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Endangered and Threatened Wildlife and Plants; Proposed Rule To Determine the Pallid Sturgeon To Be an Endangered Species

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§ 32.4340 Net noncurrent deferred operating income taxes.

(a) This account shall include the balance of income tax expense related to noncurrent items for regulated operations which have been deferred to later periods as a result of comprehensive interperiod tax allocation related to temporary differences that arise from regulated operations.

(d) The classification of deferred income taxes as current or noncurrent shall be based on the expected turnaround of the temporary difference.

9. Section 32.4341 would be added to read as follows:

§ 32.4341 Net noncurrent deferred tax liability adjustments.

(a) This account shall include the noncurrent portion of deferred income tax charges and credits pertaining to Accounts 1437, Recoverable Tax Liabilities, 4361 Deferred Regulatory Liability and 7521 Deferred Tax Liability Adjustments-Net.

(b) This account shall be used to record adjustments to the accumulated deferred tax liabilities recorded in Account 4100 for:

(1) Tax effects of temporary differences accounted for under the flow-through method or treated as permanent differences prior to January 1, 1989.

(2) Reclassifications attributable to changes in tax rates prior to January 1, 1989.

(3) The tax effects of carryforward net operating losses and carryforward investment tax credits expected to reduce future taxes payable that are reported in published financial statements.

(4) Reversals of the tax effects of carryforward net operating losses and carryforward investment tax credits previously recorded in this account at the time they become recognized as reductions in current taxable income and current taxes payable on tax returns.

10. Section 32.4350 paragraphs (a) and (g) would be revised to read as follows:

§ 32.4350 Net noncurrent deferred nonoperating income taxes.

(a) This account shall include the balance of income tax expense (Federal, state and local) that has been deferred to later periods as a result of comprehensive interperiod allocation

related to nonoperating temporary differences.

(g) The classification of deferred income taxes as current or noncurrent shall be based on the expected turnaround of the temporary difference.

11. Section 32.4361 would be added to read as follows:

§ 32.4361 Deferred regulatory liability.

This account shall include amounts of probable future revenue reductions attributable to future decreases in taxes payable. As reductions occur, amounts recorded in this account shall be reduced with a debit entry and a credit entry to Account 4341, Net Noncurrent Deferred tax Liability Adjustments.

12. Section 32.6999 paragraph (b) would be amended to add account 7251 to the other income accounts listing to read as follows:

§ 32.6999 General.**(b) Other Income Accounts Listing.**

Account title	Class A account	Class B account
Deferred tax liability adjustments-net.....	7251	7251

13. Section 32.7251 would be added to read as follows:

§ 32.7251 Deferred tax liability adjustment—net.

(a) This account shall be credited to record the tax effects of carryforward net operating losses and carryforward investment tax credits expected to reduce future taxes payable that have been debited to Account 4341, Net Noncurrent Deferred Tax Liability Adjustments.

(b) This account shall be debited for reversals of the tax effects of carryforward net operating losses and carryforward investment tax credits expected to reduce future taxes payable that have been debited to Account 4341, Net Noncurrent Deferred Tax Liability Adjustments.

[FR Doc. 89-20064 Filed 8-29-89; 8:45 am]

BILLING CODE 6712-01-M

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17****Endangered and Threatened Wildlife and Plants; Proposed Rule To Determine the Pallid Sturgeon To Be an Endangered Species**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes to determine the pallid sturgeon (*Scaphirhynchus albus*) to be an endangered species under the authority of the Endangered Species Act (Act) of 1973, as amended. The pallid sturgeon is a large fish known only to occur in the Missouri River, the Mississippi River downstream of the Missouri River, and the lower Yellowstone River. The species is threatened through habitat modification and apparent lack of reproduction. Numbers of fish reported have declined dramatically in the last two decades. Past commercial utilization likely exceeded biological recruitment. Pollution may be a problem over much of its range, and significant hybridization has been documented. Listing would provide protection for preservation of the species. The Fish and Wildlife Service (Service) is requesting data and comments from interested parties on this proposal.

DATES: Comments from all interested parties must be received by October 30, 1989. Public hearing requests must be received by October 16, 1989.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Missouri River Coordinator, Fish and Wildlife Enhancement, U.S. Fish and Wildlife Service, P.O. Box 988, Pierre, South Dakota 57501. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Dr. Kent D. Keenlyne, Missouri River Coordinator, at the above address, telephone (605) 224-8893.

SUPPLEMENTARY INFORMATION:**Background**

The pallid sturgeon was first described by S.A. Forbes and R.E. Richardson in 1905 from nine specimens collected from the Mississippi River near Grafton, Illinois, in June 1904

(Forbes and Richardson 19DS). Known locally as the white sturgeon, they named it *Parascaphirhynchus albus* and suggested it be considered as its own genus. Later classifications, however, placed it in the genus *Scaphirhynchus* where it has remained (Bailey and Cross 1954).

The pallid sturgeon has a flattened, shovel-shaped snout; long, slender, and completely armored caudal peduncle; and lacks a spiracle (Smith 1979). The principal features distinguishing the pallid sturgeon from the darker shovelnose sturgeon are the absence of bony plates on the belly, 24 or more anal fin rays, 37 or more dorsal fin rays, and inner barbels under the snout are much shorter than outer barbels with the inner barbels less than six times the length of the head (Pflieger 1975). As with other sturgeon, the mouth is toothless, protrusible, and far under the snout while the skeletal structure is primarily cartilaginous (Gilbraith et al. 1988). It is one of the largest fish found in the Missouri-Mississippi River drainage with specimens approaching 39 kilograms (85 pounds) being reported (Gilbraith et al. 1988).

Pallid sturgeons require large, turbid, free-flowing riverine habitat with rocky or sandy substrate (Gilbraith et al. 1988). They are well adapted to life on the bottom and inhabit areas of swifter water than does the related but smaller shovelnose sturgeon (Forbes and Richardson 1909; Carlson et al. 1985).

The range of the pallid sturgeon is primarily the Missouri River and the Mississippi River downstream of its junction with the Missouri River (Gilbraith et al. 1988). Sightings have been reported from the mouth of the Mississippi to the mouth of the Missouri (1,860 kilometers or 1,154 miles), from the mouth of the Missouri to Fort Benton, Montana (3,330 kilometers or 2,065 miles), and in the lower 320 kilometers (200 miles) of the Yellowstone River. Sightings have occasionally come from near the mouths of large tributaries to the Mississippi River (Big Sunflower River and the St. Francis River) and Missouri River (Kansas River and Platte River); however, these are rare and may be due to the fish utilizing unusual flow conditions (Cross 1967). The total length of its range is approximately 5,725 kilometers (3,550 miles) of river.

A review of the literature shows a sharp decline in pallid sturgeon observations over the range of the species and especially so in the Missouri River from Gavins Point Dam to the Fort Peck Dam. In the 1960's, 500 observations were made (i.e., an average of 50 per year); in the 1970's, 209 observations (i.e., an average of 21 per

year); and in the 1980's, 56 observations (an average of about 6 per year) over the entire 5,725 kilometers (3,550 miles) of range. The decline of the species appears to correspond with expanded commercial harvest while, during the same time, recruitment began to fail. The decline, however, also follows the extensive developments of the 1950's and 1960's of the Missouri and Mississippi Rivers. Deacon et al. (1979), Kallemeyn (1983), and Gilbraith et al. (1988) all attribute the decline, either directly or indirectly, to habitat modification. Factors include physical blocking of normal movement patterns of the fish by construction of the big dams; alteration of water quality and temperature; alteration of flows which may affect reproduction, timing of reproduction, or food sources; alteration of previous spawning habitats; reduction of habitat diversity; and reduced productivity of the river systems.

Dr. Michael D. Zagata, on behalf of the National Audubon Society, petitioned the Service to list the pallid sturgeon as "threatened" in an April 17, 1978, letter. The Service responded that the petitioner did not supply sufficient substantial evidence of the threats to permit it to move directly on the petition and informed the petitioner that it was gathering status data on this and several other species. On December 30, 1982, the Service included the pallid sturgeon in a notice of review published in the *Federal Register* (47 FR 56456). This notice addressed vertebrate species that were currently under review for listing as endangered or threatened, and indicated that substantial information was available to support the biological appropriateness of proposing to list this species as endangered or threatened. On June 16, 1988, a petition was received by the Service from the Dakotah Chapter of the Sierra Club requesting that the pallid sturgeon be listed as an endangered species throughout its range. A positive finding on this petition was made in September 1988 and subsequently published by the Service in the February 23, 1989, *Federal Register* (54 FR 7813). This notice stated that the petition was accepted and that the Service had one year from the date that the petition was received to publish its findings in the *Federal Register*. This proposal constitutes the final finding for the petitioned action.

Summary of Factors Affecting the 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 provisions of the Act set forth the procedures for adding species to the

Federal Lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in Section 4(a)(1). These factors and their application to the pallid sturgeon (*Scaphirhynchus albus*) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* Alteration of habitat has been a major factor in the decline of this species. Approximately 51 percent of its range has been channelized, 28 percent impounded, and the remaining 21 percent affected by upstream impoundments and altered flow regimes. All of these factors have adversely affected the fish by blocking movements to spawning and/or feeding areas, destroying spawning areas, altering conditions or flows of potential remaining spawning areas, reducing food sources or the ability to obtain food, or altering remaining substrates and conditions necessary for the fish's survival. Of the approximately 5,725 kilometers (3,550 miles) of former habitat for the pallid, virtually all of it has been drastically modified in one manner or another.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* Since it was not described as a separate species until 1905, many of the early reports of sturgeon catches during the heyday of commercial fishing in the late 1800's, during which time many of the sturgeon populations were severely reduced, likely grouped it with the lake or shovelnose sturgeon. During the early years of the upper Missouri reservoirs (1950's and 1960's), pallid sturgeon were relatively common and were harvested commercially in both South Dakota (Gasaway 1970) and North Dakota (Carufel 1953) where they were locally called "lake" sturgeon. During this same period, however, researchers began to notice that they were unable to find reproduction of the species, even though large adults were still present (Beckman and Elrod 1971; June 1976; and Walburg 1977). By 1988, 11 of the 13 states which represent its range had classified it as a species of concern under their various programs (Gilbraith et al. 1988).

The pallid sturgeon is considered a fine eating fish, and the roe is suitable for caviar. Its large size makes it a desirable trophy sport fish (Gilbraith et al. 1988).

C. *Disease or predation.* No information is available regarding diseases of the pallid sturgeon. We are not aware of specific disease or predation problems.

D. *The inadequacy of existing regulatory mechanisms.* Adequate

regulatory mechanisms do not presently exist to protect the fish and especially so when considering that most of its range constitutes interjurisdictional waters or is connected to interstate waters. The species is presently not classified under the State listing programs in Arkansas or Mississippi and presumably may be harvested. Kentucky still allows harvest of the species. Sturgeon over 16 pounds (presumed to be a pallid sturgeon if over that weight) must be released in Montana, and sturgeon over 36 inches long (presumed to be a pallid sturgeon if longer than that length) must be released in North Dakota.

Weight and length provisions, however, do not protect young or smaller pallid sturgeons. Pallid sturgeons must be released in Iowa, Kansas, Missouri, Nebraska, and South Dakota (Gilbraith et al. 1988).

E. Other natural or manmade factors affecting its continued existence.

Although more information is needed, pollution is a likely threat to the species over much of its range. Various fish harvest and consumption advisories exist or have existed as a result of manmade pollution from near Kansas City, Missouri, to the mouth of the Mississippi, which represents about 45 percent of the pallid sturgeon's range. Like other sturgeons, the pallid sturgeon is an opportunistic feeder that feeds on aquatic insects, crustaceans, mollusks, annelids, eggs of other fish, and sometimes other fish. Although utilizing aquatic insects, the pallid is noted as having a high incidence of fish in its diet also (Cross 1967; Kallemeyn 1983; and Carlson et al. 1985). Being a bottom feeder of aquatic forms, one would expect it to be exposed to various pollutants, if present.

Inability to document pallid sturgeon reproduction in recent years has been previously noted. Gilbraith et al. (1988) indicate that there has been no documented reproduction in a decade.

Gilbraith et al. (1988) indicate that male pallids mature at age three or four years. In extensive sturgeon studies in the late 1970's, Carlson et al. (1985) found that hybridization had occurred between the pallid sturgeon in Missouri and the much more abundant shovelnose sturgeon. In two years of study (1978 and 1979), only 11 pallid sturgeon and 12 hybrids were found. The study area comprised approximately 25 percent of the entire range of the pallid sturgeon. The small number of pallids found, the low frequency of reproduction, and the apparent lack of recruitment in the species, plus the high rate of hybridization over a significant portion of its range portends serious

problems for the fish in this and other areas as well if the same phenomenon has or is occurring elsewhere in similar habitat situations.

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 pallid sturgeon as an endangered species without critical habitat. The habitat of the species has been altered through damming, channelization, altered and/or degraded water quality, and altered flows to the detriment of the fish. Past harvest for commercial purposes may have surpassed replenishment capability. Commercial harvest of sturgeon may still pose a threat in certain areas of its range. Existing regulations are inadequate to protect the species from further decline. Pollution may be a serious threat over a significant portion of its range, and hybridization is a known threat. Threatened status is not appropriate because *Scaphirhynchus albus* is in danger of extinction throughout its range due to the apparent lack of recruitment of the species for over 15 years, and current habitat threats which have brought the species to this low level are not likely to be modified to benefit the species without protection under the Act. For reasons given below, critical habitat is not proposed.

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 determinable or prudent for this species. Critical habitat cannot be determined at this time due to the paucity of information on the species life requisites and the wide dispersal of limited sighting records in recent years. Moreover, even if it could be determined, it may not be prudent to identify critical habitat to the public. As noted in Factor "B" of the "Summary of Factors Affecting the Species," the pallid sturgeon is a large sturgeon and might be sought by sport fishermen as a trophy specimen. Furthermore, sturgeon roe may be harvested as caviar. Publication of critical habitat maps and descriptions in the Federal Register could negatively impact the species by stimulating interest in the pallid sturgeon, making it more vulnerable to take, and increasing enforcement problems. Protection of this species'

habitat will be addressed through the recovery process and through the Section 7 jeopardy standard. Therefore, the Service does not propose to determine critical habitat for the pallid sturgeon at this time.

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)(4) requires Federal 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 insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or destroy or adversely modify its critical habitat. If a Federal action may adversely affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. Being found primarily in navigable waters of the United States and in areas of considerable Federal land ownership interests, consultation procedures could play a significant role in improving the welfare of the pallid sturgeon.

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 (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 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 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. 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. With respect to *Scaphirhynchus albus*, it is anticipated that few, if any, trade permits would ever be sought or issued, since the species is not common in the wild and is unknown in cultivation for roe.

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning any aspect of this proposed rule are hereby solicited. Comments particularly are sought concerning the following:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to this species;

(2) The location of any additional populations of this species and the reason why any habitat should or should not be determined to be critical habitat as provided by Section 4 of the Act;

(3) Additional information concerning the range, distribution, and population size of this species; and

(4) Current or planned activities in the subject area and their possible impacts on this species.

Final promulgation of the regulation on this species will take into consideration the comments and any additional information received by the Service. Such communications may lead to adoption of a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of publication of the proposal. Such requests must be made in writing and be addressed to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 25486, Denver Federal Center, Denver, Colorado 80225.

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 here is available upon request from the Missouri River Coordinator in Pierre, South Dakota (605/224-8693) (see ADDRESSES above) or the Fish and Wildlife Enhancement Office, U.S. Fish and Wildlife Service, P.O. Box 25486, Denver Federal Center, Denver, Colorado 80225 (303/236-7398).

Author

The primary author of this proposed rule is Dr. Kent D. Keenlyne, Missouri River Coordinator (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

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

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 98 Stat. 1411; Pub. L. 100-478, 102 Stat. 2308; Pub. L. 100-653, 102 Stat. 3825 (16 U.S.C. 1531 et seq.); Pub. L. 99-625, 100 Stat. 3500, unless otherwise noted.

2. It is proposed to 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:							
Sturgeon/pallid	<i>Scaphirhynchus albus</i>	U.S.A. (AR, IA, IL, KS, KY, LA, MO, MS, MT, ND, NE, SD, TN).	Entire	E		NA	NA

Dated: July 18, 1989.

Susan Recce Lamson,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 89-20397 Filed 8-29-89; 8:45 am]

BILLING CODE 4310-55-M

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for the Lower Keys Rabbit and Threatened Status for the Squirrel Chimney Cave Shrimp

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes to determine the Lower Keys rabbit (*Sylvilagus palustris hefneri*) to be an endangered species and the Squirrel Chimney cave shrimp (*Palaemonetes cummingsi*) to be a threatened species pursuant to the Endangered Species Act of 1973, as amended (Act). These species are found only in Florida. The Lower Keys rabbit is restricted to a few keys in Monroe County and is endangered by loss of wetlands to residential development. The Squirrel Chimney cave shrimp is restricted to one site in Alachua County, Florida. It is threatened by potential development. This proposal, if made final, would implement the protection and recovery provisions afforded by the Act for these species. The Service seeks data and comments from the public on this proposal.

DATES: Comments from all interested parties must be received by October 30, 1989. Public hearing requests must be received by October 16, 1989.

ADDRESSES: Comments and materials concerning this proposal should be sent to Field Supervisor, Jacksonville Field Office, U.S. Fish and Wildlife Service, 3100 University Boulevard South, Suite 120, Jacksonville, Florida 32216. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: David J. Wesley, Field Supervisor, at the above address (telephone 904/791-2580 or FTS 946-2580).

SUPPLEMENTARY INFORMATION:

Background

The Lower Keys rabbit (*Sylvilagus palustris hefneri*) is an island subspecies of the widespread marsh rabbit. The subspecies was described by Lazell in 1984, based on a specimen from

Sugarloaf Key, Monroe County, Florida (Lazell 1984). The Lower Keys rabbit measures about 40 centimeters (16 inches) in total length and has brownish fur dorsally and gray fur ventrally. It differs from the marsh rabbit of peninsular Florida (*Sylvilagus palustris paludicola*) principally in skull characters.

In recent times, the Lower Keys rabbit was found on at least ten of the Lower Keys, but may now be extirpated from five of these. The rabbit does not occur east of the Seven Mile Bridge; it is replaced in the Upper Keys by the subspecies *Sylvilagus palustris paludicola*. The Lower Keys rabbit is restricted to marshes, ranging from saline to fresh water. Salt marshes in the area are typically vegetated with fringerush (*Fimbristylis* sp.), buttonwood (*Conocarpus erectus*), cordgrass (*Spartina alterniflora*), saltwort (*Batis maritima*), glasswort (*Salicornia virginica*), sawgrass (*Cladium jamaicense*), and sea oxeye (*Borrchia frutescens*). Fresh water marshes support cattail (*Typha latifolia*), sedges (*Cyperus* sp.), and sawgrass. Marshes are very limited in the Lower Keys, since mangroves occupy many coastal areas and interior fresh water habitat is scarce. Known localities for the Lower Keys rabbit are on Federal (National Key Deer Refuge, Key West Naval Air Station), State (Florida Department of Transportation), and private lands. The primary cause of the decline of the Lower Keys rabbit is the filling of wetlands for residential, commercial, and military purposes.

The species was considered a category 2 species in the Service's notice of review published in the Federal Register of September 18, 1985 (50 FR 37958), and also in the notice of review published in the Federal Register of January 6, 1989 (54 FR 554), indicating that listing was possibly appropriate.

The Service was petitioned to list the Lower Keys rabbit as an endangered species by Ms. Joel Beardsley in a letter received April 17, 1985. Section 4(b)(3)(B) of the Endangered Species Act of 1973, as amended in 1982, requires that for any such listing petition containing substantial information, a finding be made within 12 months of receipt of the petition. The Service made a finding that the petition presented substantial information and that the requested action may be warranted on August 30, 1985 (50 FR 35272). Subsequent 1-year findings for 1986 (51 FR 29673; August 20, 1986), 1987 (53 FR 25512; July 7, 1988), and 1988 (53 FR 31723; August 19, 1988) were that the petition was warranted but precluded by other listing activities. In April 1989

the Service made a final finding, based on additional status survey information, that listing of the species was warranted. Publication of the present proposal implements that finding.

The Squirrel Chimney cave shrimp (*Palaemonetes cummingsi*), a decapod crustacean of the family Palaemonidae, was described by Chase in 1954. It measures about 30 millimeters (1.2 inches) in total length and is transparent. The body and eyes are unpigmented, and the eyes are reduced in size in comparison to surface-dwelling species of *Palaemonetes*. The Squirrel Chimney cave shrimp (also known as the Florida cave shrimp) is restricted to Squirrel Chimney, a sinkhole near Gainesville, Alachua County, Florida. The site is privately owned. Squirrel Chimney is a small sinkhole which leads to a flooded cave system over 30 meters (100 feet) deep. Several other cave-dwelling invertebrates are found in Squirrel Chimney: McLane's cave crayfish (*Troglocambarus macclanei*), the light-fleeing crayfish (*Procambarus lucifugus*), the pallid cave crayfish (*Procambarus pallidus*) (a category 2 candidate for Federal listing), and Hobb's cave amphipod (*Crangonyx hobbsi*). The site supports one of the richest cave invertebrate faunas in the United States. In 1983, the site was proposed for recognition as a National Natural Landmark, but the National Park Service has not yet taken final action on the proposal.

The Squirrel Chimney cave shrimp is considered threatened by the Florida Committee on Rare and Endangered Plants and Animals, while the other four species are considered species of special concern. The Squirrel Chimney cave shrimp was classified a category 2 species in the Service's May 22, 1984, invertebrate review notice (49 FR 21664), and also in the animal notice of review published January 6, 1989 (54 FR 554). It is threatened by potential residential development and changes in land use.

Summary of Factors Affecting the 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 provisions of the Act set forth the procedures for adding species to the Federal Lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in Section 4(a)(1). These factors and their application to the Lower Keys rabbit (*Sylvilagus palustris hefneri*) and the