

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Endangered Species Bulletins and Technical
Reports (USFWS)

US Fish & Wildlife Service

6-20-1991

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Winged Mapleleaf Freshwater Mussel

Follow this and additional works at: <http://digitalcommons.unl.edu/endangeredspeciesbull>



Part of the [Biodiversity Commons](#)

"Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Winged Mapleleaf Freshwater Mussel" (1991). *Endangered Species Bulletins and Technical Reports (USFWS)*. 42.

<http://digitalcommons.unl.edu/endangeredspeciesbull/42>

This Article is brought to you for free and open access by the US Fish & Wildlife Service at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Endangered Species Bulletins and Technical Reports (USFWS) by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

below. Elevations at selected locations in each community are shown. Any appeals of the proposed base flood elevations which were received have been resolved by the Agency.

Source of flooding and location	#Depth in feet above ground. Elevation in feet (NGVD)
ARIZONA	
Phoenix (city), Maricopa County (FEMA Docket No. 7006)	
<i>Agua Fria River:</i>	
Shallow flooding along west bank of Agua Fria River immediately upstream of Indian School Road.....	*1,008
At Thomas Road.....	*989
Approximately 530 feet upstream of Indian School Road.....	*1,010
At Camelback Road.....	*1,024
Approximately 200 feet upstream of the confluence with the New River.....	*1,033
Approximately 0.5 mile upstream of confluence with the New River.....	*1,039
<i>Cave Creek Wash (Below Grand Canal):</i>	
Just upstream of 51st Avenue.....	*1,014
Just downstream of 35th Avenue.....	*1,041
At Van Buren Street.....	*1,073
Just upstream of Thomas Road.....	*1,095
Just downstream of Grand Canal.....	*1,120
<i>Cave Creek Wash (Shallow Flooding Areas)</i>	
Approximately 500 feet upstream of the intersection of 19th Avenue and Earl Drive.....	*1,102
At 23rd Avenue, just downstream of Grand Canal.....	*1,117
<i>Cave Creek Wash (Shallow Flooding Along 21st Avenue):</i>	
Approximately 200 feet downstream of Grand Canal.....	*1,118
At Turney Avenue.....	*1,120
At Missouri Avenue.....	*1,142
<i>Cave Creek Wash (Shallow Flooding Along 19th Avenue):</i>	
At Roma Avenue.....	*1,120
At Lawrence Road.....	*1,171
Approximately 700 feet downstream of North-ern Avenue.....	*1,182
<i>Cave Creek Wash (Shallow Flooding Along 15th Avenue):</i>	
At Grand Canal.....	*1,120
At Hazelwood Street.....	*1,125
Approximately 350 feet upstream of Montebello Avenue.....	*1,146
<i>Cave Creek Wash (Shallow Flooding Along 17th Avenue):</i>	
At Bethany Home Road.....	*1,151
Approximately 500 feet downstream of Maryland Avenue.....	*1,160
Approximately 500 feet downstream of Glendale Avenue.....	*1,169
<i>Cave Creek Wash (shallow flooding along 11th Avenue):</i>	
At Highland Avenue.....	*1,126
At Missouri Avenue.....	*1,140
Approximately 100 feet upstream of Montebello Avenue.....	*1,146
<i>Cave Creek Wash (shallow flooding along 7th Avenue):</i>	
At Highland Avenue.....	*1,125
At Georgia Avenue.....	*1,137
Approximately 500 feet downstream of Lawrence Road.....	*1,169
Maps are available for review at the City Hall, 251 West Washington Street, Phoenix, Arizona.	
WEST VIRGINIA	
Alderson (town), Greenbrier and Monroe Counties (FEMA Docket No. 6987)	
<i>Greenbrier River:</i>	
Downstream corporate limits.....	*1,549
Approximately 330 feet upstream of upstream corporate limits.....	*1,553

Source of flooding and location	#Depth in feet above ground. Elevation in feet (NGVD)
Maps available for inspection at the City Building, 202 South Monroe Street, Alderson, West Virginia.	

Issued: June 11, 1991.
C. M. "Bud" Schauerte,
Administrator, Federal Insurance Administration.
 [FR Doc. 91-14444 Filed 6-19-91; 8:45 am]
BILLING CODE 6718-03-M

DEPARTMENT OF DEFENSE
48 CFR Parts 243, 249, and 252
Department of Defense Federal Acquisition Regulation Supplement; Contract Modifications and Termination of Contracts; Correction
AGENCY: Department of Defense (DOD).
ACTION: Interim rule with request for comments; correction.

SUMMARY: The Defense Acquisition Regulations (DAR) Council has issued an interim DFARS rule to implement section 4201 of the Fiscal Year 1991 DoD Authorization Act (Pub. L. 101-510) which requires the Secretary of Defense to notify the Secretary of Labor if a modification or termination of a major defense contract or subcontract will have a substantial impact on employment. This is a correction to the interim rule, published on May 28, 1991, (58 FR 24030), to provide the effective date of the interim rule.

DATES: *Effective Date:* May 14, 1991.
Comment Date: Comments on the interim rule should be submitted in writing at the address shown below on or before June 28, 1991, to be considered in the formulation of the final rule. Please cite DAR Case 90-339 in all correspondence.

ADDRESSES: Interested parties should submit written comments to: Defense Acquisition Regulations Council, ATTN: Mr. Eric Mens, Procurement Analyst, DAR Council, OUSD(A)DP(DARS), room 3D139, The Pentagon, Washington, DC 20301-3000. Telefax Number (703) 697-9845.

FOR FURTHER INFORMATION CONTACT: Mr. Eric Mens, Procurement Analyst,

DAR Council, (703) 697-7286.
Nancy L. Ladd,
Colonel, USAF, Director, Defense Acquisition Regulations Council.
 [FR Doc. 91-14744 Filed 6-19-91; 8:45 am]
BILLING CODE 3810-01-M

DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
50 CFR Part 17
RIN 1018-AB42

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Winged Mapleleaf Freshwater Mussel
AGENCY: Fish and Wildlife Service, Interior.
ACTION: Final rule.

SUMMARY: The Fish and Wildlife Service (Service) determines the winged mapleleaf mussel (*Quadrula fragosa*) to be an endangered species under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act). Historically, this freshwater mussel occurred extensively in the Mississippi, Tennessee, Ohio and Cumberland River drainages in the states of Ohio, Indiana, Missouri, Tennessee, Nebraska, Iowa, Illinois, Wisconsin, Oklahoma and Kentucky. As a result of land use changes, river alterations and pollution, the winged mapleleaf mussel has been reduced to a single known population located in the St. Croix River between northwestern Wisconsin and east/central Minnesota. Critical habitat is not being proposed.
EFFECTIVE DATE: July 22, 1991.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Fish and Wildlife Service Regional Office, Federal Building, Ft. Snelling, Twin Cities, Minnesota 55111.

FOR FURTHER INFORMATION CONTACT: Mr. Bill Harrison, Chief, Division of Endangered Species at the above address (612/725-3276 or FTS 725-3276).
SUPPLEMENTARY INFORMATION:

Background
 The earliest record of the winged mapleleaf mussel (*Quadrula fragosa*) dates from 1835 when Conrad described this North American freshwater mussel from the Scioto River, Ohio. He described this species as similar to the mapleleaf mussel (*Quadrula quadrula*),

but "much more ventricose" having more prominent tubercles and being very distinct. Occurrence records of the winged mapleleaf were not infrequently reported until about 1920. From the 1920's to the present, few occurrences were reported and some experts considered it extinct. These few post-1920 occurrence records include the collection of three specimens from Wayland, Missouri (Ohio State Museum of Zoology collection), possibly as late as 1968 and a small population on the St. Croix River between Minnesota and Wisconsin discovered in 1987 (Marion Havlik, Malacological Consultants, *in litt.*, 1990).

There is a disagreement about whether the winged mapleleaf mussel, *Quadrula fragosa*, is a distinct species or a subspecies of *Quadrula quadrula*. *Quadrula fragosa* was synonymized as a variant of *Q. quadrula* by Neel (1941) based on morphological intergrades. Since Neel's study Burch (1975), Johnson (1980), and Oesch (1990) have recognized the synonymy. Recently, David Stansbery (Ohio State University, *in litt.*, 1991) has refuted Neel based on his own research of morphological characteristics, stating, "An examination of material of these two species in all or nearly all of our major museums over the years has failed to turn up any intergrading forms between the two. This total lack of intergrades indicates that they are distinct species rather than subspecies or environmental forms as was previously believed by myself and others * * * Stansbery also said that there may be a second population or sibling species of *Q. fragosa* on the Kiamichi River in Oklahoma. The Service recognizes the need for further taxonomic and distributional research, but does not intend to allow the St. Croix River population to go extinct while the uncertainties are resolved.

The winged mapleleaf can be distinguished from *Q. quadrula* using several characteristics. The shell is more inflated and more quadrate in outline. The shell's beaks are more elevated and turned forward over the lunule (Baker 1928). The winged mapleleaf is more alate and has ridges on the alae while the mapleleaf often has distinct pustules (Stansbery, pers. comm.). Young in the genus *Quadrula* are almost indistinguishable (Neel 1941).

Little is known about the ecology and habits of the winged mapleleaf, presumably because of its historic rarity and early population reductions. Baker (1928) reported it occupied larger rivers on a mud bottom in water two meters or more in depth. Ortmann (1925) indicated

it may prefer gravel bars. Recent observation on the extant population indicated that it exists in the riffle areas of the St. Croix and is absent from muddy microhabitat (David Heath, Wisconsin Department of Natural Resources, *in litt.*, 1989).

Few historical records exist that report population demographics or brooding period of the winged mapleleaf. Recent attempts have been made to determine when the winged mapleleaf broods young. No individuals have been observed brooding young. In addition, in a sample of 41 specimens, none were collected that were younger than four years of age (Heath and Rasmussen 1990). In fact, a survey by the Wisconsin Department of Natural Resources conducted in 1988 suggests that the St. Croix population has not reproduced since 1983. Population density at the only known location was one individual per 52 square meters and constituted less than 0.02% of the mussel community.

A fairly rich mussel assemblage of 32 species inhabit the extant winged mapleleaf site on the St. Croix River. Most associates are fairly common species in the upper Mississippi River system, but several species are considered rare. These rare species, which are characteristic of well-preserved streams, include the Federal Category 2 spectacle case (*Cumberlandia monodonta*), salamander mussel (*Simpsonaias ambigua*), and the Federally endangered Higgins' eye (*Lampsilis higginsii*). Other rare species that co-occur include the snuffbox (*Epioblasma triquetra*), purple wartyback (*Cyclonaias tuberculata*), and buckhorn (*Tritoginia verrucosa*).

The historic geographic range of the winged mapleleaf is fairly well-documented. It occurred in at least ten states; Ohio, Indiana, Missouri, Tennessee, Nebraska, Iowa, Illinois, Wisconsin, Oklahoma, and Kentucky. Disregarding the single known extant population, nearly all collections were made prior to 1925.

Simpson (1900, 1914) and La Rocque (1967) reported the winged mapleleaf from the Ohio, Cumberland, and Tennessee River systems west probably to Minnesota and Nebraska. It was reported from the Ohio River by the Commonwealth of Kentucky Department of Fish and Wildlife Resources (1989), Sterki (1907), Coker (1921), Call (1896, 1900), Simpson (1900, 1914), La Rocque (1967), Stansbery (1985, 1989), and vouchered in the United States National Museum (USNM) collection. Ohio River tributaries where the winged mapleleaf was reported

include the Scioto River (Conrad 1835, the Ohio State University Museum of Zoology (OSUMZ) collection), the Licking River (Commonwealth of Kentucky State Natural Preserves Commission 1989, Commonwealth of Kentucky Department of Fish and Wildlife Resources 1989), Racoon Creek (OSUMZ collection, Watters 1988), the Wabash River (Call 1896, OSUMZ collection, USMN collection, La Rocque 1967) and the White River (Call 1896, Academy of Natural Sciences of Philadelphia (ANSP) collection).

Within the Tennessee River System, collections have been reported from the Tennessee River (Ortmann 1925, Starnes and Bogan 1988), the Cumberland River (Wilson and Clarke 1914, Danglade 1914, Starnes and Bogan 1988, Commonwealth of Kentucky State Natural Preserves Commission 1989, Commonwealth of Kentucky Department of Fish and Wildlife Resources 1989), the Harpeth River (Starnes and Bogan 1988), and from the Duck River (Ortmann 1925, Starnes and Bogan 1988).

In the upper Mississippi River system, it has been reported from the Mississippi River (Utterback 1915-1916, Stansbery 1989, Frest 1987, Grier and Mueller 1922-1923, Shimek 1888, 1921, Field Museum of Natural History (FMNH) collection, OSUMZ collection, Illinois Natural History Survey (INHS) collection, USNM collection, Keys 1889, Havlik and Stansbery 1977, Havlik and Marking 1980, Heath 1981-1985, Bell Museum of Natural History (BMNH) collection). Upper Mississippi River tributaries containing winged mapleleaf included the Cedar River (Frest 1987, Shimek 1888, FMNG collection, OSUMZ collection, USMN collection); the Des Moines River (Keyes 1889); the Racoon River; the Iowa River (Keyes 1889); the Illinois, Kaskaskia and Spoon Rivers, (Grier and Mueller 1922-1923, Baker 1906; FMNH collection, ANSP collection, Starrett 1971, and Strode 1891, 1892); and the Sangamon River (OSUMZ collection, ANSP collection, University of Michigan Museum of Zoology (UMMZ) collection, INHS collection). Additional upper Mississippi River drainage locales where the winged mapleleaf have been recorded include the Wisconsin and Baraboo Rivers (Baker 1928, Morrison 1929, Heath 1986b; FMNH collection, BMNH collection, OSUMZ collection), the Minnesota River (Havlik 1990, OSUMZ collection, BMNH collection), and the St. Croix River (Heath 1985, University of Illinois Museum of Natural History (UIMNH) collection).

In Oklahoma, the winged mapleleaf occurred in the Boggy, Little, and

Neosho Rivers (Isley 1925). There may be an existing population or sibling species of *O. fragosa* in the Kiamichi River (Stansbery, *in litt.*, 1991). In Nebraska the mussel occurred in the Bow and Blue Rivers (Aughey 1877). Missouri records were from the Osage, Fox, and 102 (at St. Joseph) Rivers (Utterback 1915–1916, OSUMZ collection).

The winged mapleleaf freshwater mussel was included as a Category 2 species in the 1984 notice of review (49 FR 21664–21675). Category 2 species are those for which the Service does not have conclusive data on biological vulnerability and threat to the degree that support a proposed rule. In the 1989 notice of review (54 FR 554–579) the mussel was changed to a Category 3C species, which indicated that it was more abundant and/or widespread than previously thought, and that threats were not substantial. However, the Service was advised that this designation might be in error. Subsequently, all states with historic records were again contacted. As a result of that correspondence and information gained through recent surveys, the Service determined that the species was in need of protection. The most recent surveys and biological data as to distribution and threats were incorporated into the proposed rule to determine endangered status for the winged mapleleaf freshwater mussel issued in the Federal Register of August 6, 1990 (55 FR 31864–31867).

Summary of Comments and Recommendations

In the August 6, 1990 proposed rule, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. A notice inviting public comment was published in the St. Paul Pioneer Press, August 28, 1990.

Eight comments were received: five of these were letters of support for listing the winged mapleleaf mussel as endangered (Minnesota Department of Natural Resources, National Park Service, Wisconsin Department of Natural Resources, Dr. David Stansbery of the Museum of Zoology, Ohio State University, and Fish and Wildlife Service, Region 4); one letter, from Dr. Richard Johnson, Harvard University, questioned the taxonomic decision to treat *Q. fragosa* as a species. The Kansas Biological Survey observed that the mussel did not occur in Kansas as

originally stated in the proposed rule. One letter, from Northern States Power Company, was in opposition to the proposed listing.

Northern States Power Company questioned the validity of listing this species based on present evidence. They believed that the taxonomic status of the species should be confirmed before listing. They suggested the flow regime at the power plant on the St. Croix River actually might be beneficial to the population since the regime hadn't changed in 84 years.

The Service considered these comments and criticisms and rewrote the final rule to address them. The Service recognizes that the taxonomic question needs further study, and that there is a need for more research on the distribution and ecology of the species. The Service decided to proceed with listing in view of the evidence of morphological distinctiveness and the potential threat to the St. Croix River population of *Quadrula fragosa*.

Summary of Factors Affecting the Species

After a thorough review and consideration of all available information, the Service has determined that the winged mapleleaf mussel, *Quadrula fragosa*, should be classified as an endangered species. 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 provision of the Act set forth the procedures for adding species to the Federal lists. A species may be determined to be endangered or threatened according to one or more of the five factors described in section 4(a)(1). These factors and their application to the winged mapleleaf are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Historically, the winged mapleleaf mussel was known from eleven states and three major drainage systems in North America. This species has been eliminated from 99% of its historical range. Habitat modification including land use changes, river channel modifications, and pollution are the primary factors threatening the continued existence of the winged mapleleaf. The species was usually found in well-preserved large to medium-sized clear-water streams in riffles or on gravel bars. These areas have been lost due to the development of impoundments, channelization, soil erosion, and sediment accumulation originating from land use practices.

Additional threats to the small, remaining population include expanded

agriculture or modified land use practices in the watershed, toxic substance spills, point discharges of harmful chemicals, low water levels, and large recreational boat traffic. The small size of the population makes it particularly vulnerable to single catastrophic events and genetic deterioration. These factors may affect the host fish (presently unknown) which is necessary for the reproduction of the winged mapleleaf in addition to affecting the remaining mussel population.

Minnesota and Wisconsin Departments of Natural Resources agree that the peaking operation of Northern States Power Company power plant located upstream from the mussel bed is posing a possible threat to the mussel population. The normal winter operation of Northern States Power Company is a twice daily peaking mode (once a day during droughts) with only 800 cfs being discharged between peaking operations. It appears that this is not enough water to cover the beds at night so the clams are exposed to freezing, abrasion, and predation. In fact, in 1989, the peaking operation completely exposed the beds during the night. In 1991, the Wisconsin Department of Natural Resources surveyed the bed and found that a layer of ice 13 inches deep was laid directly on the gravel of the bed with each lowering of flow (Miller, *in litt.*, 1991). The ice layer adhered to and abraded the bottom exposing the mussels. The Minnesota Department of Natural Resources conducted a wetted perimeter study for this portion of the river and found that the dam must release 1980 cfs to adequately protect the mussel beds (Nargang, *in litt.*, 1991). Given the direct exposure that the mussel bed is currently experiencing, the Service believes that there is an immediate danger to the only known population of *Q. fragosa*. The Service will cooperate with Northern States Power Company, the Minnesota and Wisconsin Departments of Natural Resources, and the National Park Service to study the affect of "peaking" on the population.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Collection of the winged mapleleaf for these purposes is believed to have been a minor factor in its decline. It was harvested during the early 1900's for the pearl button industry in the United States (Coker 1921). At present the population is partially protected from harvest by Wisconsin harvesting laws and by a National Park Service Superintendent Determination (March 5, 1990) for the St. Croix

National Scenic Riverway. Some recreational collecting may occur.

C. *Disease or predation.* No disease or predation has been recorded for the winged mapleleaf.

D. *The inadequacy of existing regulatory mechanisms.* The winged mapleleaf is presently protected by Wisconsin and by a Superintendent Determination (March 5, 1990) of the National Park Service (NPS) for the St. Croix National Scenic Riverway. The Act offers possibilities for additional protection through Section 6 by cooperation between States and the Service, and cooperation through section 7 (interagency cooperation) requirements, in particular with the NPS St. Croix National Scenic Riverway.

E. *Other natural or manmade factors affecting its continued existence.* The single remaining population is small, located on less than five miles of the St. Croix River and is immediately threatened by lack of any reproduction. During surveys in 1988 and 1989, Heath and Rasmussen (1990) were unable to locate individuals less than four years of age although members of related species in the genus *Quadrula* were collected that were less than four years of age. In addition, they were unable to locate any winged mapleleaf individuals brooding young. Lack of young individuals and brooding females could be a natural cyclic phenomenon, an artifact of sampling, or an abrupt cessation of reproduction, but other mussels at the location did not evidence reproductive problems. If recent observations reflect trends in the population, the continued existence of the species is in serious doubt.

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 propose this rule. Based on this evaluation, the preferred action is to list the winged mapleleaf as an endangered species. Due to the threats and vulnerability of the single remaining population, it is believed that the species will continue to decline unless immediate corrective actions are taken. For reasons detailed below, it is not considered prudent to propose designation of critical habitat.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the Secretary propose critical habitat at the time the species is proposed to be endangered or threatened. The Service finds that designation of critical habitat is not presently prudent for the winged mapleleaf freshwater mussel. This

determination is based on the premise that such designation would not be beneficial to the species (50 CFR 424.12), and little additional benefit would be gained, since the single extant location is presently receiving protection from the NPS and the State of Wisconsin. Critical habitat designation would not provide additional protection over that afforded through the normal section 7 consultation procedures. The NPS and the States of Minnesota and Wisconsin are cognizant of the location of this population of winged mapleleaf and of the importance of protecting its habitat.

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)(4) requires agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, 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 such a 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 NPS administers the portion of the St. Croix River where the winged mapleleaf is found. The Service has not identified any ongoing or proposed NPS projects that could affect this species.

The Act and its 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 (including 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 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.

The Act and 50 CFR 17.22 and 17.23 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered species under certain circumstances. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connections with otherwise lawful activities. In some instances, permits may be issued for a specified time to relieve undue economic hardship that would be suffered if such relief were not available.

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

A complete list of all references cited herein, as well as others, is available upon request from (see ADDRESSES above).

Author

The primary author of this final rule is Jan L. Eldridge (see ADDRESSES section). Mr. David J. Heath, Wisconsin Department of Natural Resources, Rhinelander, Wisconsin 54501 (715) 362-7616, provided substantial information.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

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; Public Law 99-625, 100 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							
Mussel, winged mapleleaf.....	<i>Quadrula fragosa</i>	U.S.A. (WI, IL, MN, MO, OH, NA, NE, TN, KY, IN, IA, OK).		E.....		NA.....	NA.

Dated: June 11, 1991.
Bruce Blanchard,
Acting Director, Fish and Wildlife Service.
 [FR Doc. 91-14655 Filed 6-19-91; 8:45 am]
 BILLING CODE 4310-55-M

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

50 CFR Part 630
 [Docket No. 910640-1140]

Atlantic Swordfish Fishery

AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce.
ACTION: Emergency rule; corrections.
SUMMARY: NMFS corrects errors in the emergency rule governing the Atlantic

swordfish fishery published June 12, 1991 (56 FR 26934).
EFFECTIVE DATES: June 12, 1991 through December 9, 1991.
FOR FURTHER INFORMATION CONTACT: Richard B. Stone, NMFS (F/CM3), 301-427-2347.

SUPPLEMENTARY INFORMATION: In rule document 91-13924 beginning on page 26934 in the issue of Wednesday, June 12, 1991, make the following corrections:

1. On page 26934, in the first column, under the "SUMMARY" heading in the tenth line after "carcass length" insert "or 41 pounds (18.6 kilograms) dressed carcass weight".
2. On page 26935, in the third column, under the "Minimum Size Limit" subheading in the second line after "carcass length" insert "or 41 pounds (18.6 kilograms) dressed carcass weight".

3. On page 26936, in the first column, under the "Minimum Size Limit" subheading in the fortieth line after "carcass length" insert "or 41 pounds (18.6 kilograms) dressed carcass weight".
4. On page 26936, in the third column, under the "Annual Quota" subheading in the 42nd line after "closure is" insert "at least".

§ 630.26 [Corrected]

5. On page 26938, in the third column, in § 630.26 (a), *Minimum Size*, in the eleventh line after "(CK measurement)" insert ", or 41 pounds (18.6 kilograms) dressed carcass weight".

Dated: June 14, 1991.
Samuel W. McKeen,
Acting Assistant Administrator for Fisheries National Marine Fisheries Service.
 [FR Doc. 91-14664 Filed 6-19-91; 8:45 am]
 BILLING CODE 3510-22-M