation of the Cracking Pearly-Mussel as an Endangered Species

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

**ACTION:** Final rule.

**SUMMARY:** The Service designates the cracking pearly mussel (*Hemistena* (= *Lastena*) *lata*) as an endangered species under the Endangered Species Act of 1973, as amended (Act). This species, which was once known from the Ohio, Cumberland, and Tennessee River systems, is presently known to survive only at a few shoals in the Clinch, Powell, and Elk Rivers, and possibly a short reach of the Tennessee and Green Rivers. The species' range has been seriously restricted by the construction of impoundments and by other impacts to its habitat. Due to the species' limited distribution, any factors that adversely modify habitat or water quality in the river reaches it now inhabits could further threaten the species.

**EFFECTIVE DATE:** October 30, 1989.

**ADDRESSES:** The complete file for this rule is available for inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service's Asheville Field Office, 100 Otis Street, Room 224, Asheville, North Carolina 28801.

**FOR FURTHER INFORMATION CONTACT:** Mr. Richard G. Biggins at the above address (704/259-0321 or FTS 672-0321).

#### SUPPLEMENTARY INFORMATION:

##### Background

The cracking pearly mussel (*Hemistena* (= *Lastena*) *lata*) was initially described by Rafinesque (1820). This freshwater mussel has a thin, medium-size, elongated shell (Bogan and Parmalee 1983). The shell's outer surface is brownish green to brown and often has broken dark green rays. The nacre (inside of shell) color is pale bluish to purple. Because of its rarity, little is known of the mussel's biology. The species inhabits moderate-size streams on gravel riffles where it is often deeply

buried in the substrate (Bogan and Parmalee 1983). Like other freshwater mussels, it feeds by filtering food particles from the water. It has a complex reproductive cycle in which the mussel larvae parasitize fish. The mussel's life span, fish species its larvae parasitize, and other aspects of its life history are unknown.

The cracking pearly mussel has undergone a substantial range reduction. It was historically distributed in the Ohio, Cumberland, and Tennessee River systems (Stansbery 1970, Kentucky Nature Preserves Commission 1980, Bogan and Parmalee 1983, Bates and Dennis 1985). The loss of populations occurring in these river systems was probably due to direct impacts of impoundments, pollution and habitat alteration, and the indirect impacts associated with the reduction or elimination of its larval host species by these same factors. Based on personal communications with knowledgeable mussel experts (Steven Ahlstedt and John Jenkinson, Tennessee Valley Authority, 1987; Arthur Bogan, Philadelphia Academy of Sciences, 1987; Richard Neves, Virginia Polytechnic Institute and State University, 1987; David Stansbery, Ohio State University, 1987) and a review of current literature on the species (see above, plus Ahlstedt 1986), the species is definitely known to survive in only three river reaches—the Clinch River, Hancock County, Tennessee, and Scott County, Virginia; the Powell River, Hancock County, Tennessee, and Lee County, Virginia; and the Elk River, Lincoln County, Tennessee.

Although the species has not been collected in the Green River since 1966, and a survey of the Green River in Hart and Edmonson Counties in 1987 failed to collect the species, there is a possibility that an isolated population may still exist in the Green River (Richard Hannan, Kentucky Nature Preserves Commission, personal communication, 1988). Another small population may also still exist in the Tennessee River below Pickwick Dam in Hardin County, Tennessee (Paul Yokley, Jr., University of North Alabama, personal communication, 1988). Live specimens have not been taken below Pickwick Dam since the 1970s, but a few relic shells have been taken in the 1980s, indicating that a small population may still be holding on in a short reach of the Tennessee River.

All of the known populations and the populations that may exist in the Green and Tennessee Rivers are threatened and are located in areas bordered primarily by private lands. The Powell River is severely threatened by the

impacts of coal mining. The Clinch River, although in much better condition, is also impacted by coal mining, and in the past has experienced extensive fish and mussel kills caused by toxic spills from a riverside power plant. The Elk River mussel fauna has been impacted by cold-water discharges from Tims Ford Reservoir, and the Green River has had a history of water quality problems from oil and gas production in the watershed. The Tennessee River below Pickwick Dam has been impacted by gravel dredging, channel maintenance work, and the upstream reservoir.

The cracking pearly mussel was recognized by the Service in the May 22, 1984, *Federal Register* (49 FR 21664) as a category 2 species that was being considered for possible addition to the Federal List of Endangered and Threatened Wildlife and Plants. Category 2 is for those species for which the Service has some information indicating that the taxa may be under threat, but sufficient information is lacking to prepare a proposed rule. The service has met and been in phone contact with various Federal and State agency personnel concerning the species' status and the need for the protection provided by the Endangered Species Act. On January 14, 1988, and May 16, 1988, the Service also notified appropriate Federal, State, and local governmental agencies by mail that a status review was being conducted and that the species might be proposed for listing. No negative comments were received.

On February 17, 1989, the Service published in the *Federal Register* (54 FR 7225) a proposal to list the cracking pearly mussel as an endangered species. That proposal provided information on the species' biology, status, and threats to its continued existence.

#### Summary of Comments and Recommendations

In the February 17, 1989, proposed rule and associated notifications, all interested parties were requested to submit factual reports and information that might contribute to development of the final rule. Appropriate Federal and State agencies, county governments, scientific organizations, and interested parties were contacted and requested to comment. A legal notice was published in the following newspapers: "Elk Valley Times," Fayetteville, Tennessee, March 1, 1989; "Kingsport Times-News," Kingsport, Tennessee, March 5, 1989; "Hart County News," Munfordville, Kentucky, March 9, 1989; and "Savannah Courier," Savannah, Tennessee, March 9, 1989.



A total of eight comments was received. Six respondents (Tennessee Valley Authority, Kentucky Department of Fish and Wildlife Resources, Kentucky Nature Preserve Commission, Ohio Department of Natural Resources, Virginia Commission of Game and Inland Fisheries, and one petition containing 96 signatures) supported the proposed rule. Two Federal agencies, the U.S. Soil Conservation Service and the Department of the Army, Corps of Engineers, indicated that the listing would not likely affect their activities.

#### Summary of Factors Affecting the Species

After a thorough review and consideration of all information, the Service has determined that the cracking pearly mussel should be classified as an endangered species. Procedures found at section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act were followed. A species may be determined to be endangered or threatened due to one or more of the five factors described in section 4(a)(1). These factors and their application to the cracking pearly mussel (*Hemistena* (= *Lastena*) *lata*) are as follows:

##### A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range.

The cracking pearly mussel was once fairly widely distributed in the Ohio River Basin. It ranged in the Ohio River from Ohio downstream to Illinois (Bogan and Parmalee 1983). In Indiana and Illinois it was historically known from the White, Wabash, and Tippecanoe Rivers (Kevin Cummings, Illinois State Natural History Survey Division, and Max Henschen, Mollusk Technical Advisory Committee, personal communications, 1988). Kentucky records (Kentucky Nature Preserves Commission 1980; Richard Hannan, personal communication, 1988) show that the species once inhabited the upper Cumberland, Big South Fork, Green, and Kentucky Rivers. The cracking pearly mussel has historically been taken in Tennessee from the Tennessee, Cumberland, Powell, Clinch, Holston, Elk, Duck, and Buffalo Rivers (Bogan and Parmalee 1983; Ahlstedt 1986; Bates and Dennis 1985). In Alabama, this mussel existed in the Tennessee River (Bogan and Parmalee 1983). Portions of the Powell, Clinch, and Holston Rivers in Virginia are also reported to have supported the species (Bogan and Parmalee 1983; Charles Sledd, Virginia Commission of Game

and Inland Fisheries, and Michael Lipford, Virginia Department of Conservation and Historic Resources, personal communications, 1988).

Based on a literature review (see above) and personal contacts with knowledgeable Federal, State, and independent biologists, the species is presently known to be surviving only in the Clinch River, Hancock County, Tennessee, and Scott County, Virginia; the Powell River, Hancock County, Tennessee, and Lee County, Virginia; and the Elk River, Lincoln County, Tennessee. The species may also still survive in the Green River, Hart and Edmonson Counties, Kentucky (Richard Hannan, personal communication, 1988), and in a short reach of the Tennessee River below Pickwick Dam, Hardin County, Tennessee (Paul Yokley, Jr., personal communication, 1988).

The Powell River's population was sampled in 1979 by the Tennessee Valley Authority (Ahlstedt 1986). They surveyed 78 sites over about 97 river miles and found the cracking pearly mussel at only three sites. The Powell River watershed is mined extensively for coal, and coal mining impacts to the river are evident. The upper reaches of the Powell River are significantly impacted. The lower river reaches, which still contain a relatively diverse mussel fauna, have large deposits of coal fines and silt (Ahlstedt 1986). In 1973 the section of the Powell River inhabited by the cracking pearly mussel experienced a mussel kill that may have resulted in a loss of 5 percent of the mussel population (Ahlstedt and Jenkinson 1987).

The Clinch River population of the cracking pearly mussel is the largest and covers the greatest river length. Ahlstedt (1986) reported the species from 16 of the 141 sites sampled in a 1978-83 Tennessee Valley Authority survey that covered about 174 river miles. Although this river and its mussel fauna are apparently healthier than the Powell, the Clinch River has been adversely affected by pollution. Charles Sledd (personal communication, 1988) stated that land use practices along the Clinch have contributed to the loss of water quality and decline in mussel populations. The Clinch River also experiences some impacts from coal mining, and the river has been subjected to two mussel kills that resulted from toxic substance spills from a riverside coal-fired power plant.

The cracking pearly mussel was taken at only 2 of 108 sites over the 172 miles of the Elk River surveyed in 1980 by the Tennessee Valley Authority (Ahlstedt 1986). The river, according to Ahlstedt

(1986), has a considerable amount of suitable habitat for freshwater mussels, and a large number of relic shells was present. However, Ahlstedt (1986) reported that cold-water releases from Tims Ford Reservoir and pollution from an unknown source in the lower Elk River have impacted the mussel fauna, and mussel density has been reduced.

The cracking pearly mussel has not been taken since 1966 from the Green River, and a 1987 mussel survey did not find the species (Ronald Cicerello, Kentucky Nature Preserves Commission, personal communication, 1988). However, suitable habitat appears to be available in the Green River, and an isolated population may still exist there (Richard Hannan, personal communication, 1988). In the Tennessee River, live specimens were taken in the 1970s below Pickwick Dam, but only relic shells have been taken in recent years. According to personal communication with Dr. Paul Yokley, Jr., (1988), this species, which apparently existed only in small numbers in this river reach, could possibly still survive there.

If populations still persist in the Tennessee River below Pickwick Dam in Tennessee and the Green River in Kentucky, these populations are at risk. The Green River's mussel fauna has been seriously depleted. Ortmann (1926) reported finding 66 species of mussels in the Green River. Isom (1974) reported only 27 species present. The Green River has been degraded by oil and gas exploration and production and by alterations of stream flow from an upstream reservoir. Any population below Pickwick Dam in the Tennessee River is potentially threatened by gravel dredging, channel maintenance, and operation of Pickwick Dam. This river reach also experienced a mussel die-off in 1985 and 1986 (Ahlstedt and Jenkinson 1987).

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

This freshwater mussel species is not commercially valuable, but because of its rarity it could be sought by collectors. Thus, because of the species' restricted range, taking could be a threat to its continued existence. Federal listing would help control any indiscriminate taking of individuals.

##### C. Disease or Predation

Although the cracking pearly mussel is undoubtedly consumed by predatory animals, there is no evidence that predation threatens the species. However, freshwater mussel die-offs,



possibly due to disease, have been reported in recent years throughout the Mississippi River basin, including the Tennessee River and its tributaries (Ahlstedt and Jenkinson 1987). Significant losses have occurred to some populations.

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

The States of Kentucky, Tennessee, and Virginia prohibit taking fish and wildlife, including freshwater mussels, for scientific purposes without a State collecting permit. However, these States' laws do not protect the species' habitat from the potential impacts of Federal actions. Federal listing would provide the species additional protection under the Endangered Species Act by requiring a Federal permit to take the species and by requiring Federal agencies to consult with the Service when projects they fund, authorize, or carry out may adversely affect the species.

#### *E. Other Natural or Manmade Factors Affecting Its Continued Existence*

The Powell River and Elk River populations are small, and if the species continues to exist in the Green River and Tennessee River, these populations must also be very limited. All the populations are geographically isolated from each other. This isolation restricts the natural interchange of genetic material between the populations, and the small population size reduces the reservoir of genetic variability within the populations. It is likely these populations, with the possible exception of the Clinch River, are now below the generally accepted level (Soulé 1980) required to maintain long-term genetic viability.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to make this rule final. Based on this evaluation, the preferred action is to list the cracking pearly mussel (*Hemistena* (= *Lastena*) *lata*) as an endangered species. Historical records reveal that the species, although now rare, was once widely distributed in the Ohio River drainage. Presently only three small, isolated populations, and possibly two others, are known to survive. These populations are all threatened by a variety of factors, including gravel dredging, coal mining, oil and gas resource development, and other factors that adversely impact the aquatic environment. Due to the species' history of population losses and the vulnerable nature of the populations, threatened status does not appear appropriate for

this species. See the following section for a discussion of why critical habitat is not being proposed for the cracking pearly mussel.

#### **Critical Habitat**

Section 4(a)(3) of the Act requires, to the maximum extent prudent and determinable, that the Secretary designate critical habitat at the time a species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not presently prudent for the cracking pearly mussel, owing to the lack of benefits from such designation. The U.S. Army Corps of Engineers, the Tennessee Valley Authority, and the National Park Service are the three Federal agencies most involved, and they, along with the State natural resources agencies in Tennessee, Kentucky, and Virginia, are already aware of the location of the remaining populations that would be affected by any activities in these river reaches. These Federal agencies have conducted studies in these river basins and are knowledgeable of the fauna and of their projects' impacts.

No additional benefits would accrue from critical habitat designation that would not also accrue from the listing of the species. In addition, this species is so rare that taking for scientific purposes or private collections could be a threat. The publication of critical habitat maps and other information accompanying critical habitat designation, such as the location of inhabited river reaches, could increase that threat. The location of populations of this species has consequently been described only in general terms in this proposed rule. More precise locality data is available to appropriate Federal, State, and local governmental agencies through the Service office described in the "ADDRESSES" section.

#### **Available Conservation Measures**

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibition against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. The Service has notified Federal agencies which may have programs that affect the species. Federal activities that could occur and impact the species include, but are not limited to, the carrying out or the issuance of permits for hydroelectric facility construction and operation, reservoir construction, river channel maintenance, stream alteration, wastewater facilities development, and road and bridge construction. It has been the experience of the Service, however, that nearly all section 7 consultations have been resolved so that the species has been protected and the project objectives have been met. In fact, the areas inhabited by the cracking pearly mussel are also inhabited by other mussels that have been federally listed since 1976. The Service has a history of successful section 7 conflict resolutions that have protected the species and provided for project objectives being met throughout these areas.

The Act and implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions would apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes to enhance the



propagation or survival of the species and/or for incidental take in connection with otherwise lawful activities.

#### National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the Federal Register on October 25, 1983 (48 FR 49244).

#### References Cited

- Ahlstedt, S.A. 1986. Cumberland Mollusk Conservation Program. Activity 1: Mussel Distribution Surveys. Tennessee Valley Authority, Norris, Tennessee. January 1986. 125 pp.
- Ahlstedt, S.A., and J.J. Jenkinson. 1987. A Mussel Die-off in the Powell River, Virginia and Tennessee, in 1983. In: Proceedings of the Workshop on Die-offs of Freshwater Mussels in the United States. June 23-25, 1986. Davenport, Iowa. Richard Neves, Editor. Pp. 21-28.
- Bates, J.M., and S.D. Dennis. 1985. Mussel Resource Survey—State of Tennessee.

- Tennessee Wildlife Resources Agency Technical Report No. 85-3. P. 125.
- Bogan, A.E., and P.W. Parmalee. 1983. Tennessee's Rare Wildlife, Volume II: The Mollusks. 123 pp.
- Isom, Billy G. 1974. Mussels of the Green River, Kentucky. Trans. Kentucky Acad. Sci., 35(1-2):55-57.
- Kentucky Nature Preserves Commission. 1980. Kentucky Natural Area Plan—Appendix A. (*Hemistena* (= *Lastena*) *lata*) (Rafinesque).
- Ortmann, Arnold E. 1926. The Naiades of the Green River Drainage in Kentucky. Annals Carnegie Mus., 17:167-188.
- Rafinesque, Constantine S. 1820. Monographie des Coquilles Bivalves Fluviales de la Riviere Ohio, Contenant Douze Genres et Soixante-huit Espèces. Ann. Gen. des Sci. Physiq. Brux., 5:287-322.
- Soulé, M.E. 1980. Threshold for Survival: Maintaining Fitness and Evolutionary Potential. Pages 151-169 In: M.E. Soulé and B.A. Wilcox (eds.), Conservation Biology. Sinauer Assoc., Inc., Sunderland, Massachusetts.
- Stansberry, David H. 1970. Eastern Freshwater Mollusks (I) The Mississippi and St. Lawrence River Systems. Malacologia, 10(1):9-22.

#### Author

The primary author of this proposed rule is Richard G. Biggins, U.S. Fish and

Wildlife Service, Asheville Field Office, 100 Otis Street, Room 224, Asheville, North Carolina 28801 (704/259-0321 or FTS 672-0321).

#### List of Subjects in 50 CFR Part 17

Endangered and threatened species, Fish, Marine mammals, Plants (agriculture).

#### Regulation Promulgation

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

#### PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1543; 16 U.S.C. 4201-4245; Pub. L. 99-625, 190 Stat. 3500; unless otherwise noted.

2. Amend § 17.11(h) by adding the following, in alphabetical order under CLAMS, to the List of Endangered and Threatened Wildlife:

#### § 17.11 Endangered and threatened wildlife.

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
CLAMS							
Pearly mussel, cracking.....	<i>Hemistena</i> (= <i>Lastena</i> ) <i>lata</i> ....	U.S.A. (AL, IL, IN, KY, OH, TN, and VA).....	NA	E	365	NA	NA

Dated: September 13, 1989.  
Richard N. Smith,  
Acting Director, Fish and Wildlife Service.  
[FR Doc. 89-22847 Filed 9-27-89; 8:45 am]  
BILLING CODE 4310-55-M

#### 50 CFR Part 17

RIN 1018-AB 23

#### Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Rhus Michauxii* (Michaux's Sumac)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines *Rhus michauxii* (Michaux's sumac), a dioecious shrub limited to 16 populations in North Carolina and

Georgia, to be an endangered species under the authority of the Endangered Species Act of 1973, as amended (Act). *Rhus michauxii* is endangered by suppression of fire, conversion of habitat for silviculture and agriculture, industrial and residential development, highway construction and improvements, hybridization with other species, and geographic isolation of small, single-sex populations. This action implements Federal protection provided by the Act for *Rhus michauxii*.

EFFECTIVE DATE: October 30, 1989.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, 100 Otis Street, Room 224, Asheville, North Carolina 28801.

FOR FURTHER INFORMATION CONTACT: Ms. Nora Murdock, at the above address (704/259-0321 or FTS 672-0321).

#### SUPPLEMENTARY INFORMATION:

##### Background

*Rhus michauxii*, described by C. S. Sargent (1895) from material collected in North Carolina, is a rhizomatous shrub. It is sometimes called "false poison sumac" because of its superficial resemblance of *Rhus vernix*. The erect stems grow from 0.2 to 0.4 meter in height, and the entire plant is densely pubescent. The narrowly winged or wingless rachis supports 9 to 13 sessile, oblong to oblong-lanceolate leaflets that are each 4 to 9 centimeters long, 2 to 5 centimeters wide, and acute to acuminate. The bases of the leaflets are rounded, and their edges are simply or doubly serrate. Flowering in this dioecious species occurs in June. The small flowers are borne in a terminal, erect, dense cluster, with each one being four- to five-parted and greenish-yellow to white. The fruit, which is a red,