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by Thomas E. Kucera and

William J. Zielinski

pand that knowledge, and describe attempts to give these species special administrative and legal protection. We will emphasize the western contiguous United States, with which we are most

familiar.

Carnivores are important indicators of ecosystem integrity in that they influence the structure and reflect the vigor of the trophic levels upon which they depend (Eisenberg 1989). They are also sensitive to the abundance and behavior of the humans with which they coexist. Throughout much of the United States, concern for the conservation of mammalian carnivores has centered on two large species, the gray wolf (Canis lupus) and the grizzly bear (Ursus arctos) (Curlee et al. 1994). Much effort and money have been spent at first to eradicate and more recently to prevent the extinction of these large, well-known species in the northern and western United States.

Less well known are the ecology, distribution, and status of a suite of smaller but no less important carnivores. Often referred to as furbearers, reflecting the utilitarian flavor of humanity's traditional values of them, the Canada lynx (Lynx canadensis), wolverine (Gulo gulo), fisher (Martes pennanti), and American marten (Martes americana) are receiving increasing attention by wildlife scientists and managers and the larger conservation community. Because of their sympatry and association with forested habitats over much of their range, and because they are rarely trapped commercially in the western United States anymore, they are now more commonly referred to collectively as forest carnivores.

The rising swell of conservation concern is a product of our scientific ignorance of these species and the effects of habitat manipulations on them, combined with their association with late-successional forests. In this article we will briefly review current scientific knowledge of lynx, wolverine, fisher, and American marten and efforts to ex-

Range and Natural History

Lynx, wolverines, fishers, and American martens occur in a wide band across the higher latitudes of North America, with conspecifics or close relatives in Eurasia (Koehler and Aubry 1994, Wilson 1982, Powell 1993, Gibilisco 1994). The single species of wolverine occupies tundra and taiga as well as forests in Eurasia and North America. The Canada lynx, and its Old World relative the Eurasian lynx (L. lynx), are restricted to forested habitats: Canada lynx occur south of the Arctic treeline from Alaska to Newfoundland. Both the fisher and American marten occur only in North America, also in a wide swath of forested areas from Alaska to eastern Canada.

It is the southern, largely peninsular distributions of these species that are currently of concern. Canada lynx historically occurred in the New England and Great Lakes states (McCord and Cardoza 1982); nineteenth- and early twentieth-century logging in these areas probably resulted in their extirpation early in this century (Quinn and Parker 1987). In the western United States, Canadalynx extend southward along the Rocky Mountains into Colorado and occur in the north Cascades and Okanogan Highlands of Washington (Koehler and Aubry 1994).

Canada lynx, which weigh about 10 kg, are closely associated with deep snow and with the snowshoe hare (*Lepus americanus*), their primary prey. The

population cycles of hares, with those of Canada lynx lagging slightly behind, are well known throughout the boreal forest (Brand and Keith 1979, Keith 1990). However, at their more southerly latitudes, hare and lynx cycles are less pronounced or absent (Koehler 1990).

Wolverines, whose ferocity and association with wilderness are legend, are the largest terrestrial members of the Mustelidae, weighing up to 15 kg. They were extirpated from the upper Midwest in the early 1900's (deVos 1964), and were always rare or absent in the Great Plains and Great Basin. Wolverines extended southward in montane boreal habitats along the Rocky Mountains as far as New Mexico, and along the Cascade-Sierra Nevada axis to the southern Sierra Nevada of California (Grinnell et al. 1937, Wilson 1982). Best characterized as a "scavenging predator" (Hash 1987), the wolverine, with its powerful dentition, requires large-mammal carrion, particularly in winter.

Wolverines typically exist in low-density populations whose members have notoriously large home ranges. For example, current research in Idaho has found home ranges of wolverines as large as 3000 km² (J. P. Copeland, Idaho Dep. Fish and Game, unpubl. data). The status of wolverines in the Rocky Mountains of Colorado and in the Cascade Range and Sierra Nevada on the west coast is uncertain at best. Recent efforts to document photographically their current existence in California were unsuccessful, although sporadic reports of sightings continue (T. E. Kucera, unpubl. data).

Fishers are the largest and most sexually dimorphic member of the genus *Martes*; males weigh about 5 kg, females about half that. They prey on medium-sized and small mammals and birds, most

notably the snowshoe hare and porcupine (Erethizon dorsatum), but also squirrels, voles, mice, carrion, and fruit (Powell 1993). Before European settlement, fishers occurred along the Appalachian Mountains as far south as Tennessee, and in the Midwest to southern Illinois, coincident with appropriate forest types. They ranged along the Rocky Mountains at least into Wyoming, and down the West Coast to the southern Sierra Nevada (Grinnell et al. 1937, Powell 1993, Powell and Zielinski 1994).

In the late nineteenth and early twentieth centuries, fisher numbers plummeted and their range shrank drastically, particularly in the southern portions (Powell 1993, Powell and Zielinski 1994, Graham and Graham 1994). They were and remain extirpated from the southern tier of states they historically occupied in the East and Midwest. Similarly, fisher numbers in the Rocky Mountains and on the West Coast dropped precipitously. Trapping and deforestation were responsible; these agents were simultaneous and complementary. Fishers are fairly easily trapped, and fisher pelts have always been valuable. Coincident with trapping was destruction of the fisher's forest habitat by logging, both for timber and to clear land for agriculture. As Powell (1993) points out, because logging increases access to forested regions for trappers, the two are often linked. The combined effect of trapping and logging was the reduction or extirpation of fishers over much of their range.

The American marten is the smallest of this trio of mustelids at less than 2 kg. Depending on season and locality, they live on a variety of small mammals and birds (Martin 1994). Distributed throughout Alaska and Canada, the American marten has experienced reductions in the southern and eastern parts of its range similar to but less drastic than those of the fisher (Gibilisco 1994. Graham and Graham 1994). In the Rocky Mountains the apparent patchy distribution of American martens reflects the patchy distribution of forested montane islands and is little changed from its historic pattern.

On the west coast, however, from Washington to California, there have been substantial reductions in the distribution of American martens. A subspecies from the Coast Range of northern California, the Humboldt marten (M. a. humboldtensis), may be extinct, although American martens in other areas, such as higher elevations of the Sierra Nevada, are relatively common (Kucera et al. in press). Buskirk and Ruggiero (1994) reason that because trapping for American martens has been illegal in California since 1953, the loss of the Humboldt marten in northwestern coastal California is due to the loss of late-successional redwood (Sequoia sempervirens) forests there.

Scientific Efforts

Concern for these species increased during the 1980's and stimulated several efforts by scientists and conservationists to address forest carnivores. In 1991, the First International Symposium on the Biology and Management of Martens, Fishers, and Sables in Laramie, Wyoming led to the recent summary volume by Buskirk et al. (1994). The Martes Working Group, which grew out of that symposium, produces a newsletter with items of interest regarding martens and fishers. The Second International Martes Symposium will be held in Edmonton, Canada in August, 1995.

Also in 1991, an ad hoc group of agency, academic, and forest-industry scientists and managers formed what became known as the Western Forest Carnivore Committee. Under the leadership of Bill Ruediger of the USDA Forest Service (USFS), the group meets several times per year to coordinate and facilitate efforts to increase scientific understanding of and to develop management programs for lynx, wolverine, fisher, and American marten in the western United States.

The USFS recently published The Scientific Basis for Conserving Forest Carnivores: American Marten, Fisher, Lynx, and Wolverine in the Western United States (Ruggiero et al. 1994a), which reviews and summarizes what is known about these forest carnivores. Its unifying theme is that our understanding of the ecology of these species is rudimentary at best. For example, Powell

Endangered Species UPDATE

A forum for information exchange on endangered species issues

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Readers include a broad range of professionals in both scientific and policy fields. Articles should be written in an easily understandable style for a knowledgeable audience. For further information, contact the editor.

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Cover: Lynx canadensis Photo by Susan C. Morse.

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and Zielinski (1994:64) state "The primary reason for concern about the fishers in the western mountains of the United States is the utter lack of data on the ecology of the species". Ruggiero et al. (1994b) emphasize that our knowledge of the ecology of wolverines, lynx, and fishers in the western U.S. comes from a total of one, five, and four studies, respectively. With such a limited knowledge base, questions about the conservation status or population trends of these species are impossible to address with any reliability. As Ruggiero et al. (1994c:5) state, "Because the quantity and quality of information available for the western United States is limited...the conservation status of forest carnivores is itself uncertain."

As discussed repeatedly in Ruggiero et al. (1994a), it is not only the more sophisticated questions regarding the ecology of these species that are impossible to answer. Basic knowledge of current distribution is lacking in many areas. Because these species are shy, inconspicuous, primarily nocturnal, occur at low densities, and are now rarely trapped in the contiguous United States, reliable data on current distribution are often unavailable. For example, much of the knowledge of the distribution of wolverines, fishers, and American martens in California is based on Grinnell et al. (1937). Other western states lack even this type of early data from scientific naturalists. Current reliable data on the distribution and abundance of these species are needed.

One attempt to address this need is a document titled "Lynx, Wolverines, Fishers, and Martens: Survey Methods for their Detection" (Zielinski and Kucera in press). This manual, which grew out of the Western Forest Carnivore Committee, describes several standardized, non-lethal methods for detecting these species using remote photographic bait stations, baited track plates, and snow tracking. We describe sampling strategies and discuss disposition and storage of data to promote understanding of regional distribution patterns. We also differentiate detection

and population monitoring and suggest that the methods we describe may form the basis of programs to estimate population size and monitor population change in these species. In a recent paper (Kucera et al. in press) we demonstrate that such methods can be used to produce reliable, verifiable information on the regional distribution as well as local occurrence of rare carnivores. We hope that the detection manual will stimulate similar work in different areas and with other species.

Current Management Status

Wolverine. The wolverine was listed as threatened in California by the California Fish and Game Commission in 1971, and was listed as endangered in Colorado in 1973. It was made a federal Category 2 Candidate ("C2") species in 1985. This category means that the listing of wolverines as threatened or endangered under the federal Endangered Species Act (ESA) may be appropriate but there is insufficient evidence

> to support a proposal to list. Oregon classified the wolverine as threatened in 1989. In most of its range in the lower 48, the wolverine is classified as a "Sensitive" species by the USFS (MacFarlane 1994). Montana is the only state in the lower 48 that permits trapping of wolverines, with a limit of one per trapper.

> In August 1994, the Biodiversity Legal Foundation of Boulder, Colorado and the Predator Project of Bozeman, Montana petitioned the U.S. Fish and Wildlife Service (USFWS) to list the wolverine as threatened or endangered "across their entire known historic range in the 48 contiguous United States" (Biodiversity Legal Foundation 1994a). The 90-day finding by USFWS as to whether the petitioned listing "may be warranted," the first step in evaluating a petition, has not been issued as of March 1995 (L. Nordstrom, USFWS, pers. commun.). If the USFWS finds that listing may be warranted, it will conduct a status review and



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Wolverine (Gulo gulo)

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issue a 12-month finding whether listing is warranted, not warranted, or "warranted but precluded by higher priority listing activities".

Canada lynx. The states of Colorado and Wisconsin classify the lynx as endangered, and Washington classifies it as threatened. The USFS lists lynx as Sensitive in National Forests in states within their historic range. In most northern states from Maine to Oregon lynx are protected from harvest. Montana allows trapping of lynx, with a statewide limit of 2 individuals per season. Idaho has a statewide quota of three lynx, but none has been taken there for several years (Koehler and Aubry 1994, MacFarlane 1994).

In August 1991, several conservation organizations petitioned the USFWS to list the Canada lynx in the North Cascades of Washington as an endangered species. In July 1993, the USFWS found that there was not substantial information to support listing the species. Subsequently, the petitioners challenged this finding in court. To settle the suit, in November 1993 the USFWS agreed to conduct a "status review" of the lynx throughout its entire range in the lower

48 states and to determine if it qualified for listing (USFWS 1994).

The Biodiversity Legal Foundation filed a petition in April 1994 requesting that the Canada lynx in the conterminous United States be listed as threatened or endangered, and that the lynx population in the southern Rocky Mountains be protected by emergency listing because of its low numbers and geographical isolation from other populations (Biodiversity Legal Foundation 1994b). In their 90-day finding published in August 1994, the USFWS found that the emergency listing of the southern Rocky Mountain population "was not warranted" but that listing the population in the conterminous US "may be warranted" (USFWS 1994).

In late December 1994, the USFWS announced their 12-month finding that "listing of the Canada lynx in the 48 contiguous States is not warranted" (USFWS 1994). The USFWS argued that the lynx was never common south of the Canadian border, occurring in most states due to dispersal from the north during cyclic population highs. They found no substantial evidence that hunting, trapping, or habitat destruction

threaten its continued existence, including the breeding populations in Washington, Montana, and Maine. Shortly after this finding, the Biodiversity Legal Foundation announced its intention to sue Secretary of Interior Bruce Babbitt and the USFWS for failing to list the lynx (Biodiversity Legal Foundation 1994c). They charged that the decision against listing was made at the Washington level for political reasons and reversed the recommendations of biologists at the local and regional levels. The Canada lynx remains a C2 species in the conterminous United States.

Fisher. East of the Great Plains, fishers have reoccupied much of their historical range following the reforestation of abandoned farmland and prohibition of trapping (Gibilisco 1994, Powell and Zielinski 1994). However, fishers in many areas of the western United States are not doing as well. In the mountains of Idaho and Montana, fisher populations appear to be expanding as a result of several relocation efforts, but fisher status in Wyoming, especially around Yellowstone National Park, is questionable. The distribution of the Pacific fisher (M. p. pacifica) on the West Coast in Washington, Oregon, and California is most worrisome (Gibilisco 1994, Powell and Zielinski 1994). Aubry and Houston (1992) believe that fishers may be on the verge of extinction in Washington. Sightings of fishers in Oregon have been extremely rare (Maj 1994), but a population near Crater Lake may have been established

from a recent reintroduction (K. Aubry, USFS, pers. commun.). In California, fishers are known from the Klamath Province in northwestern California, and a smaller population is known to inhabit the extreme southern Sierra Nevada, several hundred miles to the south (Zielinski et al. 1994). Between these two populations, large areas that formerly contained fishers appear no longer to do so.

The fisher is a candidate for listing as threatened or endangered in Washington, but has no other official state status. It is listed as Sensitive by the USFS, and in the west is legally trapped only in Montana with an annual quota of 20 animals (Powell and Zielinski 1994, MacFarlane 1994). In May 1990, a petition to list the Pacific fisher in Washington, Oregon, and California as endangered was filed (USFWS 1991). The 90-day finding by the USFWS was that "the petition to list the fisher does not present substantial information indicating that the requested action may be warranted" (USFWS 1991:1161). They did "believe that there may be reason for concern...[but]... insufficient scientific information exists to determine

whether regulatory protection...may be justified" (USFWS 1991:1161). The fisher on the West Coast became a C2 species.

In February 1994, the Natural Resources Defense Council filed a petition with the Regional Forester of the USFS in San Francisco to suspend logging of

late-successional forests until a plan ensuring the viability of forest carnivore populations, particularly fishers, is in place (Yassa and Edelson 1994). The Regional Forester's response was that no change in direction was warranted (Stewart 1994). A draft Environmental Impact Statement (EIS) on managing habitat for the California



Fisher (*Martes pennanti*) photographed using a 35 mm Trailmaster camera at bait station in Klamath National Forest. Photo courtesy of Klamath National Forest.

spotted owl (Strix occidentalis occidentalis) (USDA Forest Service 1995) would provide guidance for forests in the Sierra Nevada; the Regional Forester said that additional action would be considered if warranted after evaluation of the EIS. In December 1994, the Biodiversity Legal Founda-

tion petitioned to list the fisher in the western states as endangered (Biodiversity Legal Foundation 1994d). The USFWS has not issued its 90-day finding as of March 1995 (L. Propp, USFWS, pers. commun.).

American marten. As with fishers, American martens in the northeastern and north central states have reoccu-

pied much of their former range, although they are extinct in much of the Maritime Provinces of Canada due to deforestation and trapping (Buskirk and Ruggiero 1994, Gibilisco 1994). Martens in the Rocky Mountains occupy most of their historic range, as do martens in the Sierra Nevada (Kucera et al. in press). However, in the Pacific Northwest, American martens have suffered significant losses. The Humboldt marten of the northern coast range of California is at best extremely rare, if not already extinct (Kucera et al. in press).

The American marten is listed as endangered in New Mexico, and is a USFS Sensitive species in many forests. Trapping is prohibited in California, Nevada, New Mexico, South Dakota, and Utah (Buskirk and Ruggiero 1994, MacFarlane 1994).

Conclusions

The oft-mentioned desirability of planning for species conservation before a crisis, before the environmental "train wreck" whose archetype is the case of the northern spotted owl (S. o. caurina), is widely affirmed,

as is a multi-species or ecosystem approach. However, effective conservation planning requires knowledge. The ESA requires that petitioners present "substantial scientific or commercial information" that show listing may be warranted, and requires that listing decisions be based "solely on the basis of the



American Marten (Martes americana)

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best scientific and commercial data". Even a critic of the ESA such as Idaho's Senator Kempthorne believes that "The listing of a species should be based solely on science" (Reichardt 1995:9).

In the listing process, the burden of providing the scientific data is increasingly on the petitioner. Acquisition and development of that knowledge require resources that are difficult to obtain before the train wreck happens. With the forest carnivores, a group of species that are by nature low-density and shy, there is a particularly insidious Catch-22: listings are denied because of the lack of scientific information, and budgets to acquire that scientific information are not forthcoming because the train is not yet wrecked. Can you hear a train coming?

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Keeping Track, Inc.

Some photographs for this article were provided by wildlife habitat specialist and tracker Susan C. Morse, who is Executive Director of Keeping Track, Inc., a newly formed non-profit organization dedicated to wildlife habitat protection through field research, conservation education, and planning. Keeping Track, Inc., works to:

- 1. Educate the public about appropriate land use planning so that the biodiversity and ecological health of public and contiguous private lands will be ensured. Local volunteers are trained in wildlife track and sign identification, and their data is used to aid local and regional planners in making informed decisions about habitat protection for wildlife.
- Encourage cooperation among wildlife and natural resource interest groups to help them appreciate
 their common priorities in reaching for long-term goals. This is achieved through presenting slide
 lectures, leading how-to workshops, and serving as panelists at national and regional conferences.
- 3. Identify and protect travel corridors critical for the long-term well-being of the large and wide-ranging carnivores. This entails performing wildlife track and sign surveys.
- Keeping Track, Inc., is seeking financial support and can be contacted at RFD 1, Box 263, Jericho, VT 05465; phone (802) 899-2023

Report From Washington

The First Hundred Days of the 104th Congress: Impacts on Endangered Species Conservation

by Suzanne R. Jones

This article is the first of an occasional series that will look at legislation dealing with endangered species at both the federal and state levels. The UPDATE welcomes for consideration essays, opinion pieces, and letters to the Editor which represent any viewpoint within the ongoing debate.

-The Editor

As the smoke clears and members of Congress head home for their April recess, we are given a brief respite to examine the casualties of the frenzied first hundred days of the 104th Congress under the new Republican leadership. Among the wounded is the Endangered Species Act (ESA), which has suffered attacks on several different fronts including regulatory "reforms", listing moratoriums, and budget cuts. These recent events appear to be only a warmup for what ESA opponents have promised will be a full frontal assault when ESA reauthorization is taken up by Congress later this summer.

The Contract with America

Although the House Republicans' Contract with America did not mention the word "environment" in its original form, one of its major impacts would be to roll back 25 years of environmental protections. In the rush to vote on the Contract's provisions within House Speaker Newt Gingrich's (R-GA) pledged deadline of 100 days, the House passed takings and risk assessment provisions which have little-understood but farreaching environmental implications. These provisions, combined into a single bill (H.R. 9) titled the "Job Creation and Wage Enhancement Act," would make it virtually impossible for the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) to implement the ESA.

<u>Takings</u>: The Supreme Court's longstanding interpretation of the U.S. Constitution requires compensation to landowners whenever the government physically "takes" private property or takes away all economic use of the property. Going well beyond that protection, the Contract contains a provision to pay the landowner whenever regulations for the common good limit a landowner's use of private property. In contrast to the stated goal of protecting property values, this policy would produce one of two results. Either huge sums of taxpayer funds would be paid to corporations and others to get them to obey the law (e.g. to get them not to emit toxics into the air and water), or environmental laws would not be implemented-to the detriment of landowners who value clean air and water and wildlife.

The final version of the takings bill passed by the House was narrowed from covering all federal regulations to specifically target the ESA, wetlands protection in the Clean Water Act and Farm Bill, and some water allocation laws. It would require payoffs to landowners whenever protections for wetlands or endangered species reduced the value of any portion of the landowners property by twenty percent or more, which in effect means requiring compensation for any reduction in value. For example, if a thousand acre parcel of land was allowed to be clearcut except for one acre left around a bald eagle nest or a buffer to protect a salmon stream, the FWS would have to pay the landowner if there was a 20% impact on the value of that one acre, which might be far less than 1% of the value of the entire land parcel. This money would come out of the FWS's or NMFS's already stretched budgets, thus limiting their ability to undertake muchneeded conservation activities.

The Senate Judiciary Committee is currently considering several versions of takings bills, most notably S. 605 introduced by Senate Majority Leader Bob Dole (R-KS). While this

bill currently applies to all federal regulations, it may also be narrowed to focus on just endangered species and wetlands in an attempt to divide the large coalition of labor, civil rights, health, and environmental groups in strong opposition to takings legislation. The full Senate will likely take up the issue upon its return in early May.

Risk Assessment/Cost Benefit: In addition to takings, the House also passed risk assessment legislation which would further reduce the ability of the government to protect public health and safety and the environment. Unfortunately, this bill has little to do with furthering sound, scientifically-based risk assessment. Passed with the supposed intent to "reduce government," this bill would add a new layer of bureaucracy to write new studies and reports and fight the resulting onslaught of new lawsuits.

As passed by the House, federal agencies would have to follow a 23-step process of studies and peer reviews for all major rules. No new regulations could be adopted unless the agency could prove in court that the benefits justify the costs, and that there are no other regulatory or voluntary options more cost-effective or flexible for regulated companies. These new criteria would supersede the decision-making standards in existing statutes, such as the ESA mandate to conserve species, and would be subject to judicial and peer review throughout the process. Furthermore, regulated entities would be allowed to participate on the peer review panels. Given the difficulties of calculating the ecological, recreational, spiritual, and commercial values of endangered species to present and future generations, such rigid cost-benefit requirements could make it virtually impossible for FWS or NMFS to list any species under these new rules.

The Senate Judiciary and Governmental Affairs Committees are currently examining several risk bills. Senator Dole's bill (S. 343), the most likely legislative vehicle, will probably be brought before the full Senate in May.

Hopefully, the Senate will take more time and give a more thorough review to these takings and risk provisions before rushing them through on party-line votes. Given that a minority of Members can block legislation in the Senate, there is also more opportunity to stop anti-environmental legislation there. However it will require the American public, which has largely been absent from the debate

on the details of the Contract with America, to become informed and involved.

Regulatory Moratorium

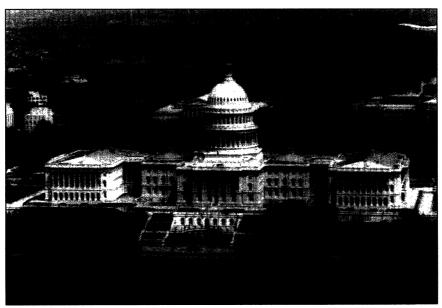
In concert with these efforts to radically alter the federal regulatory process, the House also passed H.R. 450, a moratorium on all federal regulations (with a few exceptions) until the end of 1995 or until the Contract's regula-

tory reform provisions become law. An amendment by Rep. Gary Condit (R-FL) was attached to the bill to extend the moratorium for endangered species listings and critical habitat designations an extra year until the end of 1996 or until the ESA is reauthorized. Although the Senate has yet to agree to such a sweeping attack on federal protections without regard to their individual merit, ESA opponents in the Senate are also pursuing other avenues to shut down the ESA's protections.

Senator Kay Bailey Hutchinson (R-TX), in an attempt to block the pending listings of the Barton Springs salamander and Arkansas river shiner in Texas, introduced an ESA-specific bill, S. 503, calling for a six month moratorium on listings and critical habitat designations. Under pressure, Senator John Chafee (R-RI), chair of the Environment and Public Works Committee and long-time

ESA champion, agreed to hold hearings and committee votes on this anti-ESA bill.

Meanwhile, Hutchinson was also able to get a related amendment attached to the Defense Supplemental Appropriations bill (H.R. 889) to cut \$1.5 million from the ESA listing budget and put a moratorium on all listings and critical habitat designations for the remainder of the fiscal year. Democrats on the Environment Committee, angered by Hutchinson's backdoor maneuvers, threat-



House of Representatives Office of Photography

ened to boycott the scheduled Committee markup of S. 503, thus forcing Chafee to indefinitely postpone the vote. In addition, 39 Democratic Senators signed a letter asking for the Hutchinson amendment to be stripped from the Defense bill in conference, but despite this strong show of ESA support, the amendment remains on the Defense bill headed to President Clinton's desk for his signature.

Appropriations

Another active front for undermining endangered species protections has been the attack on current and future ESA funding. Defense of endangered species conservation is made all the more difficult by the fact that funding for public health, education and other social programs is also under attack. Given the relatively small ESA budget, however, ESA cutbacks amount to substantive

attacks on the ESA rather than substantial money savers.

FY 1995 Rescissions: The House recently voted to "rescind" or take back \$17 billion of the federal budget that was previously appropriated for fiscal year (FY) 1995. Contained in the bill was a \$2 million cut from the ESA budget for listing species, equal to 25% of FWS's annual listing budget. In the Senate Appropriations Committee, Senator Slade Gorton (R-WA) upped the ESA cut to \$3 million, which if passed would

cause both a drastic reduction in the number of listings as well as the layoff of FWS personnel. Gorton agreed, however, to remove this ESA cut if the Hutchinson amendment, with its listing moratorium and \$1.5 million rescission, were kept on the Defense bill.

Also attached to the rescission bill is a "salvage" logging amendment (passed in the Senate by a vote of 48-46) which would override all

environmental laws, including the ESA, to allow expedited sale of timber in National Forests in the Pacific Northwest and elsewhere. This amendment has been passed in both houses despite the fact that such disregard for sustainable forest management is what got us into the Pacific Northwest ancient forest crisis in the first place. President Clinton has threatened to veto this rescissions bill, which also cuts many of his social programs. Ongoing negotiations and the fact that he has yet to veto a bill since being elected to the presidency make such an outcome less than promising.

FY 1996 Budget: As far as the upcoming FY 1996 appropriations debate, the good news is that the Administration has proposed a very favorable budget for endangered species, with a \$6 million increase to \$78 million despite a 3% decrease for the FWS overall. Included are increases for Clinton's

Northwest Forest Plan, fishery habitat restoration, and grants to the states to support land acquisition associated with ESA Habitat Conservation Planning. The bad news is that the President's budget has been announced dead on arrival. With the current budget-cutting climate in Congress, the amount of discretionary funding left-after Medicaid, Medicare, Social Security, and Defense-will be drastically decreased. It is important that citizens weigh in on the FY 1996 appropriations debate to ensure that endangered species and the environment are included in Congress' spending priorities.

ESA Reauthorization

All of these attacks have occurred before any action to reauthorize the ESA has even begun. No reauthorization bills have been introduced yet, although the new Republican chairmen have pledged to move ESA legislation this calendar year. Rep. Don Young (R-AK), new chair of the House Resources Committee which now has jurisdiction over the ESA, is an avowed ESA opponent. Circumventing the subcommittee process, Young established an ESA Task Force, chaired by outspoken ESA opponent Rep. Richard Pombo (R-CA), which is holding field hearings in ESA hotspots around the country to gather input for a bill to be introduced this June. Several recent news articles have raised questions about the fairness of these field hearings, which have featured invited witnesses weighted heavily against the ESA, and been followed by expensive dinners paid for by industry lobbyists. More field hearings in California and Vancouver, WA, are scheduled for this month.

In the Senate, the Environment and Public Works Committee and the Drinking Water, Fisheries and Wildlife Subcommittee have already held two hearings-on Hutchinson's ESA listing moratorium bill, and to address a proposal by Senators Faircloth and Helms (R-NC) to exempt Fort Bragg in North Carolina from the ESA. Senator Dirk Kempthorne (R-ID), chair of the subcommittee with jurisdiction, has said he will hold reauthorization hearings once

the subcommittee has finished dealing with reauthorization of the Safe Drinking Water Act. Meanwhile, Sen. Gorton (R-WA) has promised to unveil an ESAweakening bill sometime this month. The bill will likely include provisions to eliminate habitat protection requirements on private lands, make Section 7 compliance voluntary, and give the Interior Secretary the authority to decide to allow species to go extinct.

Conclusion

While continuing to fight off the attacks on the ESA and other environmental protections, supporters of a strong ESA are working to craft reasonable legislative alternatives which will further the conservation of endangered species while also providing an effective response to concerns of private landowners. Recent polls continue to show strong public support for environmental

protection in general and endangered species in particular. Amending the ESA to provide financial incentives and technical assistance to private landowners will better enable citizens to aid in species conservation and harness the widespread stewardship ethic among Americans.

It is imperative that everyone concerned about endangered species and their conservation become involved in the high stakes legislation now underway in Congress. Without such involvement, the next one hundred days may well spell the doom of the Endangered Species Act and with it many of the treasured species of this country.

Suzanne R. Jones is a Legislative Representative on the ESA for the National Wildlife Federation and a former Endangered Species UPDATE editor.

Readers of the UPDATE are encouraged to make known their views on pending legislation dealing with the Endangered Species Act as well as other environmental legislation in the 104th Congress. The Capital switchboard may be reached by phone at (202) 224-3121 in order to call the office of your Senator or Representative. Alternatively, Senators can be contacted by writing:

The Honorable __ U.S. Senate Washington, DC 20510.

Representatives can be contacted by writing:

The Honorable U.S. House of Representatives Washington, DC, 20515.

Sixth International Symposium on Society and Resource Management: Call for Papers

The Sixth International Symposium on Society and Resource Management, scheduled for May 18-23, 1996, will focus on a better integration of social and natural resource sciences in addressing resource and environmental issues. A commitment to the role of social perspectives in policy development and managing natural resources is underscored.

Symposium activities include concurrent paper and poster sessions, plenary theme addresses, roundtables and dialogue sessions, field trips, and receptions. Special efforts are being made to encourage and accommodate participation by students this year.

Those wishing to present at the conference should present abstracts no longer than two double spaced pages to: A.E. Luloff, Program Co-Chair, Department of Agricultural Economics and Rural Sociology, 111 Armsby Building, The Pennsylvania State University, University Park, PA 16802. Deadline is November 1, 1995. The organizers of the Symposium have arranged a variety

of publication outlets for some of the papers being presented at the conference. For more information on publication opportunities write to the above address.

International Directory of Aquarist Organizations

The Aquatic Conservation Network (ACN) has released the second edition of the annual International Directory of Aquarist Organizations, designed to provide an ongoing link between the ACN and the international hobby community. More than 1200 organizations in 34 countries are listed; listings are categorized by country, specializations, newsletter title, and whether the organization has a conservation program.

The cost of the Directory is \$20 plus postage and handling (\$2 in Canada, \$4 in the United States, \$8 for other international orders). Payment can be by check or money order in U.S. or Canadian currency. For more information or to order a copy contact Rob Huntley, General Manager, Aquatic Conservation Network, 540 Roosevelt Avenue, Ottawa, Ontario, Canada K2A 1Z8; Tel.

(613) 729-4670; Fax (613) 729-5613.

Travel to Help Save the Sea Turtle

One World Workforce, a non-profit organization, is seeking individuals to work on sea turtle conservation projects in Mexico. Trip fees range from \$300 to \$485 per week and cover all food, accommodations, ground travel within Mexico, and a grant for each project.

In Baja, participants will assist in the feeding and caring of sea turtles at a research station, and travel by boat on the Sea of Cortez to tag, track, and census wild sea turtles. In Jalisco, volunteers will safeguard nesting turtles and nests through nightly beach patrols. Eggs will be collected and brought to the safety of a nursery.

College credit is available, and contributions are tax deductible. For more information, contact One World Workforce, PO Box 3188, La Mesa, CA 91944-3188; (619) 589-5544.

Announcements for the Bulletin Board are welcome. Some items from the Bulletin Board have been provided by Jane Villa-Lobos, Smithsonian Institution.

Endangered Species UPDATE

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