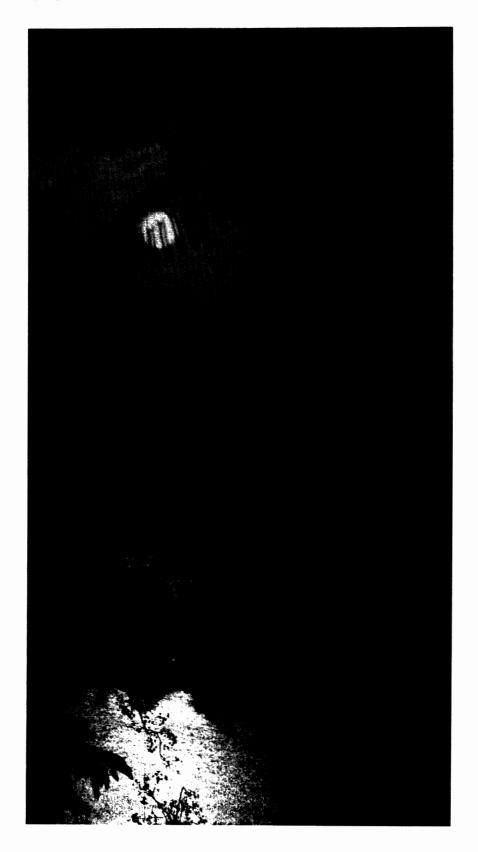
# Endangered Species UPDATE Including a Reprint of the latest USFWS Endangered Species Technical Bulletin

THE UNIVERSITY OF MICHIGAN

October 1990 Vol. 7 No. 12



# School of Natural Resources

# In this Issue:

The Role of Debt-for-Nature Swaps in Preserving Habitat

New Manatee Protection Law Adopted in Florida

Five San Joaquin Valley Plants Listed

Augmentation Research on Southern Selkirk Mountain Caribou Herd

# The Role of Debt-for-Nature Swaps in Preserving Tropical Habitats

by Jeff Wise

It is an unhappy reality that those nations experiencing the greatest environmental degradation lie in the tropical or subtropical regions of the world, where habitat for more than two-thirds of the planet's species is located. It is

not simply an unfortunate coincidence, however, that those nations facing the gravest environmental challenges are also those most burdened by foreign debt. (Although in absolute terms, the United States leads the list of countries with the highest foreign indebtedness, the U.S.

"debt burden" is lower because debt reflects a smaller portion of the U.S. gross national product.) It has become clear to environmentalists and, lately, to policy makers that a nation's debt profile and environmental profile are linked, and that a solution to one crisis must involve a solution to the other.

#### The Debt/Nature Connection

Most of the countries comprising the earth's tropical forest belt are characterized by poverty, rapid population growth, and economic underdevelopment. Yet, the tremendous foreign debt burden of many of these countries has served to aggravate each of these critical social problems. When debt servicing and foreign aid are balanced out, a net outflow of capital from the developing world to the industrialized north has occurred since the early 1980s. The causes of this new south-to-north transfer of wealth go back to the 1970s — a decade of cheap money and lax lending policies. Excessive borrowing and lending occurred throughout the decade, causing a debt overload in many developing countries. However, the actual trigger for the debt crisis came with the worldwide recession in 1982. The rise in interest rates and the collapse of many commodity prices around the world meant that not only was debt harder to pay off, but for many coun-

"It has become clear to environmentalist and, lately, to policy makers that a nation's debt profile and environmental profile are linked, and that a solution to one crisis must involve a solution to the other."

tries the revenue to do so dried up. (The rise in interest rates was especially onerous since most commercial bank loans to developing countries have floating rates.)

As a consequence of the pressure to repay debts and at the same time address critical social problems with a shrinking revenue base, public funds to protect and manage wildlife habitats have evaporated. In those countries where such public funds may be available, they are usually inadequate. More importantly, the looming foreign debt forces many countries into rapid, shortterm, and unsustainable exploitation of their natural resources. [In contrast, "sustainable development," a new buzzword in the lexicon of developdefined mentalists. is "[D]evelopment that meets the needs of the present without compromising the ability of future generations to meet their own needs." (United Nations 1987).] The clearing, farming, mining, or logging of the species-rich tropical rainforests is the most visible consequence of this type of development/ debt-servicing strategy. Additionally tropical wetlands are being drained, grasslands converted for agriculture, and coastal zones polluted and degraded. The yearly decimation of 40 to 50 million acres of tropical forest (World Resources Institute 1990) — an area larger than Washington State — however, remains the greatest threat to the planet's biological diversity, not to mention its long-term ecological and economic viability.

# The Debt-for-Nature Swap

Debt-for-nature swaps attempt to take advantage of the debt/environment nexus to generate needed funds for unprotected habitat and significant ecosystems. Simply stated, debt-fornature swaps convert unpaid loans of indebted countries into funds for conservation activities in those countries; a certain amount of foreign debt is cancelled in exchange for local investments in programs that will improve the. management of natural resources. Typically, a nonprofit international conservation group acquires part of a country's debt from a creditor, usually a commercial bank. Debt may be donated by a bank, but is more often purchased by the conservation group on the open Because many developing market. country debts have little chance of being fully repaid, their value on the "secondary debt market" is sharply lower than their original face value; debt from some Latin American countries may be purchased for as little as ten cents on the dollar. With the prior agreement of the debtor country and its central bank, the conservation group converts the dollar-denominated debt it has acquired into bonds denominated in local currency in the debtor country. These bonds are essentially government-issued "I.O.U.s" to their holders. The bonds are held and controlled by either a local, private conservation group or a coalition of public and private conservation actors, representing an investment by the debtor country government in the conservation infrastructure of its own country. In effect, the debt purchased by the international conservation group is cancelled upon the subsequent investment of funds by the debtor country in specific conservation projects.

Compelling reasons exist for all of the actors involved to participate in these fairly complex financial maneuvers. The secondary market of repurchasing loans emerged with the onset of the debt crisis in 1982, as a result of some banks wanting to remove nonperforming delinquent loans from their books, recover something from their investment, and avoid having to make further loans for servicing purposes. Thus, most banks are satisfied to recoup the market value of the debt -- a fraction of the original value of the loan -- considering that the original debt might never have been repaid.

For their part, debtor governments have responded positively to this opportunity to "make good" on a portion of their debt in readily available local currency, rather than hard-to-earn dollars. There is a large incentive on the part of debtor countries to retain dollars to pay for necessary foreign imports, rather than using them up for debt servicing. Additionally, the bonds which the government issues to meet its swap obligation often have longer maturity periods than the original debt note. This pro-

vides an opportunity for the debtor country to essentially reschedule a small portion of their debt. But by far the most compelling incentive for debtor country governments is the opportunity to invest what could be considered a debt repayment within its own country rather than sending it to a foreign bank. Although one criticism leveled against debt-for-nature swaps is that the transactions impugn the sovereignty of debtor countries by forcing decisions about how to utilize their resources, in reality, such swaps give governments an opportunity to exercise greater control over their own resources. Conversely, once a debt payment leaves a country, all control over those financial resources is surren-

Finally, conservation groups make this foray into the unfamiliar world of international finance because through debt-for-nature swaps they can substantially multiply every dollar they spend on conservation in the tropics, thereby increasing the impact of severely limited resources. For instance, if groups can purchase \$100 of debt for \$10 on the open market, and convert those debt notes into perhaps \$50 worth of local currency for conservation, they have effectively generated \$5 of conservation for every dollar they spent. (The conversion rate a debtor country is willing to offer varies according to the market price of the debt, the maturity period of the bonds, and the interest to



An endangered jaguar (Panthera onca) in a Central American rainforest

# Endangered Species UPDATE

A forum for information exchange on endangered species issues October 1990 Vol. 7 No. 12

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The Endangered Species UPDATE welcomes articles related to species protection in a wide range of areas including but not limited to: research and management activities for endangered species, theoretical approaches to species conservation, and habitat protection and preserve design. Book reviews, editorial comments, and announcements of current events and publications are also welcome.

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.

Manuscripts should be 10-12 double spaced typed pages. For further

Manuscripts should be 10-12 double spaced typed pages. For further information please contact Suzanne Jones at the number listed below.

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Tropical habitat in the Caribbean Photo by Fritz Menle

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be paid on the bonds.) In contrast, were a direct contribution made by the organization, \$10 would only purchase \$10 in local currency at the market exchange rate.

The international organizations most active in carrying out debt-for-nature swaps are The Nature Conservancy, World Wildlife Fund U.S., and Conservation International. These three groups, along with the National Wildlife Federation, the Natural Resources Defense Council, the Smithsonian, and the World Resources Institute, comprise the Debt-for-Nature Ad Hoc Working Group, which seeks to promote debt-for-nature swaps.

The big winners in all of this, and the keystones in the whole operation, are local private conservation groups that design the conservation projects to be funded, and control (often in partnership with their government) the use of the

generated funds. A private, on-site conservation group either directly invests the debt swap funds or monitors their disbursement by its government. A fully accountable, private sector group gives the operation the needed checks and balances, making it palatable to creditor banks as well as donors who fund the original purchase of debt. The "threat to sovereignty" argument against debt-for-nature swaps suffers here as well, since local government and local private organizations exercise control over the generated funds. While a few swaps completed to date have not included a local, private-sector presence, The Nature Conservancy, for one, has established private sector involvement as a prerequisite for its participation in a debt swap.

#### **Results to Date**

Debt-for-nature swaps, as currently conceived and practiced, have not and will not significantly reduce a nation's foreign debt. Costa Rica, the most active debt swapper to date, has only eliminated about five percent of its total foreign commercial bank debt. To actually ease the debt burden on developing countries, conservationists must continue to advocate debt relief and restruc-



Keel-billed toucan (Ramphastos sulfuratus)

turing in addition to swaps. What debtfor-nature swaps can accomplish is the replacement of lost public funds in the developing world — funds that have dried up due in no small measure to the requirements of debt servicing — in exchange for the protection and management of habitat.

While some developing nations have an impressive official tally of the proportion of their territory in national parks (Costa Rica 14%, Panama 10%, Venezuela 8%, Dominican Republic 12%) (World Resources Institute 1988), most of these parks exist on paper only. In more than three-fourths of the protected areas of the neotropics, roads cutting through virgin forest habitat entice new settlers, plumes of smoke betray rampant slash-and-burn farming, illicit logging and mining operations transform the landscape, and poaching inflicts a dangerous toll on endangered species. The current level of funding provided to most officially designated parks in the tropics cannot sustain viable protected areas or the endangered species which they harbor.

The Nature Conservancy, other environmental groups, and aid organizations have purchased more than \$15 million worth of delinquent debts from banks and other creditors since the first

debt swap took place in 1987. They have swapped these notes for more than \$100 million in local currencies invested in conservation projects throughout the developing world, thus multiplying their investment six fold. This infusion of conservation funds into various cash-strapped developing countries is unprecedented.

Costa Rica, the most aggressive debt swapper, has converted \$80 million of debt. These swaps have contributed to the protection of millions of acres of tropical habitat, including some of the world's last remnants of dry tropical forest. The funds have hired, trained, and equipped dozens of conservation workers and park managers throughout the country's now extensive system of natural reserves. Swap monies also support biological research and data collection for conservation and develop-

ment planning.

Debt swaps have reinforced protection on more than 2.5 million acres of Ecuador's critical natural areas, including the Galapagos Islands. Funds from swaps completed in the Dominican Republic, Zambia, Madagascar, the Philippines, and Bolivia have protected hundreds of thousands of acres of tropical habitat, provided environmental education programs for thousands of people, built up infrastructure for environmentally benign tourism, and provided for environmentally friendly small business start-ups — all in addition to the fundamental tasks of providing basic resources to unprotected parks.

## **Debt-for-Nature: The Next Step**

Although impressive in appearance and representing a great deal of effort on the part of the international conservation community, debt swaps have redirected what amounts to only a jingling of change in the pockets of the world's creditors. Only five percent of the developing world's total commercial foreign debt has been swapped in all debtfor-equity transactions, of which debtfor-nature swaps represent just a fraction. A huge source of debt—that held

( Continued on UPDATE page 4)

by creditor governments and development banks - remains completely untapped for swapping. Loans to developing countries for debt buy-backs, which allow countries to receive loans and grants from lenders like the World Bank and Japan to buy back portions of their own debt as part of debt restructuring agreements, are made with no environmental conditions. Debt negotiations take place that ignore the extraordinary environmental and developmental opportunities available through debt-fornature swaps. Clearly, the debt-for-nature model has not been used anywhere close to its full potential.

The following steps must be taken to expand the debt-for-nature model:

The President and Congress must follow the lead of private commercial banks by making a portion of Third World debt held by the U.S. government available for swapping. U.S. government agencies hold \$65.8 billion of foreign debt. The U.S. Agency for International Development (USAID) alone is owed more than \$6.7 billion by Latin American countries. Swapping just a portion of that could generate enough funds to protect tens of millions of acres of tropical rainforests. Only a small handful of government programs in this century could match the potential impact of this action, not to mention its cost-effectiveness.

On June 27, 1990, President Bush, as part of his Enterprise for the Americas Initiative, announced his intention to seek legislation that would allow part of the \$12 billion owed to the U.S. government by Latin American countries to be swapped for local currency investments in conservation. The President's announcement and parallel legislation introduced by Representative Peter Kostmayer (D-PA) represent the first substantial moves by the U.S. government to pursue debt-for-nature.

The U.S. government must encourage the World Bank and other development banks to make loans to countries for the purpose of repurchasing their debt for swapping into conservation funds. Debt "buybacks," where loans are provided to developing countries for the purpose of "buying back" their debt from commercial banks, have been engineered by

none other than the U.S. government. Last year, a USAID-funded debt swap in Madagascar generated \$2 million for conservation. This year, AID plans to fund a much larger debt buy-back in a Latin American nation.

At the same time, the World Bank is about to make a \$200 million loan to the Philippines for the repurchase of \$400

million of debt with <u>no environmental conditions</u>. Just ten percent of that loan could have been earmarked for conservation. The \$40 million it would have generated could have dramati-

cally increased the size of the Philippines' national park system, funded a national environmental education program, and supported the development of a sustainable forestry industry in the country.

Debt-for-nature must become a part of debt negotiations, with the purpose of creating "national conservation endowments" in every indebted developing country. Debt negotiations and readjustments have become a permanent feature of the U.S.'s relationship with the developing world, especially Latin America. Debt restructuring agreements inevitably involve concessions by both debtors and creditors and, therefore, offer extraordinary opportunities to make available even a small fraction of negotiated debt for swapping. Funds generated by such extraordinarily large swaps could create "national conservation endowments" in each indebted country, designed to provide a sustainable source of public funding for conservation, environmental protection, and environmentally friendly development on an unprecedented scale. Managed by both public and private interests, "national conservation endowments" generated by debt swapping could permanently replace the public funds for wildlands management dried up by the debt crisis.

The involvement of First World governments and multilateral development agencies could expand the scope of today's debt-for-nature swaps by several orders of magnitude. Debt swaps involving billions of dollars are not just gleams in the eyes of conservationists, but necessary imperatives if

meaningful progress is to be made in arresting tropical habitat destruction and reducing developing country debt.

While not mentioning conservation endowments and debt buy-backs, the President's recent announcement to consider the swapping of governmentheld Latin American debt sets us on a hopeful path in these directions. The

"Clearly, the debt-for-nature model has not been used anywhere close to its full potential."

government has seized, however tentatively, on a successful, private-sector conservation initiative with possibly dramatic consequences for the world's endangered species.

By restoring some resources to the most ignored, least-valued sectors of developing societies, debt-for-nature swaps hold out the possibility of fostering "bottom-up" economic development while at the same time funding conservation. In populated regions of biological diversity, conservation requires environmentally friendly business start-ups. Thus, in the absence of widely available low interest loans, debt-for-nature can make resources available to desperate communities that every year have no choice but to push deeper and deeper into the rainforests to survive. The burden on these people must be relieved, or like the rest of their societies, they will continue to borrow from their forests, soils, fish, and wildlife just to stay solvent.

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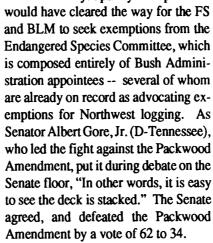
# An Endangered Species Review of the 101st Congress

by Wm. Robert Irvin

Setting the stage for what promises to be a contentious battle in the 102nd Congress over reauthorization of the Endangered Species Act (ESA), the 101st Congress was, to paraphrase Dickens, the best of times and the worst of times for endangered species conservation. To its credit, the Senate dealt a resounding defeat to the timber industry's effort to exempt logging of the northern spotted owl habitat in the ancient forests of the Pacific Northwest

gered Species Committee -- the socalled "God Committee" -- to grant an ESA exemption to logging of northern spotted owl habitat on federal lands in the Pacific Northwest. Strongly backed by the timber industry and organized labor, the Packwood Amendment would have required the U.S. Forest Service (FS) and the Bureau of Land Management (BLM) to submit outdated forest management plans for Oregon, Washington, and northern California to

> the U.S. Fish and Wildlife Service (FWS) for Section 7 consultation. Since these plans do not take into account the recent listing of the northern spotted owl as a threatened species on June 22, 1990, and do not reflect the owl conservation recommendations of the Interagency Scientific Committee, the FWS would have had little choice but to issue "jeopardy" opinions for those plans. The issuance jeopardy opinions



Now for the bad news. The long battle to save the endangered Mount Graham red squirrel was all but lost when Congress turned a blind eye toward the University of Arizona's unrelenting efforts to build an astrophysical observatory complex in the heart of the squirrel's critical habitat. In 1988, at the



enforcement of turtle excluder devices on shrimp nets off the southeastern United States coast. And, in a Congress where progress was often measured in inches rather than miles, legislators crept forward on the controversial issue of wolf reintroduction into Yellowstone

from the ESA. In addition, for the first

time, Congress allowed a full season of

National Park. In contrast to these positive developments, however, Congress stood on the sidelines while the University of Arizona chainsawed trees in the midst of the critical habitat of the endan-

gered Mount Graham red squirrel.

First, the good news. In the waning hours of the 101st Congress, Senator Bob Packwood (R-Oregon) introduced an amendment to the Fiscal Year 1991 Interior Appropriations Bill. This ammendment would have virtually guaranteed the convening of the Endan-

behest of lobbyists for the University, Congress authorized construction of the first three of a planned seven telescopes on Mount Graham, relying on a FWS biological opinion which concluded that the squirrels and the telescopes could coexist. When conservationists challenged the project in court, however, the FWS biologists who prepared the biological opinion testified under oath that they were instructed to reach that conclusion by superiors in the Albuquerque regional FWS office. An investigation by the General Accounting Office, a congressional oversight hearing, and a report by a panel of FWS biologists confirmed that the original biological opinion for the Mount Graham project was legally and scientifically flawed. Despite this consensus and numerous statements in opposition by the sponsors of the 1988 legislation (which had allowed construction to proceed in the first place), the U.S. Department of Justice concluded that the 1988 law precluded reinitiation of Section 7 consultation. When federal courts refused to halt construction, Congress failed to act on legislation introduced by Representative Gerry Studds (D-Massachusetts) that would have blocked construction while a new biological opinion was prepared. Consequently, before the snows of winter blanketed Mount Graham, the University of Arizona destroyed some of the few remaining bits of critical habitat for the 140 or so Mount Graham red squirrels left on earth.

Congress also took a hands-off approach in another endangered species arena, but with happier consequences. For the first time, turtle excluder devices (TED) regulations were kept in place for a full summer from North Carolina to Texas. In sharp contrast to the summer of 1989, when the Bush Administration caved in to violent protests by recalcitrant shrimpers and Gulf Coast congressional delegation pressure, this year the Administration enforced the TED regulations, even bringing criminal charges in Texas against

# **Book Review**

# **Lemurs of Madagascar and the Comoros:** The IUCN Red Data Book

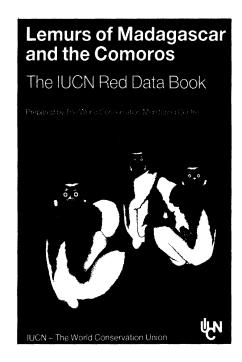
The IUCN (World Conservation Union) Red Data Books are compilations of ecological information on imperiled species for conservation purposes. This particular volume is devoted to lemurs — the greatly endangered endemic primates of Madagascar. Environmentalists now recognize lemurs as top conservation priorities due to the uniqueness of Malagasy fauna and Madagascar's rampant rate of habitat destruction -- already six genera and 14 species have gone extinct since human inhabitation of the island. Thus, as mentioned in the preface, publication of this volume is especially timely.

The book begins with introductory material on Madagascar, including geography, flora, and reasons for widespread lemur decline. Following this overview comes descriptions of the six types of Madagascar protected areas, their locations, and the lemur species found within each of them. This beginning section concludes by outlining the goals of the IUCN/SSP Primate Specialist Group, charged with preparing an Action Plan for Malagasy primates.

The bulk of the book, however, is devoted to species "data sheets" for the 53 lemur species/subspecies. Each entry contains the latest scientific information on distribution, habitat and ecology, specific threats, conservation measures, captive breeding, and taxonomy, along with an extensive reference list. Additionally, the authors include full-page distribution maps and black & white photographs for each species.

As with other Red Data Books, this volume is a deliberate iniative to provide working knowledge to those striving to save the planet's imperiled species. The IUCN is to be saluted for its pioneering efforts in amassing and disseminating this critical information.

by Caroline Harcourt and Jane Thornback



Lemurs is available for \$36 (U.S.) plus postage. from IUCN. See the back cover of this UPDATE for IUCN's address and other available books.

shrimpers who had sewn their nets closed to foil TED operation. The results were dramatic, with TED compliance at an all-time high and sea turtle strandings markedly reduced. Moreover, while long-time TED opponents Senator J. Bennett Johnston (D-Louisiana) and Representative W.J. "Billy" Tauzin (D-Louisiana) introduced legislation designed to undermine the TED regulations, Congress took no action on those bills.

Finally, Congress inched forward on efforts to reintroduce gray wolves into Yellowstone National Park and the Central Idaho Wilderness Area. In an amendment to the Fiscal Year 1991 Interior Appropriations Bill, House and Senate conferees agreed to establish a 10-member Wolf Management Committee to develop a wolf reintroduction and management plan for the two areas. The Committee is to consist of representatives from the National Park Service, FS, FWS, the fish and game departments of Idaho, Montana,

and Wyoming, two representatives from the conservation community, and two representatives from the "livestock/ hunting community," all appointed by the Secretary of the Interior. Committee is to report its reintroduction plan to the Secretary and Congress by May 15, 1991. The ban on expenditures for preparing a wolf reintroduction environmental impact statement, which retiring Senator James A. McClure (R-Idaho) had inserted for the past two years in the Interior Appropriations measure, was removed.

What lessons can be drawn from the 101st Congress for the coming battles over ESA reauthorization in 1992? First, although opponents of the ESA are already lining up to attack ESA provisions such as protection of subspecies, and to amend the ESA to require consideration of economics at all stages, those efforts will face stiff opposition in Congress. As the Senate's rejection of the Packwood Amendment demonstrates, there is a strong reservoir

of support in Congress for the ESA. Given the broad support for the ESA in the conservation community and among the American people, Congress is unlikely to countenance blatant attempts like Senator Packwood's to dismantle essential features of the ESA.

On the other hand, as the Mount Graham red squirrel experience graphically shows, Congress can easily delude itself into believing that supposedly minor modifications of the ESA's protections in particular cases will not do major damage to endangered species or the ESA itself. The lesson from Mount Graham, however, is clear: when Congress compromises on endangered species conservation, endangered species will lose. As the 102nd Congress begins to grapple with ESA reauthorization, it should keep that lesson in mind.

Robert Irvin is Legal Counsel for the Fisheries and Wildlife Division of the National Wildlife Federation, 1400 16th Street, NW, Washington, DC 20036-2266.

# **Bulletin Board**

#### **IUCN Red Data Books**

The following books providing ecological information on imperiled species are available from the IUCN:

- Threatened Antelopes of Africa and the Middle East (1990)
- Dolphins, Porpoises, and Whales of the World (1990)
- Threatened Primates of Africa (1988)
- The 1988 IUCN Red List of Threatened Animals (1985/88)
- Threatened Swallowtail Butterflies of the World (1988)
- Threatened Birds of Africa and Related Islands (1985)
- IUCN Invertebrate Red Data Book (1983)
- IUCN Amphibia-Reptilia Red Data Book (1982)
- IUCN Mammal Red Data Book (1982)
- IUCN Plant Red Data Book (1978)

For cost information and/or a catalogue, contact: IUCN Publications Services Unit, 219c Huntingdon Road, Cambridge, CB3 0DL, UK.

### **Medicinal Plant Fellowship**

The Rainforest Alliance, a New York-based nonprofit organization, is offering the Eliane Souza Edelstein Fellowship to support research leading to the sustainable cultivation, harvesting, and processing of medicinal plants in Brazil. The research will benefit both rainforest conservation and local communities by offering an economic alternative to rainforest destruction, as well as serve as a model for future research

efforts. The fellowship provides a grant of \$15,000 (U.S.) per year for three years, with progress reports and a final publishable paper expected in return. Applications are due by 5:00 p.m., February 15, 1991. For guidelines, contact: Rainforest Alliance, 270 Lafayette Street, Suite 512, New York, NY 10012; (212) 941-1900.

# **Tropical Botany Scholarships**

The Garden Club of America is offering two one-time \$5,000 awards to graduate students enrolled in a U.S. university (not necessarily U.S. citizens) conducting fieldwork in the tropics for doctoral research in tropical botany. Applications are due by December 31, 1990. Awards will be announced March 15, 1991. For guidelines, contact: Jane MacKnight, World Wildlife Fund/Garden Club of America, Scholarships in Tropical Botany, 1250 24th Street, NW, Washington, DC 20037.

#### **Upcoming Special Issue**

The November issue of the Endangered Species UPDATE will be a Special Issue focusing on the evaluation of captive breeding and reintroduction as a strategy for preserving threatened and endangered species. The Special Issue will feature over 20 authors, and will include case histories of plant, mammal,

bird, reptile and amphibian species currently involved in ongoing captive breeding and reintroduction programs. Extra copies will be available for sale. Also available are copies of the 1989 Special Issue entitled "Recovery Planning," and xerox copies of the 1988 Special Issue entitled "A 15-Year Retrospective on the Endangered Species Act" for \$4 each, plus postage.

#### **UPDATE** Back Issues Available

Back issues of the Endangered Species UPDATE are available starting from when the UPDATE was first established in November 1983, up through the present (only xerox copies are available for a few sold-out issues). Charges are \$2 per regular issue (\$4 for Special Issues), \$18 per volume (= one year's worth), or \$15 per volume if three or more volumes are purchased. Postage is \$.50/issue, \$2.50 per volume, or \$10 maximum. Contact the UPDATE Editor for more information.

# Support for the **UPDATE**

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# **Endangered Species**UPDATE

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