

AMERICAN SOCIETY OF MAMMALOGISTS  
CONSERVATION OF LAND MAMMALS COMMITTEE  
ANNUAL REPORT (1997-1998)

The Conservation of Land Mammals Committee was first established by the ASM in 1927, and is one of the oldest and consistently most active committees in the Society. Some of the most notable mammalogists of this century have served on this committee at some point. The Committee functions to fulfill the ASM's responsibilities to promote the conservation and welfare of natural populations of land mammals. Service on the Committee provides ASM members interested in conservation with opportunities to work towards supporting mammalian conservation in a variety of ways. ASM members that wish to serve on the Conservation of Land Mammals Committee should communicate their interest to either the ASM President or the Chair of the Committee. Currently, the committee is subdivided into seven subcommittees, including Position Letters, Resolutions, Conservation Education, Coordination with other Societies, International Conservation Issues, Special Projects, and Mammalian Conservation News. The subcommittee reports are as follows:

\*\*\* ACTION SUBCOMMITTEES \*\*\*

POSITION LETTERS (Lynda Randa, Chair)

The position papers subcommittee pursued the development of two position letters this year. The first letter addressed the highly publicized issue of grizzly bear reintroduction in the Bitterroot ecosystem of Idaho and Montana. On behalf of the ASM, a letter was drafted to the U.S. Fish and Wildlife Service in response to a request for comments on its draft Environmental Impact Statement for reintroduction of the Grizzly Bear to the Bitterroot Ecosystem in central Idaho. The letter supported the Fish and Wildlife's preferred alternative, reintroduction as a nonessential experimental population. This alternative was also most strongly supported by the Conservation of Land Mammals Committee members. Additionally, the letter recommended modifications for the proposed recovery and experimental population areas to provide better dispersal opportunities for the bears. The letter was sent by President Linzey in November 1997 to the Fish and Wildlife's grizzly bear recovery team. The subcommittee will continue to monitor progress on recovery of the grizzly bears to this historical part of their range. In April 1998, our committee received a request from the Alaska Department of Fish and Game for a copy of our position letter to assist them in dealing with a grizzly bear issue in Alaska.

The second letter is currently in the process of being written and deals with the conservation of the wolverine (*Gulo gulo*) in the lower 48 states. Recently, the USFWS decided to list the lynx (see below), and it is felt that the status of the wolverine is equally precarious and that the wolverine is just as deserving of protection in the lower 48 states of the US. It is anticipated that this letter will be completed and sent to the ASM president over the summer of 1998. Future issues potentially meriting position letters, such as protection of the endangered Sonoran pronghorn antelope, will continue to be monitored by this subcommittee. Recommendations for position paper issues are welcome from any ASM member.

RESOLUTIONS (Charles Long, Chair)

The resolutions subcommittee received no suggestions for resolutions from outside the committee this year. Within the committee, one issue emerged as significant enough to warrant a resolution this year, the conservation of the prairie dog and grassland ecosystems of North America (see attached). This resolution was precipitated, at least in part, by the major press coverage of the prairie dog and the endangerment of its grassland habitat in midwestern and western US, Canada, and Mexico, including cover articles in Smithsonian (Mar 98) and National Geographic (Apr 98). It was felt that the timing was good for taking on this issue. This resolution was written up, edited by several members of the subcommittee as well as members of the full committee and other ASM members, and was submitted

to the Chair of the Resolutions Committee in April. This resolution will be read and voted on during the annual ASM business meeting at the annual meeting in Blacksburg, VA. As far as last year's resolutions, there is some updated information on the Yellowstone bison killing and brucellosis policies and the Canadian Endangered Species Protection Act issues in the Mammalian Conservation News section of this report (see below).

\*\*\* INFORMATION SUBCOMMITTEES \*\*\*

CONSERVATION EDUCATION (Glennis Kaufman, Chair)

The Grassland Education module has been the subject of focus again this year. Although the module has been completed, issues involving its availability remain unresolved. The subcommittee remains committed to making the module available, and has decided to change the format of the entire program to electronic. The previous format (slide show, video, and teacher's resource manual) is out of date given the present electronic age even in the most rural areas of the U.S. and other parts of the world. Therefore, Glennis Kaufman, Steve Sheffield, Sue McLaren, and Mike Stokes have continued to explore the legalities of putting copyrighted materials on the ASM web page. These legalities include use of slides (including personal slides, ASM slide library materials, and historical materials) which were granted one-time use within the slide program as well as musical clips and voices which were obtained specifically for use in the audio program associated with the slide show. Because of the ease of downloading both visual and audio clips from the web, copyrights of individuals can be violated easily. Therefore, we are exploring what types of management of the data can be imposed to allow elementary teachers to use the information within the classroom, but will not allow other individuals to download and use information in ways that were not intended. Currently, few answers exist and others societies and entities also are struggling with these ideas as they make their home pages more attractive to users. Finally, remember that copies of our brochure "Why species become threatened or endangered: a mammalogist's perspective", published in January 1997, are available from the ASM Secretary-Treasurer (H. Duane Smith). We are in the process of making this brochure available on the ASM web page.

COORDINATION WITH OTHER SOCIETIES (Steve Sheffield, Chair)

The aim of this subcommittee is to communicate with other professional scientific societies that share our interests in conservation issues, with the intention of keeping them informed as to our conservation-related activities and possibly interacting with them on conservation matters. Our major goals this year were to (1) send out copies of our annual committee report with accompanying letters to as many other scientific societies sharing conservation interests as possible, (2) communicate and interact with as many other scientific societies that share conservation interests as possible, and (3) place CLM committee information on the ASM web page. Over the summer, about two dozen different societies, including other mammal societies, were sent a copy of our 1996-97 annual committee report along with a cover letter outlining the mission of the Committee and our desire to interact with other societies on conservation-related matters. Response to this mailing were very positive but few in number as in previous years. In the future, we will place the annual Committee report on the Committee webpage and email copies of our report along with an accompanying message to other scientific organizations with interests in conservation.

Earlier in the year, Steve Sheffield submitted current information on the CLM committee, including roster of members with mailing/email addresses and phone/FAX numbers and committee/subcommittee missions and assignments, to Mike Stokes for inclusion on the ASM web page. We invite visitors to the web page to contact the committee regarding any mammalian conservation-related issues (whether to request or to provide information). The hypertext feature on the CLM committee page allows visitors to the web page to contact committee members by email with a click.

Our committee has had contact with other scientific societies over the past year dealing with conservation issues, including the Society of Integrative and Comparative Biologists (SICB), The Nature Conservancy (TNC), and a number of international mammal societies at the ITC-7 meeting in Acapulco, Mexico. On 11 February 1998, a letter from the presidents of nine professional scientific societies, with a combined membership of >30,000, was sent to Congress and to Clinton Administration officials outlining science-based standards for amending the Endangered Species Act (see attached). The letter was sent on behalf of the membership of the American Society of Mammalogists, Society of Comparative and Integrative Biology, Ecological Society of America, Botanical Society of America, Entomological Society of America, Western Society of Naturalists, American Society of Ichthyologists and Herpetologists, American Malacological Society, and American Society of Limnology and Oceanography. This letter had originally been received by Alicia Linzey in February 1997 from SICB, who had taken the lead on this effort. The letter was reviewed by Steve Sheffield, Jim Shaw, and Paul Anderson on several occasions, and, after undergoing some significant editing, the letter was considered acceptable and was signed. This kind of group effort from professional scientific societies in calling for actions based on sound science carries a lot of weight, will attract significant attention, and should be pursued whenever possible.

Larry Master, committee member and Chief Zoologist for TNC, corresponded to Steve Sheffield that TNC continues to actively work with members of Congress on the ESA reauthorization as well as on some tax proposals that would give incentives to private landowners to conserve endangered, threatened, and otherwise rare and declining species on their properties. Also, TNC continues to work on a book on the status of biodiversity in the U.S. The original expected completion date was Spring 1997, but has been pushed back to sometime in 1999. This will include extensive analyses of patterns of species richness and species vulnerability (by state, county, ecoregion, cataloging unit, etc.) and lists of extinct species and their last year or decade of known occurrence.

Finally, Gordie Kirkland and Robert Manson brought copies of the 1996-1997 Annual Report of the CLM Committee to the ITC-7 meeting in Acapulco, Mexico in September 1997 and shared these with many of the mammalogists from other international mammal societies. Exchange of information on mammals and joint efforts to deal with international mammalian conservation issues were discussed at the meeting.

#### INTERNATIONAL CONSERVATION ISSUES (Janet Rachlow, Chair)

The role of this subcommittee is to monitor mammalian conservation issues on the international scene and to recommend possible action(s) to be taken. Members of the CLM Committee (Kirkland, Manson) were present at the ITC-7 meeting in Acapulco, Mexico to discuss mammalian conservation issues with mammalogists from around the world. Currently, this subcommittee is working on a report on policy changes that affect land mammals coming from the recent CITES meeting. At the most recent CITES meeting in 1997, 19 proposals were forwarded that concern listing of land mammal species (and 5 for marine mammal species).

#### SPECIAL PROJECTS (Tom Lee, Chair)

This year the Special Projects Subcommittee was active in three areas: finishing up a survey of mammal population monitoring programs in individual US states and Canadian provinces, submitting for publication a manuscript entitled "Factors Influencing Variation Among States in the Number of Federally Listed and Candidate Mammals in the United States" (R. Ostfeld and G.L. Kirkland, Jr.), and finishing a manuscript based on a survey of state-listed special concern species done in 1996 (G.L. Kirkland and G. Nordquist). We achieved success in all three areas. The Kirkland and Ostfeld manuscript was submitted for publication in 1997, and a draft of the Kirkland and Nordquist manuscript was

completed this year. The remainder of this subcommittee report provides a summary of the returns received from our survey of state mammal monitoring programs.

Back in March 1997, a project was initiated to assess the current status of mammalian population monitoring in this country. Members of this Subcommittee sent out questionnaires to representatives in all 50 states. By June 1997, we had received replies from 31 states. At the annual meeting in Stillwater, OK, forms were placed on bulletin boards in an attempt to gather even more information on mammalian monitoring efforts. We had over a dozen additional monitoring programs added to our listing from this effort. Currently, we have responses from 45 states, and have made phone calls and resent questionnaires to the other five states. The vast majority of states have monitoring programs of one type or another for mammals. Not surprisingly, these tend to focus on game species. This may reflect the fact that the most of the respondents represented conservation/game/wildlife departments, rather than heritage programs, biological surveys, or universities. Nevertheless, non-game species are being monitored in about half the states that responded. The scope of monitoring programs varies greatly among states for both game and non-game species. Monitoring of non-game species tends to focus on two groups: bats and special concern taxa. In general, monitoring of game species is much more widespread and comprehensive than monitoring of non-game species. In part, this may reflect a vested interest of conservation/game/wildlife departments in monitoring species that are revenue producers in terms of licenses, and for which sound management of seasons and bag limits requires an accurate knowledge of population size and trends. We hope to have a complete summary of mammalian monitoring programs in all 50 states compiled for the annual meeting in Blacksburg in June.

In addition to surveying American states, Justina Ray contacted representatives in Canadian provinces to assess the nature of their mammal monitoring programs. Nationally, there is a Committee on the Status of Endangered Wildlife in Canada (COSEWIC), which is responsible for developing a national listing of Canadian species at risk. ASM member Dave Nagorsen (Royal British Columbia Museum) heads the mammal subcommittee. Information was also received from Alberta, British Columbia, Manitoba, and Ontario. In general, the nature of mammal population monitoring in Canadian provinces mirrors that in the United States. Specifically, provincial monitoring of mammals tends to focus on game species. Progress to date in Alberta has been impressive with the publication of "The Status of Wildlife in Alberta" in December 1996 by the Wildlife Management Division of Alberta Environmental Protection. One additional goal of this project is to collect information on mammalian monitoring in Mexico. Patty Cortes-Calva has provided some information on mammalian monitoring efforts in Mexico. In general, mammalian monitoring efforts in Mexico are lagging far behind those of the US and Canada, but great improvements have been made over the past 10 yrs or so. Efforts focus mostly on game species, but there are some longer-term monitoring efforts of bats and rodents in certain Mexican states.

#### MAMMALIAN CONSERVATION NEWS (Robert Manson, Chair)

The role of this newly formed subcommittee is to actively monitor conservation news that impacts mammalian species and report on its findings in the annual report for the benefit of the ASM membership. The first goal of this subcommittee this year was to compile a working list of conservation news sources. These sources include printed materials (e.g., journals, magazines, newsletters, etc.) as well as the internet (e.g., web pages, listservers, etc.). Steve Sheffield has been compiling these sources for years, and sent them on to Robert as a starting point. Robert and the subcommittee added to this list, and it will continue to be added to as more sources become available. This listing will be made available to any interested ASM members from the committee. The second goal of this subcommittee was the report of mammalian conservation news items. These items are listed as follows:

\*\*\* Contributed by Robert Manson \*\*\*

(1) African Elephant Conservation (CITES)

The conservation of African elephants has been in controversy recently regarding the Convention on International Trade in Endangered Species (CITES, to which the United States is a party). In June 1997, Zimbabwe hosted the 10th Conference of the Parties (COP10) of CITES. Before the member nations were three proposals (one for each country) to list the elephant populations of Zimbabwe, Botswana, and Namibia from on Appendix II, thereby allowing a managed trade in elephants and elephant parts (including ivory) from those countries. These countries have had a history of firm control over their elephant populations, and a surplus of elephants which are causing increasing losses of property and human life. They have generally allowed controlled hunting, often integrating it into village economies and securing revenues for conservation and park programs. The proposals would have allowed individual export quotas for each country to Japan only, trade in hunting trophies, and trade in live animals to appropriate and acceptable destinations. When the proposals were offered at COP10, they were initially tabled (with U.S. support). But after intense lobbying by the three nations as well as by South Africa, the proposals were modified (a) to impose strict quotas for a one-time sale; (b) to lift the ban only after 18 months; and (c) to limit exports of hunting trophies to non-commercial purposes. On a secret ballot, these modified proposals passed, with strong support of many countries in South America which view themselves as facing similar problems. The United States voted against the amended proposals as well. As a result of the vote, sometime after December 1998, Botswana, Namibia, and Zimbabwe will be allowed to sell 25.3, 13.8, and 20.0 metric tonnes of ivory respectively to purchasers in Japan. Resources from these sales will help local people, the countries' wildlife programs, and their national treasuries. Critics counter that resumption of the ivory trade will also lead to resumption of poaching in other countries and a return to declining elephant populations, as poachers try to take advantage of the legal market by disguising the illegal origin of their ivory products. Other critics feel, quite simply, that the killing of these animals is immoral, and should be stopped (source: Environmental and Natural Resources Division of the Congressional Resource Service).

## (2) Endangered Species Act (ESA)

### Background

The 1973 ESA began as a comprehensive attempt to protect all species and to consider habitat protection as an integral part of that effort. It is administered primarily by the Fish and Wildlife Service (FWS), but also the National Marine Fisheries Service (NMFS) for certain marine species. Under the ESA, certain species of plants and animals (both vertebrate and invertebrate) are listed as either "endangered" or "threatened" according to assessments of the risk of their extinction. Once a species is listed, powerful legal tools are available to aid the recovery of the species and the protection of its habitat. As of January 31, 1998, 1,696 species of animals and plants (of which 1,126 occur in the United States and its territories) had been listed as either endangered or threatened. Of the U.S. species, 744 were covered in 478 recovery plans. As of July 31, 1997, only 11 species had been delisted due to recovery, while seven species had gone extinct and nine had been de-listed due to improved data. A large number of species (41% of those listed) have improved or stabilized their population levels following listing. However, there appears to be a trend to list species only once they are very depleted (e.g. median population of 407 animals for endangered vertebrates) which may be too late for many species. The authorization for funding under ESA expired on Oct. 1, 1992, though Congress has appropriated funds in each succeeding fiscal year.

### Congressional Activity on ESA 1997-98

The focus in the 104th Congress was on ESA funding matters and various amendments to appropriations bills, as well as attempts at more comprehensive revisions of the Act. The only enactments affecting ESA were two moratoria on further listings, and a provision in the immigration bill exempting certain border activities of the Immigration and Naturalization Service from the Act. The FY1997 appropriations bill

included a listing moratorium but provided for a presidential waiver that was invoked shortly after the bill was signed. The authorization for spending under ESA also expired on October 1, 1992. The prohibitions and requirements of the Act remain in force, even in the absence of an authorization, and funds were appropriated to implement the administrative provisions of the Act in both sessions. There is expected to be little movement towards a comprehensive reauthorization of ESA during the 105th Congress. However, the tentative support by the Administration of S. 1180 recently reported by the Senate Committee on Environment and Public Works, may cause some reassessment of that view. Objections to portions of the bill range from its failure to include compensation for property rights to the higher cost of administering a more complex law (i.e., less conservation per dollar appropriated). Sponsors had hoped to bring the bill to the floor early in the second session, but consideration has been postponed. Some observers see a chance of passing a less comprehensive bill addressing some points on which many parties (including litigants) can agree. Whether those willing to accept compromise on some points outnumber those who wish to pass only a far-reaching bill remains to be seen. To date, two other bills amending ESA have been reported. Among other things, H.R. 752 would permit those whose economic interests are affected by the ESA to have standing to sue. The House has not acted on the measure. H.R. 478, which would have allowed special waivers of certain provisions of the ESA for flood control projects, was considered by the House, but no final action was taken. In addition, a provision was added to P.L. 105-18 (supplemental appropriations bill), to expand on an existing Fish and Wildlife Service declaration about emergency provisions of ESA and natural disasters in California. P.L.105-83, Interior Appropriations for FY1998, included a provision that caps expenditures for listing and designations of critical habitat, thereby limiting the ability of FWS to carry out these functions and respond to lawsuits, but also protecting the rest of its programs from the results of court decisions. In addition, H.R. 2351, a bill supported by much of the environmental community, has drawn a number of cosponsors (105 at last count), but has not been scheduled for hearings.

#### Legislation Summary

Senators Kempthorne, Chafee, Baucus, and Reid introduced S.1180 to reauthorize and amend ESA. The bill emphasizes recovery efforts, and would write into law many of the measures implemented by Secretary Babbitt. It would allow non-federal property owners to sign agreements with the Secretary to identify "activities of the property owner that will not result in a violation of the prohibitions..." of Section 9 of the Act regarding taking; the agreements would not be subject to public notice or comment. It would expand the role of states in implementing the Act. It would direct federal agencies to enter agreements with the Secretary to implement recovery plans, and it is possible that "for purposes of" the section on recovery, "the substantive provisions of the agreement shall be within the sole discretion of the Secretary and the head of the Federal agency," i.e., it is possible that the agreements would not be subject to judicial review. It does not cover water rights or compensation to property owners. Both property rights and environmental groups objected to major portions of the bill. At a hearing on the bill, the Administration said it could support the bill, provided certain amendments were made. After the bill was amended and reported on October 31, 1997, the Administration offered its support. Floor consideration of the bill has been delayed.

H.R. 2351 was introduced by Representative Miller; it was endorsed by conservation groups and rejected by property rights groups. It emphasizes recovery of species, steps up protection for candidate species, creates a new category of "survival habitat" which must be designated at the time of listing, creates a version of "no surprises" permits, and creates a habitat conservation fund based on performance bonds paid by those who receive incidental take permits. It contains extensive tax benefits for landowners. It would also allow the public to sue to enforce the terms of Habitat Conservation Plans (HCPs). No hearings are scheduled for the bill.

The Emergency Supplemental Appropriations Act (P.L. 105-18) expands on existing and FWS policy for certain California counties affected by flooding. FWS had declared the implementation of the emergency provisions of the ESA in 42 California counties affected by flooding. Section 3003 of the supplemental extends that policy by allowing federal agencies carrying out repairs to flood control projects to protect human life or property to defer the consultations or conferences required under Section 7 of ESA. The law applied to repairs on flood facilities to protect lives and property and lasted through Dec. 31, 1997. In addition, H.R. 752 was reported by the House Resources Committee (H.Rept. 105-42). As reported, the bill would grant standing to those who claim they have suffered (or are "threatened with") economic or other injury from a violation of the ESA, or from the Secretary's failure to act in accordance with the ESA. The bill was introduced before the recent Supreme Court decision (*Bennett v. Spear*) upholding the right of those with economic injury to sue in some circumstances (source: Committee for the National Institute for the Environment).

### (3) Brucellosis and Yellowstone Bison: An Update

As a result of pressure from a number of conservation organizations and professional societies including the ASM, USDI Secretary Bruce Babbitt called for a National Academy of Sciences (NAS) study on the brucellosis disease situation in and around Yellowstone National Park. Central goals of this report were to assess the threat of Brucellosis transmission between bison and the cattle herds surrounding Yellowstone Park and to devise alternative management strategies besides the current approach of shooting bison leaving park boundaries. The Board on Agriculture and the Board on Environmental Studies and Toxicology began the study in May 1997 to look specifically at the following issues:

- The transmission of *B. abortus* among cattle, bison, elk, and other wildlife species
- The relationship, if any, between bison population dynamics and brucellosis.
- The ability of serology testing to estimate true infectious potential.
- The efficacy and safety of existing vaccines for target and nontarget species and the need for new (including bison-specific) vaccines.
- The nature and likely successes or limitations of a wild animal vaccination program.
- Key factors in reducing risk of transmission from wildlife to cattle and among cattle.

Key findings of the December 1997 report include the following:

1. Current methods of testing for brucellosis have flaws which limit the ability to accurately monitor the prevalence of this disease in bison and elk populations. Animals are tested for brucellosis using serologic tests (blood tests to detect that antibodies are present as a result of an infection) and bacterial cultures (where bacteria from tissue samples are grown under laboratory conditions). Both methods have flaws. A serologic result can be a good indicator of infection, but because it detects antibodies, not living bacteria, it is indirect evidence of infection or vaccination. Thus, a seropositive animal might not be infectious. In contrast, an animal might be infected but test seronegative in several situations, such as when antibodies have not yet developed because the test is taken in early stages of disease incubation, when a test is not sensitive to detect low levels of antibodies, or when the test itself is defective. Bacterial culture is the definitive test of infection, but in chronic infections, such as those present in the YNP bison herd, few bacteria might be present in an animal. That makes accurate culture difficult--the correct tissue and the correct sample size must be obtained. Therefore, although bacterial culture does not yield false-positive results, it does give false-negative results. Because of testing insufficiencies, seropositive animals should be assumed for management purposes to be carrying live *B. abortus*.

2. Much of what we know about brucellosis in the GYA has been extrapolated from research conducted on cattle. Almost no controlled research has been done concerning transmission between wildlife species and cattle. YNP and Grand Teton National Park (GTNP) bison populations are chronically

infected with *B. abortus*, but the true prevalence of brucellosis in GYA bison and elk is unknown. The risk of bison or elk transmitting brucellosis to cattle is small, but it is not zero.

3. Transmission of *B. abortus* from elk to cattle is unlikely in a natural setting, because elk usually avoid areas used by cattle and isolate themselves for birth, but elk are capable of transmitting the bacteria to cattle. Elk also can transmit the bacteria to bison, and this might have occurred in the GYA. Under present conditions, even if low infection rates were attained for bison, an elk-to-bison or bison-to-elk transmission eventually would occur. If infection rates are not substantially reduced in elk, reinfection of bison is inevitable. *B. abortus* is unlikely to be maintained in elk if the elk winter-feeding grounds were closed.

4. If a program to control brucellosis were undertaken, a variety of approaches could be exercised, some of which could be undertaken at the same time. The approaches taken would depend on short- and long-term goals. Several approaches to control and eventual eradication of brucellosis are available, including vaccination, establishment of perimeter quarantine zones, spatial and temporal separation of cattle and bison, and vaccination with herd management (which might include testing and eliminating infected animals). Those approaches could be used individually or combined, depending on the degree of control determined to be in the best national interest. Other possibilities for control might arise, particularly as vaccine development progresses. A long-term, controlled vaccination study must be conducted to assess the complete role of vaccination in brucellosis control and eradication. Any vaccination program for bison must be accompanied by a concomitant program for elk.

5. A program to eradicate brucellosis entirely would need to include an extensive vaccination effort, as well as a test-and-slaughter component with simultaneous elimination of all infected bison, elk, and cattle. If brucellosis were eradicated from those species, the reservoirs of *B. abortus* in other wild species are expected to disappear on their own. Total eradication of brucellosis as a goal is more a statement of principle than a workable program at present; neither sufficient information nor technical capability is available to implement a brucellosis-eradication program in the GYA. No good vaccine or vaccine delivery mechanism is available at present—it would be impossible to vaccinate all GYA elk, and attempts to vaccinate bison (for example, by rounding them up) likely would be very intrusive. USDA and DOI should develop a plan to maintain a series of YNP perimeter quarantine zones with progressively increasing disease surveillance, vigorous monitoring, vaccination, and contact-reporting programs as one nears the park. The boundaries of the zones and management needed to maintain the zones should be determined jointly by USDA, DOI, and the states surrounding YNP. The plan should remain in place until brucellosis is eliminated from YNP. It is important that a team of scientists be involved in this program and that results be analyzed and published in a refereed scientific journal. A brucellosis program for wildlife in the GYA should be approached in an adaptive management framework (sources: National Academy of Sciences, National Wildlife Federation).

#### (4) African Wild Dogs

A combination of a natural wanderlust and bad image among humans has driven African wild dogs from nearly two thirds of their original range. Their population in parks has plummeted to around 3,000 -- making them as endangered as black rhinos -- according to a recently released report by IUCN Species Survival Commission. The report found that even the largest parks can support only small numbers of wild dogs, which are distant relatives to wolves and jackals. Each pack uses up to 400 square miles, probably to avoid lions, which prey on both adults and pups, and compete for many of the same prey species. In Kruger National Park in South Africa for example, just 400 wild dogs live within its 9,000 square-mile expanse. According to the report, this tendency for the dogs to wander often puts them in contact with humans who have persecuted them since colonial days. Half the wild dogs found dead in reserves have been shot, snared, poisoned, or killed by road traffic. Wild dogs roaming outside of



reserves meet up with domestic dogs where they fall victim to rabies and other diseases. Rabies has already caused the extinction of at least one wild dog population.

The researchers have proposed a series of conservation measures to ensure protection of the remaining population of African wild dogs. These include working with local landowners to minimize persecution and contact with domestic dogs. Inside protected areas and along their borders, the use of snares must be controlled, and new high-speed roads should be routed away from reserves (sources: IUCN, Wildlife Conservation Society).

#### (5) Wolf Reports

Minnesota DNR and U.S. Fish and Wildlife Service officials said they are in the early stages of preparing for the removal of the timber wolf from the endangered species list in Minnesota. Neighboring states may soon follow. Reclassifying the wolf would mean those states could begin to use lethal methods to protect livestock from wolves.

The U.S. Fish and Wildlife Service has decided to keep North Carolina's red wolf on the endangered species list despite claims the animal may really be a hybrid of gray wolves and coyotes. The agency has rejected a challenge filed by a group called the National Wilderness Institute to the wolf's credentials. The group based its challenge on genetic analyses by biologist Robert Wayne of the University of California at Los Angeles, which showed the red wolf might be a hybrid.

Wolves believed to be crowding an area of Alaska will be subjected to sterilization and relocation in a bid to protect a shrinking caribou population, the state Department of Fish and Game said. The 21 packs in Alaska's Fortymile River region -- a lengthy network of creeks and rivers in eastern Alaska -- will be spared any wolf kills, department officials said. Instead, the "alpha" or lead pairs of each pack will get vasectomies and tubal ligations to reduce reproduction under the plan. State biologists this winter will capture about 30 of the area's 150-some wolves, take them to a makeshift clinic for sterilization and then release them. About 60 more wolves will be relocated to other parts of the state, under the plan. The intent is to boost the population of the Fortymile River area's caribou herd, which is at 25,000 animals, only 5 percent of its historic high, officials said (sources: Reuters and an Internet Wildlife Digest).

#### (6) USFWS Agrees To Halt Trapping & Killing Of Coyotes In NW

As a result of a lawsuit by Friends of Animals, the U.S. Fish & Wildlife Service has agreed to immediately halt its program of trapping and killing coyotes in the Pacific Northwest. The service had insisted that lethal controls were necessary because coyotes were killing deer fawns, but FoA presented evidence that declining deer populations were due to the federal government's own practice of allowing cattle to graze on refuge lands. As part of a settlement with FoA and the Oregon-based Predator Defense Institute, the wildlife service agreed to stop its program of lethal control while it seeks alternatives. Under the terms of the agreement, FoA and PDI can reopen the court case and pursue further action if the wildlife agency fails to permanently change its policy. The suit was filed in May, 1997 in U.S. District Court in Washington, shortly after the federal government began a three-year program to trap and kill coyotes in and around the Julia Hansen National Wildlife Refuge in southwest Washington. The program was carried out by the wildlife service's Animal Damage Control Office.

\*\*\* Contributed by Lynda Randa and Steve Sheffield\*\*\*

#### (7) Mexican Wolf

Eleven Mexican wolves (*Canis lupus baileyi*) in three family groups were finally released into the Apache National Forest of eastern Arizona on 29-30 March, 1998. The reintroduced Mexican wolf population was designated as non-essential experimental under section 10(j) of the Endangered Species Act; this reintroduction option was supported by ASM in a position letter sent to the FWS in October 1995. The

wolves will be allowed to expand throughout the Blue Range Wolf Recovery Area (BRWRA), consisting of the Apache and Gila National Forests of eastern Arizona and western New Mexico, an area of about 7,000 mi<sup>2</sup>. Additional wolves will be reintroduced as needed until the recovery objective of 100 wolves is met. Up to this point, the Mexican wolf was considered extinct in the wild; the last individual was seen in Mexico over 10 yrs ago. Currently, about 175 individuals exist in captivity (zoos and breeding facilities). Updated information on Mexican Wolf Recovery can be obtained at: <http://ifw2es.fws.gov/wolf/updates>. Back on 3 April 1997, the USFWS made available the Record of Decision and Statement of Findings on the Environmental Impact Statement on reintroduction of the Mexican wolf to its historic range in the southwestern US (contact person - David Parsons ((505) 248-6922, [david\\_parsons@mail.fws.gov](mailto:david_parsons@mail.fws.gov))).

\*\*\* Contributed by Justina Ray \*\*\*

(8) The Status of the Canadian Endangered Species Act (April, 1998)

To review the status of endangered species legislation in Canada as of April 1998, a Canada Endangered Species Protection Act, Bill C-65, was introduced in federal parliament on October 31, 1996. After first reading, it was reviewed by a Standing Committee that held public hearings and reported the Bill back to Parliament in March with some significant amendments. Although it is usual practice to hold a debate and reading of the Bill in the House of Commons within 72 hours of the report, there was a long delay. On April 24 there was a reading of the Bill and a short debate in the House, but was not completed. Since the official report of the revised Bill, there had been enough time for 115 new amendments to be proposed. On Sunday April 27, the Prime Minister dissolved Parliament and called for elections, and the Bill died on the Order Paper in the House of Commons. The PM, Jean Chretien, was re-elected in June 1997, but there is now a new Minister of the Environment, Hon. Christine Stewart (the third since the draft version of the Bill was introduced in August 1995).

The re-elected government renewed its commitment to introduce federal endangered species legislation (it is committed to "legislation to identify, protect, and recovery those species at risk within federal jurisdiction" [Liberal Plan 1997]). As of this writing, one year since the Bill died in Parliament, this has not occurred. Most activity has been centered around individual provinces.

Prior to the introduction of Bill C-65, an Agreement-in-principle, with the National Accord for the Protection of Species at Risk, was reached by provincial/territorial representatives. Under this Accord, provinces and territories agreed to: 1) participate in the Canadian Endangered Species Conservation Council to ensure coordination among activities and resolution of issues for the protection of wildlife at risk, 2) put in place complementary legislation and programs to cover wildlife in their jurisdiction and ensure multi-jurisdictional cooperation for the protection of species that cross borders, and 3) recognize the Committee on the Status of Endangered Wildlife in Canada (COSEWIC; the committee of scientists and wildlife experts that develops the national listing of Canadian species at risk) as a source of independent advice on the status of nationally imperiled species. Since that time, only seven governments have formally signed the Accord and fewer have lived up to the commitment to develop legislation which includes the 14 agreed elements necessary to protect species at risk. The provincial governments apparently were not happy with the Bill C-65 which contained federal initiatives to legally protect endangered species outside of federally owned land. In the words of the Canadian Endangered Species Coalition, ACanada's international commitments to protect species and the extinction of native Canadian plants and animals were not seen as sufficient reasons for the provinces to concede that this issue warranted national leadership. A At the present time, endangered species protection exists in the form of a patchwork of provincial laws that range in quality, and significant gaps remain.

The Provincial and Territorial Ministers responsible for wildlife (CESCC) met with the federal Environment Minister, on October 1, 1997 to discuss the future of the federal endangered species law.

At this meeting, the Council resolved that each jurisdiction would prepare their respective implementation plans of the National Accord by April 1998. Since the content of any federal endangered species legislation will depend on negotiation among provinces, this is a pre-requisite of the introduction of another Bill in the House of Commons.

As of this writing, it is clear that the Council is months behind their self-prescribed deadline and that the April deadline will not be met. They have, however, released the draft outline of the Implementation Strategy, which contained the draft Terms of Reference for the CESSC and a "new" COSEWIC. In this document they proposed that the CESSC would be responsible for national listing of species at risk, would recommend appointments to COSEWIC, "provide direction" to COSEWIC, in addition to multi-governmental coordination (which is not detailed in the draft implementation plan). This, in effect, would put the political body (CESSC is comprised of wildlife ministers) over the scientific committee, and would turn the listing process into a political exercise. It is already apparent that this approach is fraught with problems from a glance at the listing process within the four provinces that have endangered species legislation. These same wildlife ministers have listed only a fraction of the species listed by COSEWIC in their own provinces, with ratios of COSEWIC species within jurisdiction: provincially-designated species as follows: New Brunswick 28:14, Quebec 65:9, Ontario 138:24, and Manitoba 36:16. There is hope that this will be significantly improved by the time the CESSC is ready to introduce the final draft of the Implementation Strategy.

As long as the provinces come up with their plan of action as defined by the Accord sometime this year, it is expected that a new Endangered Species Bill will be introduced in the House of Commons by the end of this year. It is not clear how similar it will be to the Bill that was tabled last year, but many people were unhappy with it, so there is pressure to introduce a different version. Meanwhile, COSEWIC came out with a revised Canadian endangered species list this month; 18 new species (no mammals) were added, bringing the total to 307. This designation is largely symbolic, because Canada has no endangered species act to legally protect the species or their habitats.

#### (9) Issues at CITES conference in Zimbabwe

A 10-day conference of the Convention on International Trade in Endangered Species (CITES) beginning in Harare, Zimbabwe on Monday 9 June was dominated by the following issues: a proposal by Botswana, Namibia and Zimbabwe for CITES to partially lift a 1989 world ban on ivory trade to allow the three elephant-rich southern African states to trade ivory regularly culled from their 150,000 herd, a proposal by Norway and Japan to open up whale-hunting, especially for scientific studies, a petition by South Africa that it be allowed to trade white rhinoceros products, expanding on current limits to export just its live animals, and debate on ways to cut down illegal trade in endangered species, currently estimated by CITES at up to \$10 billion a year. Measures to further protect heavily traded species (mammalian species include monkeys, apes, rhinos, tigers) were proposed and discussed.

#### (10) Gorillas are endangered prey in central African forests

Deep in the rain forests of Central Africa, a hunter sits beside the carcass of a dead gorilla, an endangered animal protected by law in Cameroon. The man, brandishing the gorilla's dismembered hand, boasts that this is one of many apes he's killed. Why would anyone care about the animal, the hunter asks. In the forest, he says, it's a war between man and savage beast. The widespread slaughter of endangered animals in eastern Cameroon, like lowland gorillas and chimpanzees, is a mounting problem that could drive the great apes from the face of the Earth. A hunter can fetch roughly \$30 for the carcass of a 400-pound male gorilla. The meat, known as bush meat, is destined for markets in cities and towns where consumers pay more for it than beef or pork. At the zoo in Limbe, a chief trading port

in Cameroon, volunteers care for orphaned baby gorillas and chimpanzees -- their mothers were sold for meat; the babies sold as pets. Government officials seized some of the animals from poachers, but most were given to the zoo by people who bought them from hunters. "The baby, if it survives, tends to bring in more money for the hunter than the carcass. That encourages the hunter to go out and look for females with infants," volunteer Patricia Gleason said. However, the zoo's rescue-operation program, Pandrillus, is running out of funds and space for the ever-increasing number of orphans. The widespread slaughter of the animals is compounded by expanding timber operations, conducted by European and Asian companies. When companies clear land and build logging roads that lead deep into forests, Hunters follow the roads to track down prey. Hunters also use logging trucks to carry meat out of the forests, and some sell their kills to logging workers and their families in company towns. Residents in the towns say they have no choice but to eat the bush meat because pork and beef are not available. "When the hunter kills an elephant, everybody buys it. When it's a gorilla, everybody buys it," explained Ndzana Ndzana, government minister of environment and forests. And on the logging roads, hunters say they don't like their way of life, but they claim it's the only way to feed their families. There are no other jobs in Cameroon, one hunter said. But as timber companies press deeper into the forest, followed by the hunters, it is clear what the outcome will be: a mounting disaster that could lead to the extinction of some of the world's most endangered animals (source: CNN 21 February 1998).

#### (11) European logging firms fuel trade in ape meat

Africa's great apes are threatened anew by an explosion in trade of wild animal meat for human consumption fueled by European logging companies, animal charities said on Thursday. A large and generally illegal trade in "bushmeat" has developed into a major commercial activity that threatens the survival of gorillas and chimpanzees, the Ape Alliance said in a report. Many other species are also at risk, including the giant pangolin, forest elephant and dwarf crocodile, according to the report, entitled "The African Bushmeat Trade -- A Recipe for Extinction." The extent of the crisis was shown in Congo, where 15,000 animal carcasses, including 293 chimpanzees, were counted at bushmeat markets in Brazzaville, it said. The report said that up to 600 lowland gorillas were killed each year to feed the trade. It said the rapidly growing timber industry, which has been dominated by European companies, has been a big factor in generating the bushmeat trade. Timber companies have destroyed forests where apes live and opened up their refuges to human encroachment and commercial hunting, according to the Ape Alliance, a coalition of 34 international organizations and ape specialists. Chimpanzee expert Jane Goodall was quoted as saying: "All four species of great ape are in desperate trouble. It is my firm belief that if action is not taken now there will be no viable populations of great apes living in the wild within 50 years." The report said loggers supplement their income by hunting wild animals and using logging trucks to transport them from the forest to urban markets. In Gabon, it has been estimated that 20,000 chimpanzees have been wiped out as a result of the logging. The report also pointed the finger at Asian logging companies in Africa, saying their conservation records were even worse than their European competitors (source: Reuters (London) 26 Feb 1998).

#### (12) New fund to benefit polar bear conservation

On 22 October 1997, the U.S. Fish and Wildlife Service and the National Fish and Wildlife Foundation announced that they have established a fund to enhance polar bear conservation research and management programs in Alaska and Russia. The seed money for the fund comes from fees collected by the Service for permits (\$1,000 each) to import polar bear trophies from Canada under the 1994 amendments to the Marine Mammal Protection Act. The fund will be managed jointly by the Foundation and the Service's Alaska Region. "This kind of public/private cooperation clearly is the wave of the future in wildlife conservation," said Marshall Jones, the Service's Assistant Director for International Affairs. "Working together, the Foundation and the Service will use the permit fees to generate additional

support for polar bear conservation efforts both here and in Russia." The Service works with Federal, state, and international partners to coordinate measures for polar bear conservation, sustainable use, habitat protection, and to study Alaska-Chkotka (Russia) shared polar bear populations. These partners include the U.S. Department of State, the Marine Mammal Commission, the Biological Resources Division of the U.S. Geological Survey, the State of Alaska, the Alaska Nanuuq Commission, the North Slope Burrough, and the Russian Federation. In addition to existing programs, the Service and the Foundation plan to use the additional resources generated by the fund for activities such as the development of a harvest monitoring management program, aerial den or populations surveys, and technical assistance for enforcement programs. "This innovative approach offers an exciting opportunity for the Foundation, the Service, and other groups to join together to leverage funds and make more money available for these programs," said the Foundation's Executive Director, Amos Eno. "During the next few months, the Foundation will let the private sector know of this new way it can help support polar bear conservation."

\*\*\* Contributed by Steve Sheffield \*\*\*

#### (13) Lynx

By 30 June 1998, the USFWS will propose listing of the lynx (*Lynx lynx*) as endangered within the contiguous 48 states. A final listing decision must be made by June 1999. This was the result of a lawsuit brought against the USFWS by Defenders of Wildlife and several other environmental organizations that started back in 1991. Back on 27 March 1997, a federal judge ordered the USFWS to reconsider its decision (within 60 days) not to list the lynx under the Endangered Species Act. In a 38 page opinion, Judge Gladys Kessler wrote that the failure to list the lynx was found to be inconsistent with scientific findings made by the USFWS's own field biologists. The USFWS rejected their own biologists' recommendations to list the lynx in Dec. 1994, and 13 environmental groups and two individuals sued in January 1996 to attempt to force the listing. Field surveys indicate that the U.S. population is on the brink of extinction and is being splintered into smaller, isolated populations that cannot interact with each other due to continued clearcutting and road building through forest lands. Indications are that the desire to cut National Forest lands in eastern WA, western MT, and ID has been driving the "political" decision to leave the lynx unprotected, and that problems now facing the lynx were compounded by the logging rider and the endangered species listing moratorium passed by the 104th Congress. Currently, the lynx is listed in virtually all of the northern US states (from Maine to Washington), and it is thought that its numbers have dwindled to fewer than 100 animals. Remaining lynx occur primarily in Montana, Washington, and Maine. The state of Colorado has recently announced their intention to reintroduce the lynx to the state. It should be noted that the USFWS identified the lynx for possible listing as early as 1977, when data indicated that the lynx was extirpated from 15 of 30 states in its original range, and of the 15 states that still reported lynx, all but one had the lynx listed as endangered or rare.

#### (14) Tigers

The South China subspecies of tiger (*Panthera tigris amoyensis*) is the rarest of the five living subspecies, and is the most critically endangered and closest to extinction. No wild South China tigers have been seen for 25 yrs and the last one was brought into captivity 27 yrs ago. The 19 reserves listed by the Chinese Ministry of Forestry within the presumed range of the tiger are spatially fragmented and most are too small to support viable tiger populations. Despite its plight and occasional anecdotal reports of sightings by local people, no intensive field study has been conducted on this tiger subspecies and its habitat. The captive population is at 50 animals derived from 6 wild-caught founders and is genetically impoverished with low reproductive output. Given the size and fragmentation of potential tiger habitat, saving what remains of the captive population may be the only option left to prevent extinction of this

tiger subspecies, and even this option is becoming increasingly less probable (see Tilson et al. (1997) – *Oryx* 31:243-252).

(15) Jaguar

Effective 21 August 1997, the jaguar (*Panthera onca*) is listed as an endangered species in the United States. The jaguar was already listed in Mexico, Central America, and South America, but was not listed in the US because it was thought that the jaguar did not occur in the US. However, several jaguars were seen in Arizona in 1996, prompting the listing in the US. Critical habitat was found not to be prudent and therefore was not designated (see 22 July 1997 Federal Register 62(140):39147-39157; contact person – Sam Spiller (602) 640-2720).

(16) Florida panther

On 30 December 1997, the USFWS issued a notice of intent to revise the recovery plan for the endangered Florida panther (*Felis concolor coryi*). Comments are due 2 March 1998 (see 30 December 1997 Federal Register 62(249):67886-67887; contact person – Dennis Jordan (352) 846-0841).

(17) Cheetah

On 9 December 1997, the USFWS reopened the comment period on the status review of the cheetah (*Acinonyx jubatus*) in Namibia until 1 February 1998. This was initiated in response to a petition to reclassify the cheetah in Namibia from endangered to threatened (see 9 December 1997 Federal Register 62(236):64800). Currently, comments are being reviewed and no decision has been made (contact person – Sue Lieberman (703) 358-1708).

(18) Red wolf

The USFWS made available a 90-day finding for petition to delist the endangered red wolf (*Canis rufus*). The petition did not present substantial scientific or commercial information indicating delisting may be warranted. The finding was made 28 August 1997 (see 9 December 1997 Federal Register 62(236):64799-64800; contact person – Gary Henry (704) 258-3939 ext. 226).

(19) Yellowstone gray wolf

On 12 December 1997, a federal judge ruled that the reintroduction of gray wolves into Yellowstone National Park was illegal. U.S. District Judge William Downes ruled that the federal government was wrong to have experimentally introduced wolves to an area where animals already occurred. Further, the judge ruled that USFWS had to remove the two reintroduced wolf populations that now number more than 150 animals (but that this could wait until appeal). The suit was originally brought by the American Farm Bureau Federation, which had filed the suit on behalf of ranchers in Wyoming, Idaho, and Montana. Appeals have been filed by the DOI, Defenders of Wildlife and National Wildlife Federation. Secretary of the Interior Bruce Babbitt told attendees at the annual National Wildlife Federation meeting on 21 March 1998 that "no wolves will be removed from Yellowstone on my watch." Spring 1998 marks that third anniversary of the first gray wolf being released back into the wild at Yellowstone National Park.

(20) Preble's meadow jumping mouse

The Preble's meadow jumping mouse (*Zapus hudsonius preblei*) continues to be unlisted over a year following its proposed listing as an endangered species. On 25 March 1997, Preble's meadow jumping mouse was proposed for endangered status under the Endangered Species Act. This subspecies is known only from four counties in Colorado and two counties in Wyoming. It occurs in heavily vegetated riparian habitats. This habitat has been under heavy pressure from urban growth and development. The

comment period ended 27 May 1997. The USFWS then reopened the comment period until 22 January 1998. Since the original proposal to list, a major highway project has been completed through Preble's meadow jumping mouse habitat. In March 1998, Colorado's republican congressional delegation wrote to the USFWS requesting that they delay its listing of the Preble's meadow jumping mouse. An endangered listing would limit livestock grazing, sand and gravel operations, and housing development in the mouse's habitat (see 23 December 1997 Federal Register 62(246):67041; contact person – LeRoy Carlson (303) 275-2370). Note: On 13 May 1998, Preble's meadow jumping mouse was listed as endangered (see Federal Register 63(92):26517-26530). Secretary of the Interior Bruce Babbitt was on hand in Colorado to make the announcement (against the advise of his staff). This is an extremely controversial listing, as it threatens the massive amount of development that is currently occurring on the front range of the Rockies in Colorado. A recovery team is currently being assembled, and field surveys and radiotelemetry studies will be conducted by state biologists this summer.

(21) Northern Idaho ground squirrel

The USFWS has proposed threatened status for the Northern Idaho ground squirrel (*Spermophilus brunneus brunneus*), known from 21 sites in Adams and Valley Counties, Idaho. This subspecies is primarily threatened by habitat loss due to seral forest encroachment into former suitable meadow habitats, by competition from the larger Columbian ground squirrel, land use changes, recreational shooting, and naturally occurring events (see 23 March 1998 Federal Register 63(55):13825-13832; public hearing 5 May 1998, comments due 22 May, contact person – Robert Ruesink (206) 378-5243).

(22) San Bernadino kangaroo rat

On 27 January 1998, the USFWS issued an emergency rule to list the San Bernadino kangaroo rat (*Dipodomys merriami parvus*) as endangered under the Endangered Species Act. Historic range of this subspecies has been reduced approximately 96% due to agricultural and urban development, and the threat of vandalism to large portions of remaining habitat may be imminent. The USFWS reports threats have been made indicating habitat would be destroyed if the USFWS attempted to list the kangaroo rat (see 27 January 1998 Federal Register 63(17):3835-3843; public hearing held 3 March 1998, comments due 30 March 1998; contact person – Field Supervisor (760) 431-9440)

(23) Riparian brush rabbit/San Joaquin Valley woodrat

On 21 November 1997, the USFWS proposed endangered species status for the riparian brush rabbit (*Sylvilagus bachmani riparius*) and the riparian (San Joaquin Valley) woodrat (*Neotoma fuscipes riparia*). Both species inhabit riparian communities along lower portions of San Joaquin and Stanislaus rivers in northern San Joaquin Valley, California, and only a single remaining population of each species has been confirmed. Potential threats include flooding, wildfire, predation, and other random factors (see 21 November 1997 Federal Register 62(225):62276-62282; request for public hearing due 5 January 1998, comments due 20 January 1998; contact person – Diane Windham (916) 979-2725).

(24) Tree rats

A new species of tree rat was discovered in French Guiana as its habitat was flooded by a new dam. Two individual rats, named *Isothrix sinnamarensis*, were rescued from flooded trees near the Sinnamary River, 20 km upstream from Petit Saut dam (see *Mammalia* 60:393-406).

(25) Virginia big-eared bat

Protection from human disturbance has allowed populations of the Virginia big-eared bat (*Corynorhinus townsendii virginianus*) to recover, increasing by as much as 350% from 1983 to 1995 in some caves. Critical caves are closed to the public and entrances have gates or fences to prevent disturbances. It is

felt that Endangered Species Act protection is still required because the total population is still < 20,000 bats (see Endangered Species Bulletin May/June 1997).

(26) Bactrian camels

A group of American, German, and Mongolian researchers are collaborating on a study to determine the status of the critically endangered bactrian camel (*Camelus bactrianus*). An aerial survey of Great Gobi, Mongolia found 277 camels in 27 groups ranging in size from 1-55 animals. Computer modeling estimated a total population of 1985 animals, although it was concluded that the population size may lie between 909-4355 animals. Data on population dynamics and migration patterns are being gathered in the hope of developing a conservation and recovery plan for the bactrian camel (see International Zoo News 44:422-426).

(27) Chinese black barking deer

A biological expedition to northern Myanmar (formerly Burma), carried out by the Wildlife Conservation Society and the Myanmar Forestry Department during 1997, has discovered a small, short-antlered deer, genetically identical to the Chinese black barking deer (*Muntiacus crinifrons*), known only from an area in SE China, over 1600 km away. This discovery could more than double the known population of the species, considered to be the most threatened deer in the world. The area has been largely unexplored and the Myanmar Minister of Forestry is currently designating Mount Hkakaborazi National Park, which at 2590 km<sup>2</sup> will be one of the country's largest protected sites (see Wildlife Conservation, October 1997).

(28) Arabian oryx

Arabian oryx (*Oryx leucoryx*) in Oman are again threatened by poachers, who have taken at least 40 animals from 1996-1997. Many animals are thought to have been caught alive and smuggled out of the country for sale to private zoos and animal collectors in the middle east. Bedouin rangers first became aware of poaching in Feb 1996 with the loss of several calves. More were taken later in the year and by the end of summer adult animals were also being caught. There were signs that animals had been chased to a state of collapse with some left to die in the desert. More individuals have been taken in recent months, and the loss of calves and breeding females will have a significant impact on the small population. New laws have been passed increasing the maximum penalty for theft of wildlife from a 3 month sentence to 5 years (see BBC Wildlife, August 1997).

(29) Japanese mammals

The first comprehensive review of the conservation status of Japanese mammals, commissioned by the Japanese Mammal Society and carried out by a network of zoologists, reports that the country's mammals are in trouble. The study ranked 154 species of terrestrial and marine mammal species in seven categories ordered by conservation status. Five species were listed as extinct, including two species of wolf and two species of bats, and 22 species were listed as being on the verge of extinction, including the Amami rabbit (*Pentalagus furnessi*). Of the 154 species, 85 were listed in the highest four categories of risk. Of these, 21 species are endemic to Japan, many living on small island chains to the south of the Japanese archipelago.

(30) Debt swapping

Expanding on a "debt-for-nature" swap program set up by the Bush Administration, legislation passed by the House on 19 March 1998 would allow developing countries around the world to reduce debts to the US by protecting their tropical forests. The bill also offers cost-free "debt buybacks" under which countries could buy back their debt in exchange for spending up to 40% of that purchase cost for



tropical forest protection. Seventy-six countries have tropical forests, and half of all known species of plants and animals live in tropical forests. The bill must still be considered by the Senate, and has the support of the Clinton Administration.

(31) Delisting/downlisting endangered species

On 5 May 1998, Secretary of the Interior Bruce Babbitt announced that 29 species/subspecies would soon be removed or downlisted from the Endangered Species Act list. Mammalian species/subspecies on this list include the Columbia white-tailed deer (Washington, Oregon), gray wolf (Minnesota, Michigan, Wisconsin), Dismal Swamp southeastern shrew (Virginia, North Carolina), and Virginia northern flying squirrel (Virginia, West Virginia).

(32) DOI considers drilling options in Alaska

The Department of the Interior is considering several options in deciding whether to permit oil drilling in part of the 23 million acre National Petroleum Reserve (NPR) while trying to protect the fragile arctic ecosystem. DOI plans to make a recommendation in June 1998 on whether to allow drilling. Five options being considered are to continue the ban on oil leases in the 4.6 million acre region environmentalists say is important arctic wildlife habitat, or to allow oil leases on about 50%, 75%, 90%, or virtually all of the reserve. There is much controversy surrounding this issue, and declining output in North Slope areas under production and the recent discovery of a large oil field near the NPR's eastern border has fueled the battle to open the area to oil drilling. However, it can be argued that the area is just too important for wildlife and indigenous people to be disrupted by the activity of oil and natural gas production, and that the relatively small quantity of oil to be gained is not worth the disruption of the arctic ecosystem. Mammals that would be impacted by this development include polar bear, caribou, musk-ox, arctic fox, wolverine, and others.

(33) Protection of America's great places

On 2 February 1998, President Clinton announced plans to acquire 100 natural and historical sites for permanent protection. These acquisitions are made possible by the Balanced Budget Agreement negotiated last year, which provided \$699 million to the Land and Water Conservation Fund for priority acquisitions. Portions of the money were earmarked for protection of Yellowstone National Park from mining and preservation of redwoods in California's Headwaters Forest. Plans for the remaining \$329 million include purchase of 100 sites of local and national significance in 35 states, including the 95,000 acre Baca Ranch in New Mexico, the Royal Taton Ranch (adjacent to Yellowstone National Park), and lands adjacent to Cypress Creek NWR in Illinois, Archie Carr NWR in Florida, Gallatin National Forest in Montana, Lake Tahoe, and acquisition and removal of two dams in Washington that block salmon spawning.

(34) Wildlife Habitat Incentives Program

Farmers and ranchers in all 50 states will get \$24 million to improve wildlife habitat on their land under the Wildlife Habitat Incentives Program created under the Farm Bill reauthorization of 1996. The money represents the first use of the USDA program, which is aimed at making conservation more attractive to private landowners. At least 70% of land in the US is under private ownership. Under this program, landowners voluntarily come forward with conservation plans that are ranked by USDA officials, with the most deserving receiving up to 75% of the costs as well as technical assistance. Overall, \$50 million will be available through 2002. States receiving over \$1 million include Mississippi, Colorado, Arkansas, and Oklahoma.

(35) Update to Mexican hunting law

On 4 May 1998, the Mexican Environment Ministry (SEMARNAP) called upon the Mexican Congress to start a new project of reforms of the Hunting Law for the purpose of allowing exploitation and commercialization of endangered species for which the federal government does not have sufficient resources to protect and conserve. The Subminister of Natural Resources of the Environment Ministry, Victor Manuel Villalobos, said that the proposal originates from the need to avoid middlemen, poaching, and illegal trade which exist due to a lack of a well-defined program. According to Villalobos, reforms to the hunting law would seek to strengthen the Wildlife Program of the SEMARNAP. A prime example of the problem that will be addressed in these reforms was an auction in Baja California for three bighorn sheep which was suspended and which could have brought more than \$300,000 to community holders, but which was unsuccessful due to diverse violations to the law. According to Villalobos, complete protection does not contribute to the recovery of endangered species, and that viable alternatives such as allowing the taking of big money protected species for profit by local communities which are forced to serve as protectors of these resources. Mammalian species that could be impacted by these reforms include big game species such as black bear, bighorn sheep, and pronghorn antelope (source: CITES-L listserver, 5 May 1998). Note: this is a matter that needs to be monitored closely.

#### SUMMARY

The Conservation of Land Mammals Committee hopes that the ASM membership and other interested parties enjoy reading this report. It continues to be a large effort every year to compile mammalian conservation news, so it was decided last year to make this a separate subcommittee. This news is provided to you so that you may be kept informed and as up-to-date as possible on conservation issues that impact mammalian species. In the future, we will attempt to maintain this updated information on our Committee webpage. All ASM members are encouraged to become actively involved in the Committee's activities and business by notifying the Committee of pertinent and timely conservation issues. Surely, there are members out there who are either working on conservation-related studies or who are otherwise familiar with certain conservation issues that our Committee is not aware of. Well, we want to hear from you!!! CLM Committee members are ready and very willing to assist other ASM members in the preparation of resolutions or position letters representing the Society's official position on specific conservation issues. ASM members directly involved in mammalian conservation matters or having ideas for possible resolutions or position letters on conservation issues should contact the Committee. Contacting anyone on the Committee has been made that much easier through the hypertext links to email addresses on the Committee's webpage via the ASM website.

Respectfully submitted,

Steven R. Sheffield, Ph.D., Chair,  
Conservation of Land Mammals Committee

#### 1997-1998 Members

Patricia Cortes-Calva Robert Manson  
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Kerry Foresman Ray Matlack  
Glennis Kaufman Jim Moyers  
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