



## ENDANGERED SPECIES TECHNICAL BULLETIN

Department of the Interior • U.S. Fish and Wildlife Service • Endangered Species Program, Washington, D.C. 20240

# TELLICO DAM GETS GO-AHEAD



photo courtesy of Tennessee Valley Authority

Construction of Tellico Dam (background) continues as biologists remove snail darters from the Little Tennessee River

Fisheries biologists have begun to remove the remaining snail darters (*Percina tanasi*) from their home in the Little Tennessee River, pending the imminent completion of Tennessee Valley Authority's (TVA) Tellico Dam.

Construction of the dam—destined to inundate the Critical Habitat of the Endangered darter—resumed September 26, one day after President Carter signed a comprehensive energy and water development appropriations package sanctioning, among other things, the Tellico project. Brought to the House floor by Rep. John Duncan of Tennessee, the bill authorizes and directs TVA to complete, operate, and maintain the Tellico Dam and Reservoir Project, and specifically exempts the project from compliance with the Endangered Species Act of 1973 and other Federal laws.

The Tellico project had been denied an exemption from the protective requirements of the 1973 Act upon the unanimous vote of a cabinet-level Endangered Species Committee created under 1978 Amendments to the law (see January 1979 and October 1978 BULLETINS). In arriving at their decision, Committee members questioned the costs of the dam (which they concluded clearly outweighed the benefits of the project), recommending river development—maintaining the darter's natural habitat—as TVA's most feasible alternative to the dam and reservoir.

Earlier, the U.S. Supreme Court acted to halt completion of the dam, ruling that prohibitive language under Section 7 of the Act is "plain and makes no exception for projects such as Tellico" (upholding a U.S. Sixth District Court of Appeals decision, in a suit brought by a group of environmentalists, enjoining dam completion—see June 1978 BULLETIN).

## ALLIGATOR IMPORT/EXPORT CONTROLS ADOPTED

Ending a decade-long ban on international trade in the American alligator (*Alligator mississippiensis*), the Service has finalized regulations allowing limited commercial trade of alligator hides in the world market (F.R. 10/12/79).

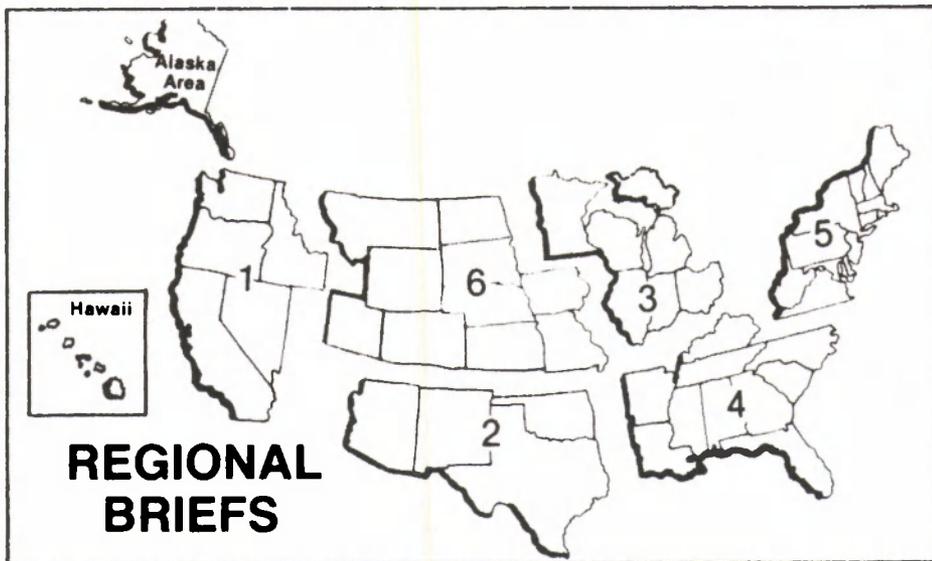
In line with the alligator's recent reclassification to less restrictive categories under an international wildlife treaty as well as the Federal Endangered Species Act, these new rules are designed to permit controlled trade in

the species—through the imposition of marking, permits, and other special requirements—while preventing protected American alligators from entering world trade.

Commenting on the new regulations, Fish and Wildlife Service Director Lynn Greenwalt said, "This change in the rules governing international trade in alligator hides is possible today because of the success of Federal and

*Continued on page 4*

*Continued on page 3*



## REGIONAL BRIEFS

Endangered Species Program regional staffers have reported the following activities for the month of September.

**Region 1.** Reports of three grizzly bear (*Ursos arctos horribilis*) killings were received in September: One in Washington (shot by a hunter and his

guide, who have been apprehended); one in Wyoming (killed by an Idaho sheepherder); and one in Idaho (shot with an arrow in the Island Park area). Law Enforcement agents are investigating the incidents.

Regional personnel have completed negotiations toward the purchase of

one of two key tracts on the Antioch Dunes, essential to the survival of the Contra Costa wallflower (*Erysimum capitatum* var. *angustatum*), Antioch Dunes evening-primrose (*Oenothera deltoides* ssp. *howellii*), and Lange's metalmark butterfly (*Apodemia mormo langei*). The Service hopes to reprogram funds for purchase of the entire Antioch Dunes area, now imminently threatened by industrial and residential development, sand mining, and a planned marina.

**Region 2.** Contingency plans to deal with Endangered species affected by the Mexican oil spill, including a treatment center for peregrine falcons (*Falco peregrinus*) in Texas, have been drawn up.

The Southwest Bald Eagle Recovery Team met and discussed the need to review several proposals on research needs.

The Mexican Wolf Recovery Team, headed by Norma Ames, New Mexico Department of Game and Fish, held its first meeting. The team evaluated the status of the wolf in Mexico and the possible involvement of the 7 individuals now in the captive-breeding program.

**Region 3.** A follow-up intended to chart the success rate of bald eagle (*Haliaeetus leucocephalus*) transplants and reintroductions is being prepared. Regional personnel expect this to aid future projects.

**Region 4.** Service efforts to improve nesting success of loggerhead sea turtles (*Caretta caretta*) on Cape Island, South Carolina, were abruptly terminated on September 4, 1979, by the passage of Hurricane David. Possibly 25,000 eggs that had been removed from eroding beach areas and transplanted under raccoon proof wiring were destroyed when 7-foot tides swept across the Island. The project was not a complete loss, however, as approximately 12,500 hatchlings had previously emerged from the enclosures and safely entered the ocean.

Hurricane David also had its impact on sea turtles in Florida. The Florida Marine Patrol reported that thousands of dead hatchlings washed ashore between New Smyrna Beach and West Palm Beach as a result of the storm.

**Region 5.** Service representatives met in West Virginia with the owners of caves which have been repropoed as Critical Habitat for the Virginia big-eared bat (*Plecotus townsendii virginianus*) to allay their fears about what a Critical Habitat designation might mean to them.

Three of four known populations of northern wild monkshood (*Aconitum*

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### U.S. Fish and Wildlife Service Regions

**Region 1:** California, Hawaii, Idaho, Nevada, Oregon, Washington, and Pacific Trust Territories. **Region 2:** Arizona, New Mexico, Oklahoma, and Texas. **Region 3:** Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. **Region 4:** Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, and the Virgin Islands. **Region 5:** Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia. **Region 6:** Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming. **Alaska Area:** Alaska

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*noveboracense*) were visited during field surveys in the Catskill Mountains of New York. The plants appear to be doing well.

**Region 6.** A Colorado outfitter—mauled in a reportedly unprovoked attack by a grizzly bear—survived his fight with the animal by stabbing it twice with an arrow. The female bear, taken near the headwaters of the Navajo River in the southern San Juan

Mountains (on the west side of the continental divide) is the first grizzly killed in the State since 1951 (when a Federal trapper was killed by a bear caught in his trap). Colorado officials are aware of only two other unconfirmed sightings of grizzlies (both in this general area in the 1960's), and are hopeful that others may survive in the State.

In other grizzly news, Don Brown of the Montana Department of Fish,

Wildlife, and Parks has been selected to prepare a recovery plan for the grizzly bear. Brown's 1-year assignment began on September 10.

As a result of an intra-Service section 7 consultation (during which the need for better hunter education was stressed), the accompanying poster was prepared for display throughout the refuge system in Region 6.

**Alaska Area.** Attempting to reestablish nesting populations of Aleutian Canada Geese (*Branta canadensis leucoareia*) on Agattu Island, the Service released 252 of the birds this summer. Of this total, 203 were captive-bred at the Amchitka Island facilities and the Patuxent Research Center, 41 were wild goslings and adults trapped on Buldir Island, and 8 were wild "guide" birds trapped on the wintering grounds in California. A total of 226 geese were hatched and raised this year at Amchitka, Patuxent, and Northern Prairie Research Centers. The patuxent and Northern Prairie birds have been shipped to Amchitka for over-wintering for next year's release.

Two meetings on the peregrine falcon were held in the Alaska Area Office. The four recovery team leaders met to discuss the Mexican oil spill and its effects on migrating falcons and this winter's research and survey on Latin American wintering grounds. There was also a meeting of the Alaskan Peregrine Falcon Recovery Team during which many of the same topics were discussed.

# HUNTER ALERT!



**BALD EAGLE**

Adults: White head and tail  
Immatures: Brown, mottled irregularly with white



**PEREGRINE FALCON**

About size of crow; long pointed wings,  
swift flyer



**WHOOPING CRANE**

Adults: Large white crane, wing-tips  
black, neck outstretched in  
flight  
Immatures: Similar size, distinctive rust  
colored markings

# DON'T SHOOT

THESE ENDANGERED SPECIES  
ARE PROTECTED BY THE  
ENDANGERED SPECIES ACT.  
ANY HARASSING, KILLING,  
WOUNDING, CAPTURING OR  
COLLECTING IS ILLEGAL.

FISH AND WILDLIFE SERVICE  
U.S. DEPARTMENT OF THE INTERIOR



**YOUR COOPERATION WILL AID IN THE WORLD-WIDE  
EFFORT TO PROTECT ENDANGERED ANIMALS!**

## Tellico Dam

*Continued from page 1*

Upon signing the legislation, President Carter said, "I accept, with regret, this action as expressing the will of Congress in the Tellico matter," and expressed his concern that a veto would likely result in repeated proposals to exempt the dam. "Nevertheless," he noted, "I believe firmly in the principles of the Endangered Species Act, and will enforce it vigorously. . . . I am convinced that this resolution of the Tellico matter will help assure the passage of the Endangered Species Act reauthorization without weakening amendments or further exemptions."

## Transplants

The interagency team of biologists from our Service, TVA, the Tennessee Wildlife Resources Agency, and the University of Tennessee have about a month to find and rescue darters known to occur on the shoal areas

*Continued on page 11*

*This warning to hunters is the result of an intra-Service Section 7 consultation.*

## Alligator Regs.

Continued from page 1

State protection of the alligator." (The alligator was first listed under the Endangered Species Conservation Act of 1966, when its populations were declining rapidly due to habitat loss and overexploitation.) While the species remains protected throughout most of its range, Greenwalt noted that alligator populations have increased substantially in portions of the U.S., where their legal take "...will prevent the waste of a valuable resource."

### Background

In response to improvements in the alligator's status, the species has been the subject of various domestic and international classifications. Before detailing the nature of the present ruling, a chronology of Service and international alligator "listings" may be helpful:

- In 1975, alligators in the Louisiana parishes of Vermillion, Cameron, and Calcasieu were reclassified from Endangered to "Threatened—Similarity of Appearance (T-S/A)," allowing the State to conduct strictly regulated hunting in these areas. (Under the Endangered Species Act of 1973, a species may be treated under the T-S/A provisions when it so closely resembles an Endangered or Threatened species that its indistinguishability impairs enforcement efforts, thereby posing an additional threat to the listed species.)

- In January 1977 (see February 1977 BULLETIN), populations of the American alligator throughout Florida and in coastal areas of South Carolina, Georgia, Louisiana, and Texas were reclassified from Endangered to the less restrictive Threatened category, allowing through special regulation (1) the taking of alligators by State agents working under a Cooperative Agreement with our Service to carry out scientific research or conservation programs and (2) the taking of sick, orphaned, or problem animals by Federal or State agents when live capture and release has not eliminated their threat to human safety. (The State of Florida has since conducted a nuisance control program to keep troublesome gators away from populated areas—see November 1978 BULLETIN.)

- Alligators in an additional nine Louisiana parishes (Iberia, St. Mary, Terrebonne, Lafourche, St. Charles, Jefferson, Plaquemines, St. Bernard, and St. Tammany) were proposed by the Service for reclassification as T-S/A (subsequent to a petition from



Alligator products must have a numbered Fish and Wildlife Service label attached before they can be sold outside the "closed system."

Governor Edwin Edwards). At this time, the Service also proposed amended procedures for regulating commercial activities involving lawfully-taken alligators (including permit requirements, the marking of hides, the sale of meat, and import/export controls—see November 1978 BULLETIN). Finally, the Service also announced its intent to review the status of the alligator throughout Louisiana to determine if further reclassification may be warranted.

- Internationally, parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) adopted in March 1979 a U.S. proposal transferring the American alligator from the Convention's Appendix I to Appendix II. This new classification generally denotes that regulated trade poses a lesser degree of threat, and conditionally permits controlled international commerce in the species providing, in this particular case, that (1) U.S. regulations allow such trade in the species and (2) export of the species is not found by the U.S. Scientific Authority for CITES to be detrimental to its survival (or the survival of other crocodilians) in the wild. (See April 1979 BULLETIN.)

- In May 1979, the Endangered Species Scientific Authority (ESSA) proposed findings in favor of alligator exports (contingent upon promulgation of enabling U.S. regulations) based on its preliminary conclusions that (1) trade would not be detrimental to the species' survival in the wild and (2) trade in alligator products would not jeopardize other look-alike crocodilians protected under CITES (see June 1979 BULLETIN), as long as its trade is strictly monitored.

(The ESSA proposal further called for U.S. licensing only of foreign buyers, tanners, and fabricators located in countries that have ratified CITES *without* reservations for endangered (Appendix I) crocodilians, and for the indelible marking of all alligator hides on their undersides before export to facilitate enforcement.)

- In June 1979, the Service finalized reclassification of the American alligator to T-S/A in 9 Louisiana parishes,

increasing to 12 the number of parishes where the species may be lawfully taken by controlled harvest.

- In July 1979, following the review of comments on the enforceability and other aspects of the proposed amendments regulating commerce in alligators, the Service repropoed a tight network of trade controls in alligator products, taking into consideration the changes in the species' domestic and international classification. (This proposal was not summarized in the BULLETIN due to delays in printing.)

- In a September 1979 ruling, the Service amended regulations authorizing Louisiana to harvest and market T-S/A alligators in 12 parishes.

- On October 12, 1979, ESSA finalized its findings in favor of 1979 alligator exports (see story on page 8).

### Final Service Regulations

Under the October rulemaking, domestic and international commerce in alligator hides and their products will be controlled in a "closed system" designed to ensure that only legally taken hides enter the system and only products made from them leave it.

First, all raw alligator hides must be fitted by the State with a noncorrodible, numbered tag, and data describing the take must be recorded. Only buyers, tanners, and fabricators with valid Federal permits may deal in the hides, which are to bear State tags throughout the tanning process. After a product (such as a wallet) is completed, the fabricator must affix a numbered Fish and Wildlife Service label before the product can be sold to others outside the closed system.

Export and import of the hides and manufactured products of lawfully taken alligators are then allowed if conducted in accordance with CITES. Appropriate Convention documentation would be the only additional requirement for the export or import of hides tagged by the State and/or products affixed with the Service's engraved label. (Permits issued to U.S. residents may carry both Federal and CITES authority.)

Both domestic and foreign buyers, tanners, and fabricators must meet a

number of conditions to qualify for the required Federal permits, and must comply with all reporting and record-keeping requirements to continue their participation in the worldwide system. Fabricators would be required to document the relationship between hides received and finished products. Additionally, permittees would be required to maintain complete and accurate records of dealings in the hides of other crocodylians, including those species most likely to be commingled with American alligators: other alligators, crocodiles, caimans, and gavials (see ESSA report on page 8).

More stringent requirements are imposed on foreign permit applicants, who also must appoint an agent for the service of process and to identify any property held in the United States. This would enable the Service to impose civil penalties and to revoke a permit when necessary, removing the permittee from lawful trade in American alligators.

[Beyond those conditions under which permits may be granted under the Service ruling, general permits may also be issued (under 50 CFR 17.32) for Threatened alligators for scientific, zoological exhibition, or educational purposes; to enhance the propagation or survival of the species; for economic hardship; or for other special purposes consistent with the purposes of the Endangered Species Act.]

#### Effects on Commerce

Having the most significant impact on international trade in the species, the new Service regulations also apply to domestic commerce in American alligators taken in accord with Federal and State laws and regulations.

Finished hide products bearing the Service alligator label may be sold wherever State law permits throughout the United States (as well as in the world market), although interstate commerce in parts and meat other than hides remains unlawful. (Raw hides which have been tagged may be transported across State lines under applicable State permits to buyers, tanners, or fabricators holding valid Federal permits.)

The new ruling will affect alligators:

(1) taken from the wild during Louisiana's controlled hunt (when as many as 15,000 will be taken in the 1979 season) and taken before June 1979 in accord with ESSA's ruling;

(2) taken in Florida's nuisance control program (accounting for between 1,600 and 2,000 hides auctioned annually); and

(3) born or "lawfully placed" in captivity wherever found.\* (Some 1,000

hides may be produced on alligator farms in the southeast this year.)

Consumers within both Louisiana and Florida can now eat alligator steak in local restaurants under the new Service ruling and special State regulations. (Louisiana adopted controls over the sale of meat some time ago, contingent upon Federal authorizing regulations, and Florida's new regulation will permit the restricted sale of specially-marked containers of meat to canneries, restaurants, and non-human food processors within Florida after October 23.)

The sale of hides and alligator parts and products is also permitted in Louisiana, where there has been a market

for hide products since their sale became lawful in 1975. Only belly skins may be legally auctioned under Florida permits, however.

Except in the handful of States (including Florida and Georgia) where the sale of alligator parts and manufactured products remains prohibited under State law, consumers may soon see a resurgence of alligator shoes, handbags, and other lawfully processed goods in the foreign and American marketplace.

\* A separate permit is no longer available under 50 CFR 17.52 (Similarity of Appearance) to deal with permit holders in captive-produced skins.

## RED-COCKADE TO BENEFIT FROM MULTI-AGENCY RECOVERY EFFORT

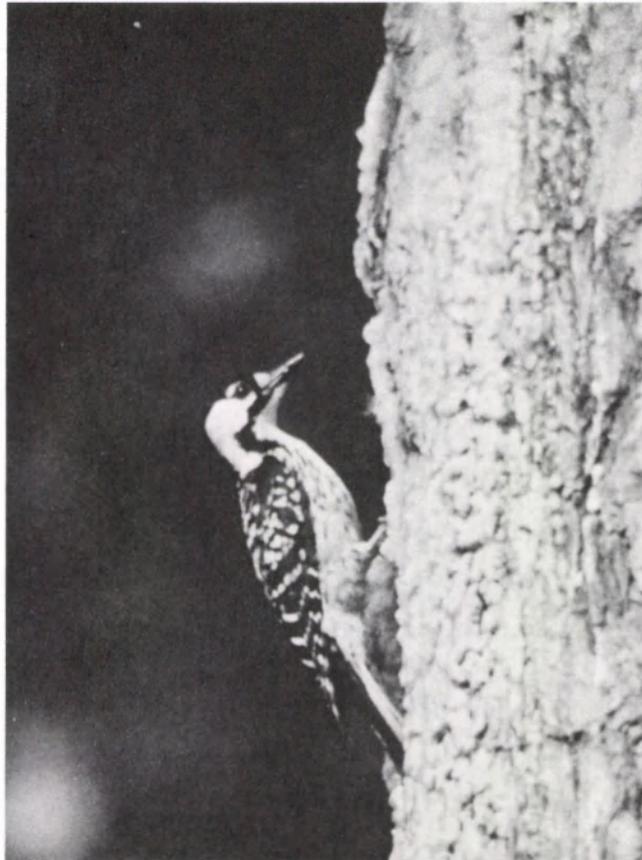
A plan to boost the recovery of the red-cockaded woodpecker (*Picoides [=Dendrocopos] borealis*)—likely to involve the cooperative efforts of Federal, State, and private agencies throughout the Southeastern U.S.—has been approved by the Service.

First listed as Endangered in 1970, the red-cockaded woodpecker has continued to decrease in numbers (now estimated at under 10,000) due primarily to a reduction in suitable

habitat. The Service-appointed recovery team for the species believes that lack of knowledge of the species' distribution, habits, and habitat requirements has also been a factor precluding effective management.

The red-cockade is non-migratory, occurring in the Southeastern States (with large concentrations on national forests in South Carolina and northern Florida). The species is unique in that

*Continued on page 6*



*The red-cockaded woodpecker builds its nest cavities in living pine trees averaging 75 years of age.*

## Red-Cockade

*Continued from page 5*

it seems to prefer open pine forests with sparse ground cover, where it builds its nest cavities in living pine trees averaging 75 years of age (usually with red-heart disease).

Calling for a coordinated, inter-agency program geared to recovering the red-cockade to non-endangered status by conserving the forest ecosystem on which it depends, the recovery plan relies heavily on the basic purposes of the Endangered Species Act. Its major goals include: (1) complete inventories of existing populations to determine the species' current status, distribution, and population trends (and to measure the effects of management); (2) protection and management of existing colonies through optimum silvicultural techniques; (3) reintroduction of red-cockaded woodpeckers into parts of their former range; and (4) attempts to link isolated populations by suitable habitat corridors to promote gene flow.

As outlined in the plan, forest management practices compatible with the species' needs are vital to the recovery of the woodpecker—not only because of its widespread occurrence on public forest lands, but also because of the almost irreversible effect of habitat loss and manipulation on remaining woodpecker colonies. "Until effects of different forest management practices on the species have been adequately documented," team leader Jerome A. Jackson says "we urge a conservative approach to management of the bird."

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## ARIZONA TROUT RECOVERY PLAN APPROVED

The Service has approved a recovery plan for the Arizona trout (*Salmo apache*), a fish species reduced by introduced non-native species. According to the plan, establishment and/or maintenance of 30 self-sustaining populations throughout the species' historic range will remove the Arizona trout from its current Threatened status.

The present distribution of Arizona or "Apache" trout is, for the most part, limited to the headwaters of the White and Black River drainages on the Fort Apache Indian Reservation. A range of genetically pure *Salmo apache* that once extended approximately 600 miles is now down to about 30 miles, largely due to introduced non-native salmonids. These fish outcompete Arizona trout for food and space and

To enhance the woodpecker's chances of survival, the team recommends longer stand rotations (100 years for longleaf and 80 for other pines), thinning of stands, prescribed burning to maintain low ground cover, the retention of some live and dead hardwoods (to reduce competition from other cavity-nesters), and a reduction in the use of pesticides on public forests within the species' range. (The National Forest Service has been cooperating in an effort to institute longer rotation and other beneficial practices, and the forest management guidelines accompanying the recovery plan are based largely on those initially prepared by the Forest Service.)

Together with other Federal land-managing agencies (as well as cooperating States, timber companies, and private landowners), the Forest Service and our Service plan to coordinate an intensive survey to determine the status of the red-cockaded woodpecker throughout its range.

A recently-formed ad hoc committee has formulated a stratified sampling methodology, and now expects to survey woodpecker colonies on Federal and State, private, and then commercial. (The committee will coordinate the collection of field data—aiming for completion early in 1981, and incorporate its findings in a final report.)

It is hoped that these data will enable specialists to determine the status and (through repeated surveys) population trends of the species on which to base a sound recovery program.

tend to prey upon them. Also, rainbow and cutthroat trout (*S. gairdneri* and *S. clarki*) contaminate the Arizona trout gene pool through hybridization.

Conservation of Arizona trout began in the late 1940's with the White Mountain Apache Tribe because at that time all known populations of the species were on the Fort Apache Indian Reservation. Sport fishing for the species was halted in 1955, in all Mount Baldy streams that still contained the fish. The Fish and Wildlife Service and Arizona Game and Fish Department, in cooperation with the Tribe, conducted surveys to determine the status of the species. As a result of the surveys, a hatchery propagation program was started and the species was introduced into Christmas Tree, Bear Canyon, Becker and Lee Valley Lakes, and prepared streams on the Apache-Sitgreaves, Kaibab, Tonto, and Coronado National Forests.

To continue these efforts, which led to the Arizona trout being down-listed in 1975 from Endangered to Threatened, the plan calls for surveys of

streams containing the species (at least every three years) to ensure that they have not been contaminated with exotic species. Surveys will also be done to locate suitable streams for the reintroduction of Arizona trout. These streams will be prepared for Arizona trout by constructing artificial barriers, if necessary, and removing other salmonid species that would compete or hybridize with Arizona trout.

The plan anticipates a recovery of the species to the point where it could be harvested on a sustained yield basis to meet the demand for Arizona trout as a sport fish.

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## SERVICE FINALIZES CAPTIVE WILDLIFE REGULATIONS

The Service has finalized a new system of rules—easing restrictions on taking, interstate and foreign commerce, and other generally prohibited activities—designed to encourage the captive breeding of Endangered and Threatened wildlife (F.R. 9/17/79).

### Rationale

Captive propagation is, in many cases, important to the conservation of Endangered and Threatened species. It can help restore declining populations in the wild, reduce the need to remove specimens from wild stocks, and increase our knowledge of the species. The Service, therefore, believes that many activities involved in the maintenance and propagation of captive wildlife should be permitted when wild populations are sufficiently protected from unauthorized taking, and when it can be shown that such activities will not be detrimental to wild or captive populations of the species.

Previous regulations have evidently hindered propagation efforts to the point where some wildlife breeders were forced to cease their activities, or to limit the number of offspring being produced (as the lawful market for the progeny was restricted).

### Provisions/Definitions

The new rule has redefined and clarified terms to simplify eligibility as well as reporting requirements for captive wildlife breeders.

(Generally, prohibited activities involving species listed as Endangered under the Endangered Species Act of 1973 may be allowed under permit for

scientific purposes or to enhance the propagation or survival of the species. For Threatened species, permits may be issued for these same purposes as well as for zoological exhibition, educational purposes, economic hardship, or other special purposes consistent with the purposes of the Act.)

Under the September ruling, the definition of the term "bred in captivity" or "captive bred" is similar to the one developed by nations party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) at their meeting in March 1979 (see April 1979 BULLETIN). These two terms refer to "wildlife, including eggs, born or otherwise produced in captivity from parents that mated or otherwise transferred gametes in captivity, if reproduction is sexual, or from parents that were in captivity when development of the progeny began, if development is asexual." For purposes of the Act, this new definition (less restrictive than that included in the Service's proposal in the May 23, 1979, *Federal Register*) excludes the portion in the CITES definition limiting consideration to progeny of parental stock that is established, maintained, and managed in certain ways. This simpler definition was adopted to avoid inbreeding of captive wildlife which could be detrimental to the species in the long run. (The stricter CITES language will be used, however, when activities covered

in this rule are also subject to the Convention.)

The term "captivity" is applied to captive-bred wildlife as considered in this rule as well as any species of wildlife for which captive populations may receive special treatment under the Act. Regulations for captive self-sustaining populations (CSSP's) are superseded by this final rule as there is no longer a need for special regulations for these few otherwise Endangered species. [The 11 CSSP's were: jaguar (*Panthera onca*), black lemur (*Lemur macaco*), ringtailed lemur (*Lemur catta*), leopard (*Panthera pardus*), tiger (*Panthera tigris*), brown eared pheasant (*Lophura edwardsi*), bar-tailed pheasant (*Syrmaticus humiae*), Mikado pheasant (*Syrmaticus mikado*), Palawan peacock pheasant (*Polyplectron emphanum*), Swinhoe's pheasant (*Lophura swinhoii*).] The Service has phased out CSSP provisions to allow holders of valid permits to be registered under the present rule.

#### Eligibility

The rulemaking authorizes registered captive breeders to take, import and export, deliver, receive, carry, transport or ship in interstate or foreign commerce any Endangered or Threatened wildlife that is bred in captivity in the United States. Author-

ization is limited, however, by these conditions:

- Species must be either exotic to the U.S. or native wild populations which the Service has determined to be adequately secure from unauthorized taking.

- The purpose of authorized activities must be to enhance the propagation or survival of the species.

- Activities involving interstate or foreign commerce in the course of commercial activity with non-living wildlife are not authorized. This is intended to discourage propagation of Endangered and Threatened species for consumptive markets.

- Re-import is allowed only if specimens were adequately identified when previously imported. Because no single method of marking is suitable for all forms of wildlife, the Service will accept any reliable method (such as marking or a written description of identifying characteristics) that can be used to distinguish wildlife bred in captivity in the U.S. from other wildlife being imported.

- Authorization is extended only to persons who register with the Service.

*Continued on page 9*

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*Zoos and other institutions involved in captive breeding will benefit from new Service regulations.*



photo courtesy of Lothar Schiawe

## ENDANGERED SPECIES SCIENTIFIC AUTHORITY

Notices—September 1979

Composed of representatives from seven Federal agencies, the Endangered Species Scientific Authority (ESSA) was established by Executive order to insure the scientific soundness of governmental decisions concerning trade in endangered species of animals and plants. As the U.S. Scientific Authority for the Convention on International Trade in Endangered Species of Wild Fauna and Flora, ESSA reviews applications to export and import species protected under the Convention, reviews the status of wild animals and plants impacted by trade, monitors their trade, makes certain findings concerning housing and care of protected specimens, and advises on trade controls.

### FINDINGS ISSUED FOR FIVE APPENDIX II SPECIES

Final export findings for the bobcat, lynx, river otter, and two other species protected under Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) were published by ESSA in the September 26, 1979, *Federal Register*.

Articles II 2(a) and (b) of CITES respectively require that the export of Appendix II species not be detrimental to (1) the survival of the species and/or (2) the survival of similar species protected by the Convention. Accordingly, ESSA has made two separate findings, respective to subsections (a) and (b), for bobcat (*Lynx rufus*), lynx (*Lynx canadensis*), and river otter (*Lutra canadensis*). Additionally, it made findings for export of Alaskan brown bear (*Ursus arctos*) and Alaskan gray wolf (*Canis lupus*) relative to subsection (b) only (see May and August 1979 BULLETINS).

Findings under appropriate CITES provisions must be positive on the basis of biological, harvest, distribution, and other applicable data (under adopted ESSA guidelines—see F.R. 3/16/78) as well as acceptable State management programs (under guidelines developed by ESSA and the U.S. Management Authority for CITES) before export can be allowed.

Substantial comments, primarily in the form of State reports in response to ESSA's advance notice (F.R. 4/30/79) and proposed findings (F.R. 7/12/79 and 9/7/79), supported no detriment findings for several States not

originally proposed for export approval.

### Findings Under Article II 2(a)

Conditional "no detriment" export findings (1979–80 harvest) under 2 (a) were made as follows:

**Bobcat:** Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Kansas, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Mexico (Q: 6,000), New York, North Carolina, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, Navajo Nation.

**River otter:** Alabama, Alaska, Arkansas, Connecticut, Delaware, Florida, Georgia, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, New Hampshire, New York, North Carolina, Oregon, South Carolina, Vermont, Virginia, Washington, Wisconsin.

**Lynx:** Alaska, Idaho, Minnesota, Montana, Washington.

### Findings Under Article II 2(b)

ESSA found that export of specimens of the three above species, as well as the gray wolf and brown bear from Alaska only, will not be detrimental to the survival of similar species protected by CITES. Tagging and other conditions for export were established relative to both findings for all five species.

Summaries of the guidelines used by ESSA (and the U.S. Management Authority) to determine their findings and of general comments are included in the final rulemaking.

### FINAL ALLIGATOR FINDINGS

Concurrent with Service regulations governing trade in the American alligator (*Alligator mississippiensis*), ESSA has found in favor of the commercial export of alligator hides (F.R. 10/12/79—see story on page 1).

Finalizing its proposals of May 31 and August 13, 1979, ESSA has determined that the export of hides legally taken prior to June 28, 1979 (the effective date of the alligator's Appendix II classification under the Convention) and during 1979 will not be detrimental to the species' survival or to the survival of other endangered crocodilians in the wild.

In its May 1979 notice, ESSA proposed findings in favor of alligator export only to nations that are parties to CITES and have not taken "reservations" for crocodilian species. This

condition conflicted with the Service's proposed alligator regulations, wherein any foreign permit applicants—in party or non-party nations—could qualify for inclusion in the market network if all permit conditions were met.

Following the review of comments on its proposal, and discussions with Service law enforcement and U.S. Management Authority officials, ESSA has withdrawn its proposed condition that exports be restricted to CITES parties (without reservations for crocodilians), deferring to the Service the administration of its foreign licensing system.

In its final ruling, ESSA expressed its concern over the effect alligator exports may have on other crocodilian species, noting that "access to alligator hides may subsidize firms that use other crocodilian species to their detriment." ESSA acknowledged that access to alligators might reduce the demand for a supply of endangered crocodilians, however, noting that Service recordkeeping requirements should facilitate trade monitoring and provide data on the effect of alligator trade on other crocodilians. (Service regulations also prohibit permittees from violating any State, Federal, or foreign law concerning the products of crocodilians.)

To ensure compliance with CITES requirements, all permit applications involving buyers, tanners, or fabricators in foreign nations (with facilities outside the U.S.) will be reviewed by ESSA before permit issuance. Moreover, ESSA will review available and new information from permittees before establishing findings for the 1980 harvest. (In addition to initially reporting on transactions in Appendix I crocodilians for the previous 5 years as a permit condition, permittees will have to report annually to the Service on their dealings in American alligators and Appendix I crocodilian species.)

Finally, ESSA has also determined that the marking and labelling system established by the Service and State agencies appears adequate to allow control of trade, and will not impose marking on the underside of hides as an export condition for 1979.

**ESSA  
Correction** With reference to our September 1979 report on ESSA's ginseng findings, the list of States from which exports have been approved by ESSA (as well as the MA) for 1979 includes Ohio. Also export *has not* been approved by ESSA for Indiana. We regret any inconvenience this error may have caused.

## Captive Breeding

Continued from page 7

As specified in the final rule, registration is extended to persons conducting research (such as pathology) directly related to propagation or survival, even though they might not maintain living specimens.\* Also included are exhibitors of wildlife attempting to educate the public on the ecological role and conservation needs of wildlife. The list of application requirements has been amended to request information on how this education will be accomplished.

### New Reporting Requirements

Persons registering with the Service in accordance with these regulations must keep written records of their authorized activities and make an annual report to the Service. (The Service found no advantage in requiring reports within 10 days of each taking or semiannually, as it had originally proposed.) In the case of interstate commerce, both the buyer and seller must be registered. Registrants must obtain approval from the Service before exporting or entering into foreign commerce if the affected captive-bred wildlife will not remain under the care of the registrant. This requirement is intended to limit access to captive-bred wildlife to qualified persons and to deter potentially harmful release of captive-bred wildlife into the wild.

### U.S. Species

To determine which native species the general permission of this rule applies to, the Service has established the following criteria:

(1) the species must be in low demand for taking from the wild because of successful captive breeding or other reasons, and

(2) wild populations must be effectively protected from unauthorized

\* Organizations conducting research on non-human primates voiced concern on what they called "the imposition of repressive regulations on the utilization of individual animals captive bred specifically for research use." The Service maintains that the primary use of non-human primates in biomedical research is to solve human problems and the rule-making was proposed to cover only activities conducted to enhance the propagation or survival of the species. The Service will consider applications for permits to authorize transactions involving non-human primates produced in breeding colonies for biomedical research, but not in the context of this rule unless it is shown that the purpose of the activity is to enhance the propagation or survival of the species.

taking because their habitat is inaccessible or through effective law enforcement.

Thus far, the Laysan teal (*Anas laysanensis*) is the only native U.S. species determined by the Service to meet these criteria. The Hawaiian goose (*Branta sandvicensis*) and the Hawaiian duck (*Anas wyvilliana*) were recommended for inclusion by the Smithsonian Institution, the American Federation of Aviculture, and the Service's Acting Endangered Species Co-

ordinator in Hawaii. (However, the Governor of Hawaii asked that they not be included until there is a real need to change their status in captivity.) The Service invites further comments and evidence on whether these two species should be proposed for eligibility. Also under consideration for eligibility is the masked bobwhite quail (*Colinus virginianus ridgway*), which was requested for inclusion by the Assistant Director of the Service's Endangered Wildlife Research Program.

## Rulemaking Actions September 1979

### GREEN PITCHER PLANT ENDANGERED

Known to remain in only five Alabama counties (and one Georgia county), where habitat destruction and overcollecting continue to threaten this plant, the Service has listed *Sarracenia oreophila* as an Endangered species (F.R. 9/21/79).

#### Background

The green pitcher plant was among over 3,100 vascular plants considered as endangered, threatened, or extinct by the Secretary of the Smithsonian Institution in his January 1975 Report to Congress (upon which the Service based its July 1, 1975, notice of review). Subsequent to this initial review, *Sarracenia oreophila* was proposed (along with some 1,700 other U.S. vascular plants) for Endangered classification (F.R. 6/16/76).

Many commentators expressed concern at that time over the increasing exploitation of carnivorous plants, and the Governor of Georgia urged that all species of the genus *Sarracenia* be protected.

#### Current Status and Threats

The green pitcher plant has been historically reported from Alabama, Georgia, and Tennessee. At the time the listing document was published, no populations were known to exist in the latter two States. However, the Tennessee Valley Authority's Regional Heritage Program has since reported the recent discovery of a population of the plant in Towns County, Georgia.

Green pitcher plants also occur in Alabama's Elmore, Cherokee, DeKalb, Jackson, and Marshall Counties. (The plant had also been reported in Etowah County, Alabama in the 1800's).

Remaining populations are threatened by increased residential, agricultural, and silvicultural development, as well as possible flood control projects. Increasing water pollution, strip mining, and road construction in areas containing well-established populations could further degrade suitable habitat and jeopardize the species' chances for survival.

Overcollecting is another major threat, with removal of these unique plants from their natural habitats continuing to deplete populations. (The Elmore County, Alabama population has reportedly been totally destroyed by collectors.)

Because the plants have been severely impacted by taking, the Service has determined that publication of Critical Habitat maps (as required upon designation of Critical Habitat) would make this species even more vulnerable, and that Critical Habitat determination is therefore not prudent.

#### Effective Date Extended

After the document which classified this species as Endangered appeared in the *Federal Register*, a number of people from Alabama requested more time and opportunity to comment on this action. The Service has therefore agreed to postpone the effective date

Continued on page 10

## CRITICAL HABITAT REPROPOSED FOR PLYMOUTH RED-BELLIED TURTLE

The Service has repropoed Critical Habitat for the Plymouth red-bellied turtle (*Chrysemys rubriventris bangsi*) in compliance with the Endangered Species Act Amendments of 1978 (F.R. 9/15/79). Endangered status and Critical Habitat were first proposed for the species on May 19, 1978, but the Critical Habitat portion was withdrawn (F.R. 3/6/79) because the Amendments, which changed the procedures for designating Critical Habitat, were passed before final action on the proposal could be taken.

The area covered in the proposal consists of lands within specified boundaries in Plymouth Township, Plymouth County, Massachusetts. Within this area are 11 ponds in which the species is known to occur. The species has also been known to occur on Naushon Island, but its existence there has not been verified since 1971.

A major threat to the red-belly, which has been estimated at population levels from less than 100 to 200, has been modification of its habitat. Some of the land adjacent to the ponds in Plymouth County is being developed for housing. The turtle wanders extensively, basks, and nests on this land, which is essential to its survival. The Service has determined that the physical and biological features of the species' aquatic and terrestrial habitat warrant special management considerations and protection. Development of these areas could result in increased human disturbance of nesting areas, collection and har-



photo by Donald E. Schell

*The effective date for the listing of the green pitcher plant has been postponed to allow for public hearings in Alabama.*

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### Rulemaking Actions

*Continued from page 9*

of this ruling for 120 days (or until February 22, 1980). During this period the Service will hold public hearings in Alabama. Any additional information on the status of this plant should be forwarded to the Director (OES), U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240.

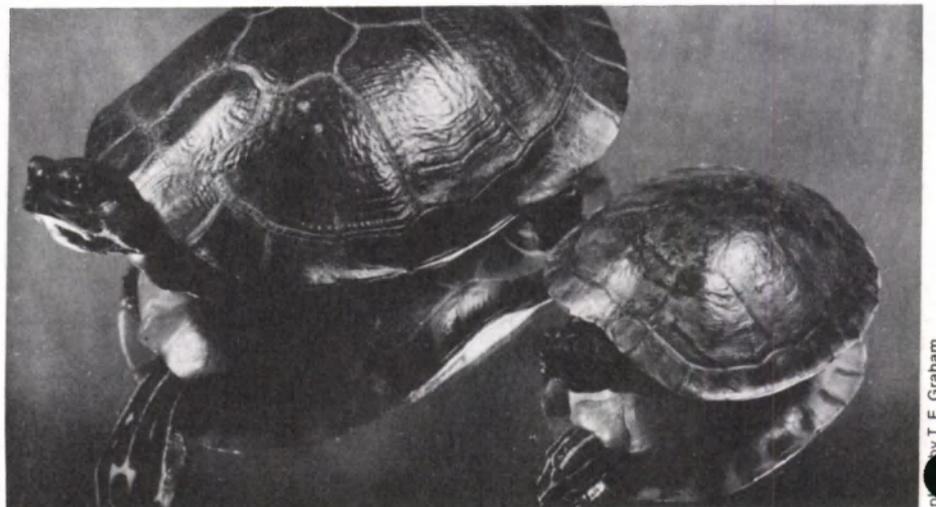


photo by T. E. Graham

*The Plymouth red-bellied turtle is threatened by modification of the ponds and associated wetlands on which it depends.*

assessment by youngsters, manipulation of vegetation used as food by the turtle, reduced water quality, and shoreline modification—all of which would decrease the chances of reproductive success for the red-belly or survival of its young.

The Service has drafted an impact analysis, and believes at this time that economic and other impacts of this proposed action are insignificant (under provisions of the 1978 Amendments and other applicable Federal laws). Upon completion, a final impact analysis will serve as the basis for a determination as to whether exclusion of any area from Critical Habitat designation is warranted (for economic impact or other reasons).

Comments, as well as biological and economic data, in response to this proposal should be submitted by November 16, 1979, to the Director (OES), U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240.

*Continued on page 12*

## Tellico Dam

*Continued from page 3*

above the dam. Most adult fish will be transplanted to the Holston River, and juveniles taken to a Tennessee State hatchery for release next summer at a selected site. TVA officials report that 319 darters were taken from above the dam from October 2-19—309 of which were transplanted to the Holston River, with the remaining 10 going to a TVA laboratory where propagation techniques will be studied. Another 179 darters have thus far been collected from below the dam. Of these, 41 adults were transplanted to the Holston, and 134 juveniles were placed in the Tennessee Wildlife Resources Agency's hatchery (with 4 mortalities accounted for).

TVA estimates that as many as 2,500 darters survive from previous transplant operations in the Hiwassee River, while more than 450 have now been moved to the Holston (including last year's transplant of 104 darters). Darters in the Hiwassee are known to be reproducing.

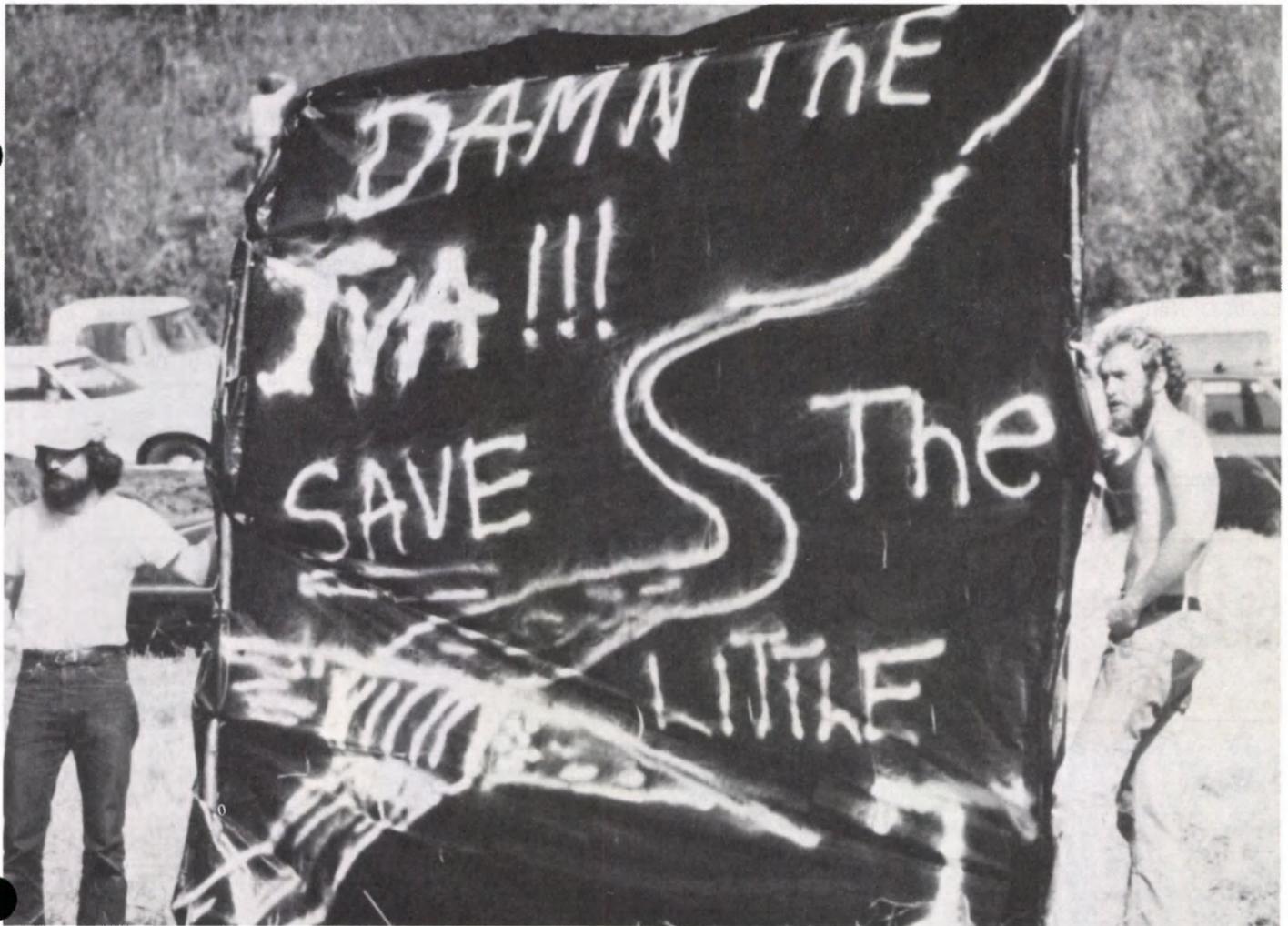
"We are afraid that the chances of

long-term survival for these transplanted populations are not good," said Harold J. O'Connor, Acting Endangered Species Program Manager for the Service, "but we feel that it is our responsibility to do everything we can to prolong the snail darter's existence."

## Cherokee Suit

The Eastern Band of Cherokee Indians has filed suit in Federal District Court in Knoxville demanding a halt to construction of Tellico Dam, which the Tribe believes violates the constitutional right of freedom of religion as well as the American Indian Religious Freedom Act. (The court will hear arguments and rule on an injunction on October 26.)

The dam (now scheduled for first-stage filling around November 9) is slated to flood more than 20 sacred Cherokee towns and villages (including "Tanasi," after which the State was named, and "Chota," the Cherokee's historic capital), spanning 10,000 years of Indian occupation in the Tennessee River Valley.



*More than 1,500 Cherokee Indians, landowners, environmentalists, and other concerned individuals gathered at "Chota" by the Little Tennessee River on October 20 to protest completion of TVA's Tellico Dam.*

# HAWAIIAN TREE SNAILS UNDER REVIEW

Upon acceptance of a petition from Alan D. Hart, the Service is reviewing the status of a genus of tree snails (*Achatinella*) on the Hawaiian Island of Oahu to determine if Endangered or Threatened classification is warranted (F.R. 9/17/79).

Available evidence indicates that these once abundant tree snails are seriously reduced, with more than half of the 41 described species now considered extinct.

Famous for their beauty and variability, *Achatinella* snails occur at elevations from 1,000 to 3,700 feet within the Koolau and Waianae mountain ranges. Major threats include overcollection, predation by human-introduced animals, destruction of native forests, and dilution of forests by introduced plants and trees.

Information on the status, distribution, and population trends of *Achatinella* species and their threats should be submitted to the Director (OES), U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240, by November 16, 1979.

## NEW PUBLICATIONS

Dr. C. Kenneth Dodd, Jr., of the Office of Endangered Species has prepared *A Bibliography of Endangered and Threatened Amphibians and Reptiles in the United States and its Territories*. The bibliography covers

## BOX SCORE OF SPECIES LISTINGS

Category	Number of Endangered Species			Number of Threatened Species		
	U.S.	Foreign	Total	U.S.	Foreign	Total
Mammals .....	33	251	284	3	21	24
Birds .....	67	145	212	3		3
Reptiles .....	11	48	59	10		10
Amphibians .....	5	9	14	2		2
Fishes .....	29	11	40	12		12
Snails .....	2	1	3	5		5
Clams .....	23	2	25			
Crustaceans .....	1		1			
Insects .....	6		6	2		2
Plants .....	24		24	2		2
<b>Total .....</b>	<b>201</b>	<b>467</b>	<b>668</b>	<b>39</b>	<b>21</b>	<b>60</b>

Number of species currently proposed: 160 animals  
1,850 plants (approx.)

Number of Critical Habitats listed: 34  
Number of Recovery Teams appointed: 66  
Number of Recovery Plans approved: 29  
Number of Cooperative Agreements signed with States: 24

September 30, 1979

34 species or subspecies either listed or proposed for listing under provisions of the Endangered Species Act of 1973. For a free copy, write to Dr. Dodd c/o Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

The *Proceedings of the 1978 Symposium of the Desert Tortoise Council* is available for \$5.00 from the Desert Tortoise Council, 1835 Klauber Avenue, San Diego, California 92114.

The first issue of *Brimleyana*, the journal of the North Carolina State Museum of Natural History, has been published and contains results of original empirical field studies in the areas of ecology, taxonomy and systematics, zoogeography, evolution, behavior, and paleozoology. Copies are available on an exchange basis to organizations

and institutions publishing general natural history and ecology journals or papers on a fairly regular basis or through individual subscriptions. For exchange and subscription information contact Alexa C. Williams, Managing Editor, *Brimleyana*, North Carolina State Museum of Natural History, P.O. Box 27647, Raleigh, North Carolina 27611.

The Institute for Ecological Studies of the University of North Dakota has published *Endangered, Threatened, and Peripheral Wildlife* of North Dakota, which treats the status of rare and endangered vertebrates of the State regardless of their abundance elsewhere. A total of 66 species are discussed. Copies are available for \$4.00 postpaid from the Institute in Grand Forks, North Dakota 58202.



## ENDANGERED SPECIES TECHNICAL BULLETIN

Department of the Interior • U.S. Fish and Wildlife Service • Endangered Species Program, Washington, D.C. 20240



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