

109-91

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AB66

**Endangered and Threatened Wildlife
and Plants; Threatened Status for the
Goliath Frog**

AGENCY: Fish and Wildlife Service,
Interior.

ACTION: Proposed rule.

SUMMARY: The Service proposes to determine threatened status for the goliath frog of Central Africa. This huge amphibian is rare and narrowly distributed, and is threatened by habitat loss, commercial trade, local hunting, and perhaps other factors. This proposal, if made final, would implement the protection of the Endangered Species Act of 1973, as amended (Act), for this species. The Service seeks relevant data and comments from the public. If listed, permits would be available to enhance propagation or survival of the species and for scientific purposes that are consistent with the purposes of the Act.

DATES: Comments must be received by November 12, 1991. Public hearing

requests must be received by October 28, 1991.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Chief, Office of Scientific Authority; Mail Stop; Arlington Square, room 725; U.S. Fish and Wildlife Service; Washington, DC 20240. Comments and materials received will be available for public inspection, by appointment, from 8 a.m. to 4 p.m., Monday through Friday, in the office of Scientific Authority, room 750, 4401 North Fairfax Drive, Arlington, Virginia 22203. Express and messenger-delivered mail should be sent to the latter address. FAX messages should be sent to 703-358-2202.

FOR FURTHER INFORMATION CONTACT: Dr. Charles W. Dane, Chief, Office of Scientific Authority, at the above address (phone 703-358-1708 or FTS 921-1708).

SUPPLEMENTARY INFORMATION:

Background

Recent investigations have suggested an alarming worldwide decline in populations of frogs and other amphibians (Rabb 1990). Because of their generally complex life cycles, with aquatic larval and terrestrial adult stages, and their permeable skin, amphibians constitute a group particularly sensitive to environmental disturbances. The precise causes of the decline are not well understood, but indicated factors in various cases include forest destruction, acid rain, metallic pollution, pesticides, and soil drying. Problems have been observed in such diverse places as Western Canada, South Carolina, Guatemala, Ecuador, Puerto Rico, Borneo, and Australia.

The U.S. Fish and Wildlife Service (Service) now has received information that the largest frog in the world is among those facing these threats. This species, the goliath frog (*Conraua goliath*) of Central Africa, reaches a recorded weight of up to 7.2 pounds (3.3 kilograms), a head and body length of 12.6 inches (320 millimeters), and a total length, including the hind leg and foot, of about 32 inches (813 millimeters); there have been reports of even larger individuals (Klass 1990; Sabater Pi 1985; Zahl 1967). Surprisingly, this giant amphibian has a relatively small range. It occurs along major rivers in dense rainforest within an area of about 9,000 square miles (23,400 square kilometers) in Equatorial Guinea and southwestern Cameroon. In contrast, the common bullfrog (*Rana catesbeiana*), which is about half the size, occurs all across eastern North America from Quebec to Mexico (Frost 1985; Sabater Pi 1985; Zahl 1967).

In a petition dated April 8, 1991, the Service was requested to add the goliath frog to the List of Endangered and Threatened Wildlife. The petition is from Dr. Christina M. Richards (Biology Department, Wayne State University, Detroit, Michigan 48202) and Dr. Victor H. Hutchison (Department of Zoology, University of Oklahoma, Norman, Oklahoma 73069). It was accompanied by extensive data on the biology of the goliath frog, and pointed out such problems as slow maturation, rarity, restricted distribution, habitat destruction, local hunting, international trade, high prices for living specimens, and poor adaptation to captivity.

Section 4(b)(3) of the Endangered Species Act of 1973, as amended in 1982 (Act), requires two findings with respect to a petition to list, delist, or reclassify a species. Within 90 days of receipt, a finding must be made on whether the petition presents substantial information indicating that the requested action may be warranted, and, within 12 months of receipt, a finding must be made as to whether the action is warranted, not warranted, or warranted but precluded by other listing activity.

The Service has examined the data submitted by the petitioners and has consulted other authorities. It also has learned that the goliath frog is classified as vulnerable by the International Union for Conservation of Nature and Natural Resources. This review leads the Service to make the findings, hereby incorporated and published in this proposal, that the petition does present substantial information and that the requested action is warranted. Although currently available data indicate that a threatened classification is appropriate, the Service emphasizes that it will be seeking additional information during the comment period on the proposal, that all new data and opinions will be reviewed, and that such evaluation may lead to a final decision that is different from this proposal.

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 endangered or threatened due to one or more of the five factors described in Section 4(a)(1). These factors and their application to the goliath frog (*Conraua goliath*) are as follows:

A. *The present or threatened destruction, modification, or curtailment*

of its habitat or range. All available information shows that the goliath frog has a narrowly restricted range and that it is rare therein. Despite its spectacular size it was not formally described until 1906. Subsequent investigators have commented repeatedly on how difficult the species is to locate, approach, and capture (Gewalt 1977; Perret 1957; Perret and Mertens 1957). Data compiled by the petitioners show that only 91 specimens were reported collected through 1967. The rate of collection later increased in response to growing scientific and commercial interest. Letters solicited by the petitioners from authorities in Cameroon pointed out that logging, deforestation, and dams are affecting the limited habitat of the goliath frog.

Sabater-Pi (1985) reported that the goliath frog has an "extremely restricted and selective distribution * * * occurs in rapids and cascades of rivers with a sandy bottom and very clean, slightly tannic oxygen-rich waters * * *". The vegetation surrounding these rivers corresponds to West African (congoloid) rainforest. It has been altered mainly by human activities, such as deforestation for agricultural purposes, forest exploitation and establishment of new villages. All these factors drastically have altered the ecosystem inhabited by the species."

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* The goliath frog is avidly hunted by the native peoples within its range, who consider its meat a delicacy. Information presented by Zahl (1967) suggests that this species is so rare and difficult to approach, its capture is a cause for celebration. Sabater-Pi (1985) warned that it was threatened by native hunting and that effective protective measures were needed at the national level.

A new problem, and one causing much of the immediate concern for the species, is capture and export of live animals. Because of its size, the goliath frog is becoming increasingly popular for public and private exhibition. Advertisements submitted by the petitioners show that the asking price is \$599.00 for "small" specimens and \$2,500.00 for individuals weighing 6-9 pounds. One U.S. dealer is reported to have imported 50 individuals and to have attempted to enter some in the well-known Frog Jump Jubilee in Calaveras County, California.

In a letter to the petitioners, Bob Johnson, Curator of Amphibians and Reptiles at the Toronto Metropolitan Zoo, expressed concern that current levels of commercial exploitation might

be excessive in relation to sustainability of wild populations of *Conraua goliath*. He noted also that survival rates in previous importations have not been high, primarily because of shipping stress and the time required to acclimate the species to captive conditions.

C. Disease or predation. While not now known to be general problems, disease and natural predation are to be expected and may become of serious conservation concern for populations that already have been severely reduced or fragmented through human disturbance.

D. The inadequacy of existing regulatory mechanisms. The goliath frog is not covered by the Convention on International Trade in Endangered Species of Wild Fauna and Flora. There are no substantive measures restricting exploitation, trade, or habitat destruction.

E. Other natural or manmade factors affecting its continued existence. Although *Conraua goliath* is by far the world's largest frog, its eggs, tadpoles, and young are hardly larger than those of other frogs (Sabater-Pi 1985; Zahl 1967). The petitioners therefore state that *C. goliath* undoubtedly takes a longer time than do most frogs to become sexually mature, and a mature animal removed from a population will not be replaced quickly. The note also that mortality in captivity is extremely high, and zoos have been unable to keep specimens for long term display.

The decision to propose threatened status for the goliath frog was based on an assessment of the best available scientific information, and of past, present, and probable future threats to the species. This giant frog is rare and narrowly distributed, and is vulnerable to human exploitation and environmental disruption. Questions about its status remain, however, and the Service will attempt to obtain and evaluate new information during the comment period. Critical habitat is not being proposed, as its designation is not applicable to foreign species.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened pursuant to the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages conservation measures by Federal, international, and private agencies, groups, and individuals.

Section 7(a) of the Act, as amended, and as implemented by regulations at 50 CFR part 402, requires Federal agencies to evaluate their actions that are to be

conducted within the United States or on the high seas, with respect to any species that is proposed or listed as endangered or threatened and with respect to its proposed or designated critical habitat (if any). Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a proposed Federal action may affect a listed species, the responsible Federal agency must enter into formal consultation with the Service. No such actions are currently known with respect to the species covered by this proposal.

Section 8(a) of the Act authorizes the provision of limited financial assistance for the development and management of programs that the Secretary of the Interior determines to be necessary or useful for the conservation of endangered species in foreign countries. Sections 8(b) and 8(c) of the Act authorize the Secretary to encourage conservation programs for foreign endangered species, and to provide assistance for such programs, in the form of personnel and the training of personnel.

Section 9 of the Act, and implementing regulations found at 50 CFR 17.21 and 17.31 set forth a series of general prohibitions and exceptions that apply to all threatened wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take, 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 threatened wildlife. It also is illegal to possess, sell, deliver, transport, or ship any such wildlife that has been taken in violation of the Act. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered and threatened wildlife under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22, 17.23, and 17.32. Such permits are available for scientific purposes, to enhance propagation or survival, or for incidental take in connection with other such lawful activities. All such permits must also be consistent with the purposes and policy of the Act as required by Section 10(d) of the Act. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship that would be suffered if such relief were not available. For threatened species, there are also permits for

zoological exhibition, educational purposes, or special purposes consistent with the purposes of the Act.

Public Comments Solicited

The Service intends that any final rule adopted will be accurate and as effective as possible in the conservation of endangered or threatened species. Therefore, comments and suggestions concerning any aspect of this proposed rule are hereby solicited from the public, concerned governmental agencies, the scientific community, industry, private interests, and other parties. Comments particularly are sought concerning the following:

- (1) Biological, commercial, or other relevant data concerning any threat (or lack thereof) to the subject species;
- (2) The location of any additional populations of the subject species;
- (3) Additional information concerning the distribution and population status of this species;
- (4) Current or planned activities in the involved areas, and their possible effect on the subject species.

The final decision on the proposed listing of the subject species will take into consideration the comments and any additional information received by the Service, and such communications may lead to a decision that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed by 45 days from the date of publication of the proposal, should be in writing, and should be directed to the party named in the above "ADDRESSES" section.

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

Literature Cited

- Frost, D.R., ed. 1985. Amphibian species of the world. A taxonomic and geographical reference. Allen Press and Association of Systematic Collections, Lawrence, Kansas, v + 732 pp.
- Gewalt, W. 1977. Einige Bemerkungen über Fang, Transport und Haltung des Goliathfrosches (*Conraua goliath* Boulenger). Zool. Garten 47:161-192.
- Klass, T. 1990. Monster frogs have leg up on other jumpers. Ann Arbor News, January 9.

Perret, J.-L. 1957. Observations sur *Rana Goliath* Blgr. Bull. Soc. Neuchateloise Sci. Nat. 80:195-202.

Perret, J.-L. and R. Mertens. 1957. Etude d'une collection herpetologique faite au Cameroun de 1952 a 1955. Bull. de I.F.A.N. 19:548-601.

Rabb, C.B. 1990. Declining amphibian populations. Species, no. 13-14, pp 33-34.

Sabater-Pi, J. 1985. Contribution to the biology of the giant frog (*Conraua goliath*, Boulenger). Amphibia-Reptilia 6:143-153.

Zahl, P.A. 1967. In quest of the world's largest frog. Natl. Geogr. 134:446-452.

Author
 The primary author of this proposed rule is Ronald M. Nowak, Office of

Scientific Authority, U.S. Fish and Wildlife Service, Washington, DC 20240. (703-358-1708 or FTS 921-1708).

List of Subjects in 50 CFR Part 17

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

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: 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. It is proposed to amend § 17.11(h) by adding the following, in alphabetical order under AMPHIBIANS, 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						
Amphibians							
Frog, goliath.....	<i>Conraua goliath</i>	Cameroon, Guinea.	Equatorial Entire.....	T	NA	NA.

Dated: August 16, 1991.
Bruce Blanchard,
Acting Director.
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