

Junaluska salamander and that they have addressed most of the potential threats to the species in North Carolina. However, the Service is in need of additional information to adequately assess the status of the species in Tennessee, to locate additional populations, and to identify those factors that may affect its persistence. Prior to receiving the subject petition, the Service had some knowledge of the status of the Junaluska salamander, principally in North Carolina. Consequently, the Service had initiated a status survey for the Tennessee portion of the species' range. In addition, the USFS is working with the Service and several other agencies and organizations to begin a multi-agency conservation agreement to minimize or eliminate the threats to the species in North Carolina.

The petitioners also requested that critical habitat be designated for the Junaluska salamander. If after completion of the status review the Service determines that the petition to list the Junaluska salamander as endangered is warranted, the issue of designating critical habitat would be addressed in the subsequent proposed rule.

References Cited

- Bruce, R. C. 1982. Egg laying, larval periods, and metamorphosis of *Eurycea bislineata* and *E. junaluska* at Santeetlah Creek, North Carolina. *Copeia* 1982(4):755-762.
- Bruce, R. C., and T. J. Ryan. 1995. Distribution and population status of the salamander, *Eurycea junaluska*. U.S. Forest Service Challenge Cost Share Report. No. 11-287. 84 pp.
- Federal Highway Administration. 1989. Guidelines for handling excavated acid-producing materials. FHWA/DF/89001, March 1989.
- Mittleman, M. B. 1949. American Caudata VI: the races of *Eurycea bislineata*. *Proc. Biol. Soc. Wash.* 62:89-96.
- Ryan, T. J. 1998. Larval life history and abundance of a rare salamander, *Eurycea junaluska*. *J. of Herpetology* 32(1):10-17.
- Sever, D. M. 1979. Male secondary sexual characters of the *Eurycea bislineata* (Amphibia, Urodela, Plethodontidae) complex in the Southern Appalachian Mountains. *J. Herpetology* 13:245-253.
- _____. 1983. Observations on the distribution and reproduction of the salamander *Eurycea junaluska* in Tennessee. *J. Tenn. Acad. Sci.* 58:48-50.
- Sever, D. M., H. A. Dundee, and C. D. Sullivan. 1976. A new *Eurycea* (Amphibia: Plethodontidae) from southwestern North Carolina. *Herpetologica* 32:26-29.

Author: The primary author of this document is Mr. J. Allen Ratzlaff (see ADDRESSES section).

Authority

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

Dated: October 8, 1998.

Jamie Rappaport Clark,

Director, Fish and Wildlife Service.

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AF29

Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for the Armored Snail and Slender Campeloma

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Fish and Wildlife Service (Service) proposes to list the armored snail (*Pyrgulopsis* (= *Marstonia*) *pachyta*) and slender campeloma (*Campeloma decampi*) as endangered species under the Endangered Species Act of 1973, as amended (Act). The armored snail is known only from Piney and Limestone creeks, Limestone County, Alabama, and the range of the slender campeloma has been reduced (Aquatic Resources Center (ARC) 1997) by at least three-quarters from its historical distribution and is now found only in Round Island, Piney, and Limestone creeks, Limestone County, Alabama. These species are in a particularly precarious position, being restricted to a few isolated sites along two or three short river reaches. Siltation and other pollutants from poor land-use practices, and waste discharges, are contributing to the general deterioration of water quality, likely impacting these species.

DATES: Comments from all interested parties must be received by December 28, 1998. Public hearing requests must be received by December 14, 1998.

ADDRESSES: Comments and materials concerning this proposal should be sent to the State Supervisor, Asheville Field Office, U.S. Fish and Wildlife Service, 160 Zillicoa Street, Asheville, North Carolina 28801. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Mr. J. Allen Ratzlaff, at the above address

(telephone 828/258-3939, Ext. 229; facsimile 828/258-5330).

SUPPLEMENTARY INFORMATION:

Background

The armored snail (*Marstonia pachyta*) was described by Thompson in 1977 and was later reassigned to the genus *Pyrgulopsis* by Hershler and Thompson (1987). The armored snail is a small, presumably annual, species (usually less than 4 millimeters (mm) (0.16 inch (in)) in length) (Thompson 1984). It is distinguished from other closely related species by the characteristics of both its verge (male reproductive organ) and shell. The armored snail has a small raised gland on the ventral surface of the verge (a trait common only with the beaverpond snail (*P. castor*) of this genus) and two small glands along the left margin of the apical (tip) lobe. The apical lobe is smaller than in most species of *Pyrgulopsis* (Thompson 1977). Garner (1993) noted some variation in verge characteristics (more developed apical lobes) but attributed the differences to temporal changes in verge morphology throughout the annual life cycle. The shell is easily identified by its ovate-conical shape, its pronounced thickness, and its complete peristome (edge of the opening). Other *Pyrgulopsis* species with ovate-conical shells have much thinner, almost transparent, shells, and the peristome is seldom complete across the parietal margin (area along the opening abutting the main body of the shell) of the aperture (opening) (Thompson 1977).

The armored snail occurs only in Piney and Limestone creeks, Limestone County, Alabama (Garner 1993, Hershler 1994, ARC 1997), and has never been noted outside this area. Piney Creek was a tributary to Limestone Creek prior to the construction of Wheeler Lake on the Tennessee River. Thus, the two populations of the armored snail are likely remnants of a once larger population. Armored snails are generally found among submerged tree roots and bryophytes (nonflowering plants comprising mosses and liverworts) along stream margins in areas of slow to moderate flow. Occasionally they are found in the submerged detritus (organic matter and rock fragments) along pool edges.

The armored snail is in a particularly precarious position, being restricted to a few isolated sites along two short river reaches. Inhabited sites appear to be rather small, covering only a few square meters.

The slender campeloma belongs to the ovoviviparous family Viviparidae. All species in this family give birth to

young crawling snails rather than laying eggs that hatch in an external environment. The sexes are separate in the Viviparidae, with males being distinguishable by their modified right tentacle that serves as a copulatory organ. This modified tentacle in males is shorter and thicker than the left tentacle or either of the bilaterally symmetrical tentacles of the females (Burch and Vail 1982).

Burch and Vail (1982) describe *Campeloma decampi* ("Currier" Binney 1865) as follows: Shell medium to large but generally less than 35 mm (1.40 in) in length; shell without spiral nodules; outer margin of shell aperture not concave and its oblique angle to the shell axis not exaggerated; columellar margin of operculum (plate that closes the shell when the snail is retracted) not reflected inward; operculum entirely concentric, including its nucleus; whorls without spiral angles, ridges, or sulci (grooves); shells without spiral color bands; length of aperture noticeably greater than width; lateral and marginal teeth simple with very fine, difficult-to-distinguish cusps (points); shell narrow, relatively thin, generally with prominent raised spiral lines.

The slender campeloma can be easily distinguished from the sympatric (two or more closely related species occupying identical or overlapping territories) *Campeloma decisum* (a widespread and common species in northern Alabama) by the presence of fine sculpture in the form of faint striations and a relatively higher spire on the shell of *C. decampi*. Many *C. decampi* specimens have strongly developed ridges, referred to as axial growth ridges by Clench and Turner (1955). All whorls in juveniles and early whorls in adults are carinate (keel-shaped). The shell of *C. decisum* is smooth, without carination.

Campeloma decampi is typically found burrowing in soft sediment (sand and/or mud) or detritus. At no site does it appear abundant, and the spotty distribution appears consistent with other *Campeloma* species (Bovbjerg 1952, Medcof 1940, van der Schalie 1965). Several size classes were found in 1996, ranging from 5 mm to 31 mm in shell height, indicating reproducing populations (ARC 1997). The life history of *C. decampi* has not been studied. Based on other studies of species in the genus *Campeloma*, a genus exclusive to North America, a few generalities can be inferred. Van Cleave and Altringer (1937), in their study of *C. rufum* in Illinois, found gravid (pregnant) females year-round, peaking in May, with the most barren females found in June.

Parturition (birth) was also most active in May but extended until September first. Chamberlain (1958) found similar results with *C. decisum* in North Carolina (parturition extending from mid-March until the end of June) as did Medcof (1940) in his study of *C. decisum* in Ontario (parturition extending from March to September). Van Cleave and Altringer (1937) and van der Schalie (1965), in their work with *C. ponderosum coarctatum*, both found females carrying young in their uterus over winter. Given the wide range of sizes found by ARC (1997), the timing of parturition and the ability of females to over-winter young in their uterus is likely similar for *C. decampi*. However, it should be noted that *C. rufum* and *C. decisum* are parthenogenic (production of young by females without fertilization by males), as several of the northern *Campeloma* species appear to be. The food habits of the slender campeloma are not known, but they likely feed on detritus.

The range given for *Campeloma decampi* in Burch (1989) is Jackson, Limestone, and Madison counties, Alabama. These counties all lie along the north side of the Tennessee River. However, the type locality (location where the specimen was collected and described) of *C. decampi* is Decatur, Alabama, in Morgan County, across the river from Limestone County (Clench 1962).

Clench and Turner (1955) identified museum specimens of *C. decampi* from several localities in northern Alabama. These sites were located primarily on stream impoundments and included Swan and Bass Lakes, Limestone County; Brim (=Braham) and Byrd Lakes, Madison County; and an unspecified locality in Jackson County. Surveys conducted in 1996 (ARC 1997) found no Swan Lake in North Alabama. A lake by that name was apparently located in Limestone County, across the river from Decatur, but was inundated by Wheeler Reservoir. This was likely the "Decatur" locality (type) mentioned in Clench (1962). Brim (=Braham) Lake was surveyed, but no *C. decampi* were found, though another viviparid (*Viviparus georgianus*) was abundant at the site. Byrd Spring, on Redstone Arsenal, was not accessible.

Based on the 1996 surveys (ARC 1997), the range of *Campeloma decampi* has been reduced by at least three-quarters from its historical distribution, and existing populations are now isolated by Wheeler Reservoir. The species is now in a particularly precarious position, being restricted to a few isolated sites along three short

stream reaches—Limestone, Piney, and Round Island creeks.

Previous Federal Action

The armored snail was identified as a category 2 species in notices of review published in the **Federal Register** on January 6, 1989 (54 FR 554), November 21, 1991 (56 FR 58804), and November 15, 1994 (59 FR 58982). The slender campeloma was identified as a category 2 species in the notice of review published in the **Federal Register** on November 15, 1994 (59 FR 58982). At that time, a category 2 species was one that was being considered for possible addition to the Federal List of Endangered and Threatened Wildlife but for which conclusive data on biological vulnerability and threats were not available to support a proposed rule. Designation of category 2 status was discontinued in the February 28, 1996, notice of review (61 FR 7956). The two snails in this proposed rule were approved as candidate species on August 29, 1997, after publication of the 1996 notice of review. A candidate species is defined as a species for which the Service has on file sufficient information on biological vulnerability and threats to support issuance of a proposed rule.

On October 20, 1993, the Service notified (by mail, 34 letters) potentially affected Federal and State agencies and local governments, and interested individuals within the species' present range that a status review of the armored snail was being conducted. No objections to the potential listing of the armored snail were received. No notification was made concerning the slender campeloma because the ranges are so similar.

The processing of this proposed rule conforms with the Service's final listing priority guidance for fiscal years 1998 and 1999 published in the **Federal Register** on May 8, 1998 (63 FR 25502). The guidance calls for giving highest priority to handling emergency situations (Tier 1); second highest priority (Tier 2) to resolving the listing status of outstanding proposed listings, resolving the conservation status of candidate species, processing administrative findings on petitions, and processing a limited number of delistings and reclassifications; and third priority (Tier 3) to processing proposed and final designations of critical habitat. The processing of this proposed rule falls under tier 2.

Summary of Factors Affecting the Species

Section 4 of the Act 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 list. 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 armored snail (*Pyrgulopsis* (= *Marstonia*) *pachyta*) and slender campeloma (*Campeloma decampi*) are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The armored snail is known only from Limestone and Piney creeks, Limestone County, Alabama, and has never been noted outside this area. The slender campeloma is currently known from Round Island, Piney, and Limestone creeks, Limestone County, Alabama (a range reduction of about three-quarters from its historical distribution). Their extremely limited distribution, limited occupied habitat, and annual life cycle (in the case of the armored snail) make these species extremely vulnerable to extirpation. The annual life cycle of the armored snail increases its vulnerability to extirpation, because an event resulting in the extirpation or disruption of any portion of the life cycle could result in the loss of this snail. Threats to these species include siltation, direct loss of habitat, altered water chemistry, and chemical pollution.

Piney Creek was a tributary to Limestone Creek prior to the construction of Wheeler Lake on the Tennessee River. Thus, populations of both the armored snail and slender campeloma inhabiting these two creeks are likely remnants of once larger populations. In addition to directly altering snail habitat, dams and their impounded waters form barriers to the movement of snails. Sediment accumulation and changes in flow and water chemistry in impounded stream and river reaches reduce food and oxygen availability and eliminate essential breeding habitat for riverine snails. It is suspected that isolated colonies gradually disappear as a result of local water and habitat quality changes. Unable to emigrate (move to another area), isolated snail populations are vulnerable to local discharges in surface run-off within their watersheds. Although many watershed impacts have been temporary, eventually improving or even disappearing with the advent of new technology, practices, or laws, dams and their impoundments prevent natural recolonization by surviving snail populations.

Sedimentation of rivers and streams may affect the reproductive success of aquatic snails by eliminating breeding

habitat and interfering with their feeding activity by reducing or eliminating periphyton (plankton which live attached to rooted aquatic plants) food sources. Sources of sediments likely affecting these species include channel modification, agriculture, cattle grazing, run-off from unpaved roads, and industrial and residential development.

Other types of water quality degradation from both point and nonpoint sources currently affect these species. Stream discharges from these sources may result in eutrophication, decreased dissolved oxygen concentration, increased acidity and conductivity, and other changes in water chemistry. Nutrients, usually phosphorus and nitrogen, may emanate from agricultural fields, residential lawns, livestock operations, and leaking septic tanks in levels that result in eutrophication and reduced oxygen levels in small streams. The Round Island, Limestone, and Piney Creek drainages are dominated by agricultural use, primarily cotton (a high pesticide use crop), which makes these creeks susceptible to pesticide contamination. Pesticide containers were found in Limestone and Piney creeks during site visits in 1997 (J. Allen Ratzlaff, personal observation). Timber harvesting for wood chip mills proposed for northeastern Alabama and southwestern Tennessee could also contribute to a deterioration of water quality.

Many bridge crossings occur within these species' range. Highway and bridge construction and widening could impact these species through sedimentation or the physical destruction of its habitat unless appropriate precautions are implemented.

Limestone Creek currently supports one endangered snail species, *Athearnia anthonyi* (Anthony's riversnail), and most of its mussel fauna has been extirpated (17 species), including five species currently listed as endangered. The specific reasons for the loss of these species are not known but are likely a combination of the above-listed impacts.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* The two snail species addressed in this proposed rule are currently not of commercial value, and overutilization has not been a problem. However, as their rarity becomes known, they may become more attractive to collectors. Although scientific collecting is not presently identified as a threat, unregulated collecting by private and institutional collectors could pose a threat to these locally restricted populations.

C. *Disease or predation.* Diseases of aquatic snails are unknown. Although both the armored snail and slender campeloma are undoubtedly consumed by various vertebrate predators, including fishes, mammals, and possibly birds, predation by naturally occurring predators is a normal aspect of the population dynamics of a species and is not considered a threat to these species at this time.

Chamberlain (1958) found the uterus of some specimens of *Campeloma decisum* infected by the trematode *Leucochloridomorpha constantiae*, a black duck (*Anas rubripes*) parasite, with the snail evidently being an intermediate host. It is not known whether the slender campeloma is parasitized or to what degree any parasitism inhibits its life cycle.

D. *The inadequacy of existing regulatory mechanisms.* The State of Alabama's prohibitions against taking fish and wildlife for scientific purposes without State collecting permits provide some protection for these snails. However, these species are generally not protected from other threats. These snails are not given any special consideration under other environmental laws when project impacts are reviewed. Although the negative effects of point source discharges on aquatic communities have probably been reduced over time by compliance with State and Federal regulations pertaining to water quality, there is currently no information on the sensitivity of snail fauna to common industrial and municipal pollutants. Current State and Federal regulations regarding such discharges are assumed to be protective; however, these snails may be more susceptible to some pollutants than test organisms currently used in bioassays. A lack of adequate research and data currently may prevent existing authorities, such as the Clean Water Act (CWA), administered by EPA and the Army Corps of Engineers (Corps), from being fully utilized to protect these species. The Service is currently working with EPA to develop a Memorandum of Agreement that will address how EPA and the Service will interact relative to CWA water quality criteria and standards within the Service's Southeast Region.

E. *Other natural or manmade factors affecting its continued existence.* Both species inhabit short creek reaches; thus, they are vulnerable to extirpation from naturally occurring events such as toxic chemical spills. All three creeks are crossed by a number of roads, railroads, and power lines that pose additional direct threats (e.g., loss of riparian vegetation) and indirect threats

(potential toxic spills and run-off). Additionally, because these populations are isolated, their long-term genetic viability is questionable. Because all three creeks are isolated by an impoundment, recolonization of an extirpated population is not likely without human intervention.

Further, since most of Limestone Creek's mussel fauna has already been lost, this is a strong indicator of a severely impacted ecosystem that has undergone significant degradation. Because the life history and biology of these species are virtually unknown, it is likely they may continue to decline due to currently unrecognized impacts and stresses to their populations.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these species in determining to propose this rule. Based on this evaluation, the preferred action is to list the armored snail and slender campeloma as endangered. The armored snail is currently known only from Piney and Limestone creeks, Limestone County, Alabama, and the slender campeloma is known only from the aforementioned creeks and Round Island Creek, Limestone County, Alabama. These snails and their habitat have been and continue to be threatened. Their limited distribution also makes them vulnerable to toxic chemical spills. Because of their restricted distribution and vulnerability to extinction, endangered status is the most appropriate classification for these species.

Critical Habitat

Critical habitat is defined in section 3 of the Act as: (i) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. "Conservation" means the use of all methods and procedures needed to bring the species to the point at which listing under the Act is no longer necessary.

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) requires that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be endangered or

threatened. Service regulations (50 CFR 424.12(a)(1)) state that designation of critical habitat is not prudent when one or both of the following situations exist: (i) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or (ii) such designation of critical habitat would not be beneficial to the species. The Service finds that designation of critical habitat is not presently prudent for these two species.

Critical habitat designation, by definition, directly affects only Federal agency actions. Because these snails are aquatic throughout their life cycles, Federal actions that might affect these species and their habitats include those with impacts on stream channel geometry, bottom substrate composition, water quantity and quality, and storm-water run-off. Such activities would be subject to review under section 7(a)(2) of the Act regardless of whether critical habitat was designated. Section 7(a)(2) requires Federal agencies to ensure, in consultation with and with the assistance of the Service, that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or destroy or adversely modify its critical habitat, if any is designated. Also, 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 the destruction or adverse modification of proposed critical habitat. See "Available Conservation Measures" section for a further discussion of section 7. As part of the development of this proposed rule, Federal and State agencies were notified of the armored snail's general distribution (with the slender campeloma being similar, no specific notification was sent regarding it), and they were requested to provide data on proposed Federal actions that might adversely affect the species. No specific projects were identified. Should any future projects be proposed in areas inhabited by these snails, the involved Federal agency will already have the general distributional data needed to determine if the species may be impacted by their action, and more specific distributional information would be provided if needed.

Regulations promulgated for the implementation of section 7 of the Act provide for both a "jeopardy" standard and a "destruction or adverse modification" of critical habitat standard. Both standards are defined in very similar language. Due to the highly

precarious status of the armored snail and slender campeloma, any significant adverse modification or destruction of these species' habitat also would likely jeopardize the species' continued existence, thereby triggering both standards. Therefore, no additional protection for the snails would accrue from a critical habitat designation that would not also occur from listing of the species. If listed, habitat protection for these snails will be accomplished through the section 7 "jeopardy" standard and the section 9 prohibitions against take.

Recovery of these species will require the identification of unoccupied creeks and creek reaches appropriate for reintroduction. Critical habitat designation of unoccupied creeks and creek reaches may benefit these species by alerting permitting agencies to areas considered crucial to these species and allowing them the opportunity to evaluate projects which may affect these areas. The Service will work with the State and other Federal agencies to periodically survey and assess habitat potential of creeks and creek reaches for listed and candidate aquatic species within the watersheds in and around Limestone County. This process will provide up to date information on instream habitat conditions in response to land use changes within watersheds. Information generated from surveys and assessments will be disseminated through Service coordination with other agencies. Should this rule become final, the Service will work with State and Federal agencies, as well as private property owners and other affected parties, through the recovery process to identify creek reaches and potential sites for reintroduction of these species. Thus, the benefit provided by designation of unoccupied habitat as critical habitat will be accomplished more effectively with this coordination process and is preferable for aquatic habitats which change rapidly in response to watershed land use practices. In addition, the Service believes that any potential benefits to critical habitat designation are outweighed by additional threats to the species that would result from such designation, as discussed below.

Though critical habitat designation directly affects only Federal agency actions, this process can arouse concern and resentment on the part of private landowners and other interested parties. The publication of critical habitat maps in the **Federal Register** and local newspapers and other publicity or controversy accompanying critical habitat designation may increase the potential for vandalism as well as

collection threats (See Factor B under "Summary of Factors Affecting the Species"). For example, on June 15, 1993, the Alabama sturgeon was proposed for endangered status with critical habitat (50 CFR 33148). The proposal generated thousands of comments, with the primary concern being that the action would devastate the economy of the State of Alabama and severely impact adjoining States. There were reports from State conservation agents and other knowledgeable sources of rumors inciting the capture and destruction of Alabama sturgeon. A primary contributing factor to this controversy was the proposed designation of critical habitat for the sturgeon.

The two snail species addressed in this proposal are especially vulnerable to vandalism. They are found in very restricted segments of relatively short creek reaches. They are relatively immobile and unable to escape collectors or vandals. They inhabit easily accessible areas and are sensitive to a variety of readily available commercial chemicals and products. Because of these factors, vandalism or collecting would be difficult to detect and/or control. For example, another Alabama snail, the plicate rocksnail, recently disappeared from 80 percent of its known occupied habitat. Although the Service has been unable to determine the cause of this decline, this disappearance illustrates the vulnerability of this and other snail species.

All known populations of these two species occur in creeks flowing through private land. One of the primary threats to surviving populations appears to be run-off from private land activities (see Factor A). Therefore, the survival and recovery of these species will be highly dependent on landowner cooperation in reducing land-use impacts.

Controversy resulting from critical habitat designation has been known to reduce private landowner cooperation in the management of listed species under the Act (e.g., spotted owl, golden-cheeked warblers). The Alabama sturgeon experience suggests that critical habitat designation could affect landowner cooperation within the watersheds occupied by these two snails.

Based on the above analysis, the Service has concluded that a critical habitat designation would provide few additional benefits for these species beyond those that would occur from listing under the Act. The Service also concludes that any potential benefit from such a designation would be outweighed by an increased level of

vulnerability to vandalism and collecting and could possibly cause landowners to be less willing to cooperate with the Service in the management and recovery of these species. The designation of critical habitat for these two snails is therefore not prudent.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness and conservation actions by Federal, State, and local agencies, private organizations, and individuals. The 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 the 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 adversely affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

The Service notified Federal agencies that may have programs or projects affecting the armored snail. No notification was given about the slender campeloma because its range is so similar and because no controversy arose from the notification of the potential listing of the armored snail. No specific proposed Federal actions were identified that would likely 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 reservoir

construction, stream alterations, wastewater facility development, pesticide registration, and road and bridge construction. Activities affecting water quality may also impact these species and are subject to the Corps and EPA's regulations and permit requirements under authority of the CWA and the National Pollutant Discharge Elimination System (NPDES). It has been the Service's experience that nearly all section 7 consultations can be resolved so that the species is protected and the project objectives are met.

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 or threatened wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 for endangered species. 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.

It is the policy of the Service, published in the **Federal Register** on July 1, 1994 (59 FR 34272), to identify, to the maximum extent practicable, those activities that would or would not constitute a violation of section 9 of the Act if these species are listed. The intent of this policy is to increase public awareness of the effects of this proposed listing on proposed and ongoing activities within the species' range.

Activities that the Service believes are unlikely to result in a violation of section 9 for these two snails are:

(1) Existing discharges into waters supporting these species, provided these activities are carried out in accordance with existing regulations and permit requirements (e.g., activities subject to sections 402, 404, and 405 of the Clean Water Act and discharges regulated under the NPDES).

(2) Actions that may affect these two snail species and are authorized, funded

or carried out by a Federal agency when the action is conducted in accordance with any reasonable and prudent measures given by the Service in accordance with section 7 of the Act.

(3) Normal agricultural and silvicultural practices, including pesticide and herbicide use, that are carried out in accordance with any existing regulations, permit and label requirements, and best management practices.

(4) Development and construction activities designed and implemented pursuant to State and local water quality regulations.

(5) Existing recreational activities, such as swimming, wading, canoeing, and fishing.

Activities that the Service believes could result in "take" of these snails, if they should be listed, include:

(1) Unauthorized collection or capture of these species.

(2) Unauthorized destruction or alteration of the species' habitat (e.g., in-stream dredging, channelization, discharge of fill material).

(3) Violation of any discharge or water withdrawal permit.

(4) Illegal discharge or dumping of toxic chemicals or other pollutants into waters supporting these two species.

(5) Use of pesticides and herbicides in violation of label restrictions within the species' watersheds.

Other activities not identified above will be reviewed on a case-by-case basis to determine if a violation of section 9 of the Act may be likely to result from such activity should these snails be listed. The Service does not consider these lists to be exhaustive and provides them as information to the public.

Questions regarding whether specific activities may constitute a future violation of section 9 should these snails be listed should be directed to the Service's Asheville Field Office (see **ADDRESSES** section). Requests for copies of regulations regarding listed species and inquiries about prohibitions and permits should be addressed to the U.S. Fish and Wildlife Service, Ecological Services Division, 1875 Century Boulevard, Atlanta, Georgia 30345 (telephone 404/679-7313; facsimile 404/679-7081).

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 this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to the armored snail or slender campeloma;

(2) The location of any additional populations of the armored snail or slender campeloma and the reasons 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 and distribution of these species; and

(4) Current or planned activities in the subject area and their possible impacts on the armored snail or slender campeloma.

Final promulgation of the regulations on these species will take into consideration the comments and any additional information received by the Service, and such communications may lead to final regulations that differ from this proposal.

You may request a public hearing on this proposal. Your request for a hearing must be made in writing and filed within 45 days of the date of publication of this proposal in the **Federal Register**. Address your request to the State Supervisor (see **ADDRESSES** section).

Executive Order 12866

Executive Order 12866 requires agencies to write regulations that are easy to understand. We invite your comments on how to make this proposal easier to understand including answers to questions such as the following: (1) Is the discussion in the "Supplementary Information" section of the preamble helpful in understanding the proposal? (2) Does the proposal contain technical language or jargon that interferes with its clarity? (3) Does the format of the proposal (grouping and order of sections, use of headings, paragraphing, etc.) aid or reduce its clarity? What else could we do to make the proposal easier to understand?

Send a copy of any comments that concern how we could make this notice easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW, Washington, DC 20240. You may also e-mail the comments to: Exsec@ios.doi.gov.

National Environmental Policy Act

The 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 Act. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

Paperwork Reduction Act

This rule does not contain any new collections of information other than those already approved under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, and assigned Office of Management and Budget clearance number 1018-0094. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information, unless it displays a currently valid control number. For additional information concerning permit and associated requirements for endangered species, see 50 CFR 17.22.

References Cited

A complete list of all references cited herein, as well as others, is available upon request from the State Supervisor (see **ADDRESSES** section).

Author: The primary author of this proposed rule is Mr. J. Allen Ratzlaff, (see "**ADDRESSES**" section) (828/258-3939, Ext. 229).

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

PART 17—[AMENDED]

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

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

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 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 SNAILS, to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate popu- lation where endan- gered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
SNAILS							
*	*	*	*	*	*		*
Campeloma, slender	<i>Campeloma decampi.</i>	U.S.A. (AL)	NA	E		NA	NA
*	*	*	*	*	*		*
Snail, armored	<i>Pyrgulopsis (=Marstonia) pachyta.</i>	U.S.A. (AL)	NA	E		NA	NA
*	*	*	*	*	*		*

Dated: October 16, 1998.

Jamie Rappaport Clark,

Director, Fish and Wildlife Service.

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