October 1999

The Probe, Issue 205 – October 1999

The Probe NADCA
ISSUE 205
OCTOBER 1999

Legislative News

Senate Kills Anti-Trapping Measure

The U.S. Senate has defeated an amendment by Senator Robert Torricelli (D-NJ) to prohibit commercial or recreational fur harvest on National Wildlife Refuges. The measure, which would have made use of steel-jawed leghold traps and neck snares illegal on refuge property, was tabled by a vote of 64 to 32.

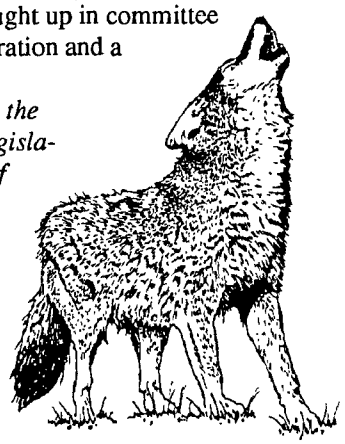
The House of Representatives had previously approved a similar measure by a vote of 259 to 166. Because the House and Senate voted differently on the matter, the subject will be resolved in a conference committee as the Fiscal Year 2000 Interior Appropriations Act moves toward final passage. Predictably, the Humane Society of the U.S. was not pleased by the vote. "The Senate voted against the wishes of the vast majority of Americans who do not want wild animals and family pets killed by inhumane and indiscriminate steel-jawed leghold traps on our precious National Wildlife Refuges," said Wayne Pacelle, a senior vice president at HSUS. "It is astonishing that national wildlife refuges, which should be sanctuaries for wildlife, have been turned into cruel, commercial killing grounds."

—excerpted from a news release distributed by America On Line

Washington Stalls Anti-Trap Bills

The Washington State legislature has adjourned until January 2000 without passing either anti-trapping bills under consideration. Senate Bill 5656 would ban the use of snares and any type of leghold, conibear or body gripping traps. House Bill 1057 would ban all leghold traps. Grassroots pressure from sportsmen trapped SB 5656 in committee and it died. However, HB 1057, which would also require trappers to get written permission to trap on land, a restriction not applied to other forms of hunting, can still be brought up in committee for consideration and a vote.

—from the Wildlife Legislative Fund of America website



NADCA Candidates Needed!

Nominations (including self-nominations) are needed immediately to keep NADCA alive as a professional association of wildlife damage practitioners. The continuation of our association depends upon having willing individuals to serve as officers or regional directors for the period January 2000 through December 2001.

Are you willing to promote the purposes of your professional organization in a formal way? Do you have some ideas about what NADCA could accomplish in the next two years? If so, contact NADCA President Robert Schmidt (email <rschmidt@cc.usu.edu> or U.S. mail c/o Dept. of Botany, Univ. of Hawaii-Manoa, 3190 Maile Way — St John 410, Honolulu, HA 96822-2279) or contact Treasurer Grant Huggins (email <jghuggins@noble.org> or U.S. Mail c/o Noble Foundation, PO Box 2180, Ardmore, OK 73402). All nominations should be submitted no later than November 1.

Raccoon Roundworm Brochure Available

A new brochure describing the health risk associated with raccoon roundworm (*Baylisascaris procyonis*) has been published by the California Nuisance Wildlife Control Operators Association (CNWCOA). This 8-page brochure describes the biology of the parasite and its life cycle, as well as outlining precautions that persons who handle wildlife or perform wildlife damage control should take when working with raccoons or in their environments. Copies of the brochure may be purchased from CNWCOA at a cost of $0.25 per copy (minimum order 25 copies = $6.25) which defrays printing, postage and handling. For further information, contact CNWCOA at (650) 685-4146, visit web site http://www.cnwcoa.org, or send payment to CNWCOA, P.O. Box 90, Burlingame CA 94011.

CALENDAR OF UPCOMING EVENTS

November 16-18, 1999: Annual Meeting of Western Coordinating Committee-95 "Vertebrate Pests of Agriculture, Forestry and Public Lands," Circus Circus Hotel, Reno, Nevada. Interested persons are encouraged to submit summaries of planned presentations or agenda topics to Ray Sterner, chairperson, USDA/APHIS/NWRC, 4101 LaPorte Ave., Fort Collins, CO 80521-2154 by Nov. 1. Topics may relate to wildlife damage management research findings; vertebrate pest management, agricultural impacts, chemical registration issues, etc.; or regulatory policies affecting registered products for use against vertebrate pests. Registration fee: approx. $30. Hotel reservations ($29 single/double) should be made by calling Circus Circus (800-648-5010) by Oct. 15. For further information, contact Ray Sterner at (970) 266-6170.

Nov. 30 - Dec. 3, 1999: 12th Annual Conference of the Australasian Wildlife Management Society, Key Centre for Tropical Wildlife Management, Northern Territory University, Darwin NT 0909 Australia. Contact: Peter Whitehead, fax 618 8946 6712 or email <peterw@gis.ntu.edu.au>

Dec. 5-8, 1999: 61st Midwest Fish & Wildlife Conference, Chicago, IL. Conference theme "Pathways to the Future." For more information, contact Larry A. Jahn, Steering Committee Chairperson, phone (309) 298-1266 or email <la-jahn@wiu.edu>.

February 7-9, 2000: Sixth Annual Wildlife Control Instructional Seminar, Imperial Palace, Las Vegas, Nevada. Sponsored by W.C.T. (Wildlife Control Technology). For more information, phone Lisa at (815) 286-3039, email <wctech@ix.netcom.com> or visit website http://www.wctech.com.

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Your contributions of articles to *The Probe* are welcome and encouraged. The deadline for submitting materials is the 15th of the month prior to publication. Opinions expressed in this publication are not necessarily those of NADCA.

March 6-9, 2000: 19th Vertebrate Pest Conference, Mission Valley Hilton, San Diego, CA. One-day field trip (Mar. 6) plus three days of plenary and concurrent sessions covering diverse topics including rodent, bird, and predator research and management. To receive program and pre-registration materials, contact Dr. Terry Salmon, Wildlife Fish & Conservation Biology, UC Davis, One Shields Ave., Davis CA 95616-8571, phone (530) 752-8751, fax (530) 752-4154, or visit web site: http://www.davis.com/~vpc/welcome.htm

October 5-8, 2000: 9th Eastern Wildlife Damage Management Conference, Nittany Lion Inn, State College, Pennsylvania. Proposed session topics: "Sustainable Ecosystem Management: The Course for 2000," "Wildlife Wars: Writing the Peace Agreement for the New Century," "20/20: The Latest News on Wildlife Damage Management," "Population Dynamics: When is Enough Enough?" "Origins, Innovations, and Futures of Wildlife Damage Management." Abstracts for papers or posters should be submitted to Jim Parkhurst, Program Chairperson (email <jparhur@vt.edu>) by Feb. 15, 2000. For further information, contact Conference Chairperson Gary San Julian, Penn State University, phone (814) 863-0401, or email <jgs9@psu.edu>.

NWRC Biologist George Matschke Retires

Dr. George Matschke, one of the most productive research scientists at the USDA APHIS Wildlife Services' National Wildlife Research Center, retired on September 30, 1999, after 31 years of service. He is a nationally recognized expert on control methods for field rodents, and also worked on reproductive physiology of European wild boar and white-tailed deer.

George joined the Denver Wildlife Research Center, Mammal Control Section, in 1968 following completion of his PhD degree in reproductive physiology at the University of Tennessee, Oak Ridge. He served 5 years in Denver before moving to Mammoth Cave, Kentucky to head a DWRC research field station studying deer reproductive control from 1973 to 1975. He returned to Denver in 1975 and has worked primarily on rodent conflicts with agriculture since that time.

At a well-attended luncheon in his honor at Fort Collins CO on September 14, 1999, George was recognized for having completed and archived the greatest number of studies (41) by any single scientist since the NWRC adopted EPA's Good Laboratory Practices (GLP) procedures about a dozen years ago. He also has survived more GLP audits (6) than any other NWRC scientist. NWRC colleagues estimate that at least 2 full-time biologists will be needed to replace him.

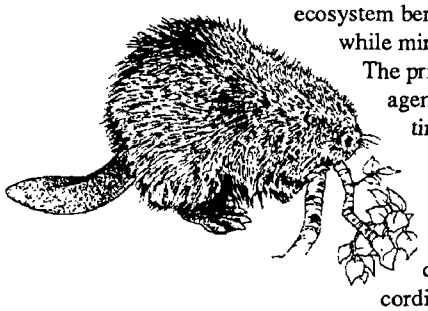
Abstracts from the 2nd International Wildlife Management Congress, Hungary — June 28-July 2, 1999

(continued from September 1999 Probe, issue #204)

History and Present Status of the European Beaver (Castor fiber) in Poland, with Implications for Beaver Management Programs

A. Czech, Institute of Environmental Biology, Jagiellonian University, Krakow, Poland

Habitat change and over-trapping resulted in the near extirpation of the beaver (Castor fiber) in Poland. Restoration efforts began in 1949, when 26 beaver from Voronezh (Russia) were released in northeastern Poland. Now fully protected and augmented by natural in-migration along the Lithuanian-Polish border, their numbers grew slowly, reaching some 1,000 by 1974. In that year, a comprehensive program of beaver reintroduction was developed at the Research Station of the Polish Academy of Sciences, under the direction of Professor Zurowski. In cooperation with the Polish Huntersí Association, beaver from the densely populated northeastern region and 2 captive breeding centers were released in several areas throughout Poland. This program continues; the Polish beaver population is now between 13,000 and 15,000. With the growth in beaver numbers, their activities exert a growing influence on ecosystems in Poland, as manifest in higher ground-water levels, increasing sedimentation in beaver impoundments, and growing biodiversity of lentic aquatic communities, along with diminished stream-bank erosion. However, increased beaver numbers have also intensified conflicts between beaver and human populations. Management strategies have evolved in order to retain the ecosystem benefits of beaver restoration while minimizing economic losses. The principles of successful management are as follow: (1) continuous monitoring of active beaver sites by trained individuals, (2) characterization of the ecosystem values of each beaver site, and (3) classification of each site according to conflict potential.



Where beaver-human conflict is possible or already occurring, the following mitigation actions are indicated: (1) public education, (2) site modification to minimize damage and increase benefits, (3) exclusion, (4) live trapping and relocation, and (5) lethal trapping.

Assessment of Elephant Damage and Mitigation Options in Amboseli Basin, Kenya

E.E. Esikuri and D.F. Stauffer*
**Environment Department, The World Bank, Washington, D.C.*

The objective of this study was to assess the effects of elephant foraging in nonpark areas of Kenya's premier tourism site, Amboseli Basin. Between June 1996 and July 1997, we used qualitative interviews, Amboseli National Park Occurrence Book (OB) records, area-based sampling, and direct monetary evaluation to assess elephant damage to farmers and livestock herders in the basin. Damage categories considered were crop damage, livestock deaths or injuries, and human deaths or injuries. During the 14-month study period, 457 crop damage incidents, 12 human deaths and injuries, and 20 livestock deaths by elephants were recorded and verified. We estimated rates of elephant damage to be 1.1 crop raids per day, 1 human death per 4.7 months, 1 human injury per 1.6 months, and 1 livestock casualty every 21 days. Higher crop raiding frequencies coincided with period of low (i.e. $\leq$10 mm) monthly rainfall, while livestock and human casualties did not show any specific temporal patterns. The total uncompensated financial cost of elephant damage to the locals was assessed at US$191,064 for the 14-month time period. The official OB records significantly under-reported the monthly damage incidents compared to our study (n = 14, mean of difference = 24.7 incidents / month; t = 5.8; P <0.0001). Inadequacy of official damage information and current mitigation options lead to us to conclude that elephant damage presents a significant cost to local subsistence in nonpark areas of Amboseli.

Wolf Movements and Home Ranges in the Slovak Carpathians

S. Findo, P. Paquet, G. Bloch, R. Chovancova, and P. Krizan*
**Forest Research Institute, Zvolen, Slovakia*

We describe the movements, home range size and activity patterns of the European wolf in the Slovak Carpathians. Data were obtained from 2 protected regions in central Slovakia, Nizke Tatry National Park (2,050 km^2) and Tatry National Park (1,087 km^2), which were recolonized by wolves at the end of the 1970s after previous eradication. In each study are we monitored 1 pack with 1 radio-collared individual. The home range sizes during the time of greatest wolf mobility (September to April) were 84km^2 and 85 km^2 (95% of fixes) in the Low Tatras and High Tatras respectively. During the denning and pup-raising season (mid-April to September), the Low Tatras pack inhabited an area of 48km^2. The territories of wolves living in the high mountains of the Tatras with high forest cover are amongst the smallest described in the literature. Movements within the home range were especially influenced by the distribution of red deer, which is the main prey species with a population density reaching 30-40 per 1,000 ha. In addition to this food source, wolves also searched for entrails left by human hunters, baits left for bears in winter, and occasionally sheep on summer pastures.

Identifying Individual Pumas from Tracks

E.L. Fitzhugh, R.C. Lewison, and S.P. Galentine*
**Cooperative Extension, Wildlife Fish & Conservation Biology, University of California, Davis, CA*

In a previous study using discriminant analysis, it seemed possible to distinguish among individual pumas by using several measurements taken from their tracks. However, the analysis was done using a small data set, not standardized except that there was only 1 observer, and the tracks were known to be from different pumas. We have now enlarged the sample, identified sources of variation inherent in the procedure, and identified the strongest, most independent variables. Our procedures, done in the laboratory using simulated tracks, used measurements (1) taken from acetate tracings and (2) obtained from computerized image processing. The study continues, but we are confident now that we can distinguish 80-90% of individuals based on track trac-

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Abstracts from the 2nd International Wildlife Management Congress, Hungary

ings. This technique can be used in radio-tracking studies to determine whether tracks found are from 1 of the collared pumas, and may be used in track surveys to help identify which tracks are from different animals. It also may have utility in identifying the offending animal in depredation or human attack situations where the trail cannot be followed by dogs from the site of the offense.

Nuisance Wildlife Control Laws, Policies, and Practices

J.M. Hadidian, M.R. Childs, R.H. Schmidt, L. J. Simon, and A.W. Church*
The Humane Society of the U.S., Washington, D.C.

The rapid pace of urbanization in the United States has led to increasing conflicts between people and wild animals in cities and towns. State and federal wildlife agencies have traditionally left the resolution of these to individual initiative or for-profit businesses. The private nuisance wildlife control industry has grown rapidly in the last 2 decades, and national firms with state franchises are now beginning to appear. Very few laws and regulations existed in the past to regulate human-wildlife conflict resolution in urban areas, although with the privatization of wildlife control businesses and public concern for the welfare of wild animals, this situations has recently been changing. We surveyed all 50 states for information on how they regulate the nuisance wildlife control industry, and conducted legal research to address questions concerning the origin and development of regulatory controls. We document considerable variation in how different states approach the issue of human-wildlife conflict resolution, which ranges from a virtual absence of control to strictly regulated practices. These differences are discussed in a context that reflects on societal interests and priorities in the United States. We project a course for the possible evolution of the existing body of law, given the dynamic tensions that exist between the states, the nuisance wildlife control industry, and animal protection interests.

Of Large Carnivores and Men—Two Different Realities: Rural Societies and Tigers in the Sariska Tiger Reserve (Rajasthan, India); Rural Societies and Wolves in the Montesinho Natural Park (north-east Portugal).

J. P. Galhano Alves
Laboratorire d'Ecologie Humaine et d'Anthropologie, Universite de Droit, d'Economie et des Sciences d'Aix-Marseille, Aix-en-Provence, France

Human attitudes towards wildlife are diverse and change from civilization to civilization. One of the best indicators of the relationship of a culture with its environment is the attitude it has toward large carnivores. Legal protection of large carnivores may be useless if the human population has a destructive relationship with them. The relationships of European and Indian rural people with wolves and tigers give good picture of these concepts. Portuguese Montesinho's people used to see wolves as a pest, having persecuted the species for centuries. Wolves survived thanks to the region's natural features, which made their extermination difficult. Presently the species has a good chance of survival as the human population is decreasing and forest and wild herbivores are occupying former agricultural areas. Sariska's Indian villagers have a completely different attitude toward large carnivores. By a complex of empirical ecological knowledge and cultural attitudes, villagers respect wildlife and never kill tigers. Their production systems are well integrated with the environment. However, such a humanized ecosystem and its tigers are endangered by external factors, because the Reserve's area is relatively small. The long-term solution could be the restoration of the surrounding habitats. But some entities proposed the relocation of some of the Reserve's villages. Paradoxical things are happening: in Montesinho, where people used to have a destructive relationship with wildlife, wolves may survive; in Sariska, where people used to respect wildlife, both tigers and traditional societies are endangered. Things could happen differently.

From the Return of Carcasses to Ecosystem Management: The Role of Trappers in Sustainable Forest Management

M. Henault and J. Huot*
**Faune et Parcs, Quebec, Canada*

In Quebec, large proportion of the public lands is divided into territories where trappers lease exclusive rights for trapping. This system has encouraged trappers to get involved in the management and conservation of furbearers and their habitat. Since 1987, each trapper fills a logbook and may have contributed to the collection of carcasses of several species for research and monitoring. This voluntary participation supplied over 4,000 specimens of marten over a 3,500-km^2 study area. Based on age, productivity, and condition analyses we tested the hypothesis that marten productivity and fall fat reserves were influence by hare (*Lepus americanus*) abundance, as this species exhibited a complete10-year cycle of abundance. Productivity and fat reserves were not related to hare numbers; young of the year (YOY) were consistently fatter than adults. Summer YOY mortality appears to be highly variable, ranging from 10% to 50%. Winter mortality for all age classes is approximately 40%, and harvest rates varied from 30% for YOY to less than 10% for adult females. Locations were provided for 2,400 traps, and these data were used to

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Wildlife in the News

Problem Mexican Gray Wolves Being Relocated

In Arizona, five wolf packs containing more than two dozen wolves now roam wilderness areas of eastern Arizona wilderness as part of recent federal wolf reintroduction efforts. Recently, a pack of these animals is known to have repeatedly harassed or attacked cattle. Wildlife officials tracked the pack for two weeks, following complaints from ranchers in the Apache National Forest. Federal wildlife officials confirmed two attacks on calves, one resulting in a calf's death. They noted there were other instances where the wolves chased cattle but were driven off by people. An adult male wolf and a yearling animal were re-captured, and officials hope to catch the remaining adult female and her pups and relocate the pack to an area free of livestock. A representative of the Arizona Cattlemen's Association, which opposed the wolf reintroduction program, expressed appreciation that the federal officials had actively responded to solve this particular problem.

—excerpted from an Associated Press article

Chipmunk Found Rabid

In April, a 12-year-old Ohio girl was bitten by a chipmunk that she rescued from her pet cat. The Ohio Dept. of Health (ODH) lab confirmed the chipmunk was rabid and sent the specimen to the Centers for Disease Control and Prevention (CDC) to confirm the strain. The CDC reported that the animal was infected with raccoon-strain virus.

Of concern to the ODH was the fact that the chipmunk was found on the western bank of a lake which was on the western edge of the immune vaccination area established in the region. ODH does not know whether this was an epizootic breach or an isolated incident. In order to assess the rabies situation in the area, local and state health and federal wildlife authorities will increase surveillance for rabies-suspect raccoons in parts of Trumbull County. If additional rabies is detected in raccoons, trapping and additional oral vaccination baiting in the area may be conducted.

Although raccoon-rabies has been found in woodchucks, deer, and other non-carnivore wild mammals, the finding of a rabid chipmunk is a very rare event. Since 1950, only 12 chipmunks have been reported positive in the entire U.S. National medical guidelines state "small rodents, including chipmunks, are almost never found to be infected with rabies."

Raccoon-strain rabies was first identified in eastern Trumbull County, OH in 1997 as part of a major epizootic that pushed into OH from PA. In 97 there were 59 positive raccoons, two cats and one skunk with this strain of rabies in northeast Ohio. In part, due to an aggressive oral vaccination program for wild raccoons, cases were reduced in 1998 to 26: 20 raccoons, two cats, one fox, and three skunks.

— excerpted from an Ohio news release

Rock Star Scares Birds

Trial and error has determined that the sounds of popular singer Tina Turner are more effective than other methods of keeping birds off the runways of Britain's Gloucestershire airport. The airport, in western England, is used by private pilots in light planes, business jets and helicopters. According to airport chief fire officer Ron Johnson, Turner's music was more effective than commercial broadcast tapes of birds' distress call."What the birds really hate is Tina Turner," he stated.

—excerpted from Reuters news service

Rat Travels Business Class

A stowaway rat on an Air New Zealand flight from Los Angeles to Auckland caused quite a commotion. First sighted by the aircraft crew, it eluded them and ran to the rear of the Boeing 767-300 aircraft. Later in the flight, a passenger in business class felt something on her right leg and found the rat on her knees when she lifted her blanket. Quarantine officials who met the plane at Auckland failed to locate the rodent, even after searching passengers' hand baggage. As a result, the plane was quarantined and fumigated. An airline spokesperson said. "We deeply regret the distress caused to passengers and will be attempting to contact those most directly affected to offer compensation."

—excerpted from an Associated Press article

What's Killing Colorado Deer?

The decline of tens of thousands of deer in Colorado has caused the state's wildlife commission to limit hunting licenses this year. Two concerns arise: first, licenses are the lifeblood of the state Division of Wildlife, which relies almost solely on them for its budget. Secondly, commissioners know the wildlife division is going to have to again take over predator control from the state Department of Agriculture. Pressure is being exerted by hunters, ranchers and others who want more predator control, and by some biologists and animal rights organizations who feel it is adequate now. Is the deer decline a result of an increase in predators, a loss of habitat, disease, competition with elk, or over-hunting? Bruce Gill, state wildlife research leader, said division research indicates changes in habitat is the main culprit for the decline in deer populations."We do not believe predation by coyotes or mountain lions is the problem because a study in the Piceance Basin where we controlled predators showed more fawns simply died from starvation, and the number that survived was about the same before we killed predators," he said. Jim Unsworth, of the Idaho Game and Fish Department, said a three-year study in his state where coyotes were killed in four game management areas and not in four others

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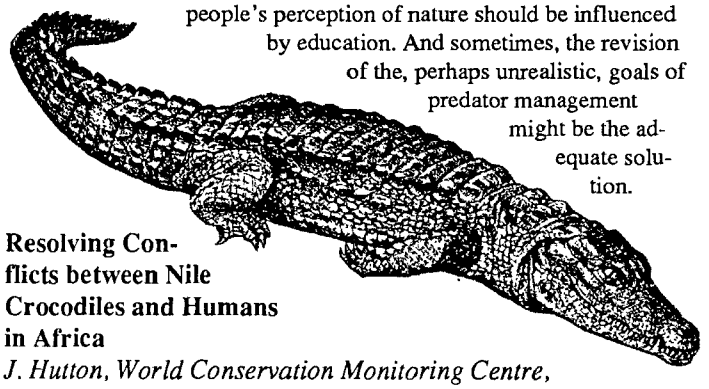
validate a habitat suitability index (HSI) for marten. Using this HSI, trappers are now dealing with forest industry to develop an acceptable scenario for logging while maintaining marten habitat. In this context, trapping not only provides data and samples for ecological studies and monitoring of wild populations but it also contributes to the conservation of habitat required for the conservation of large diversity of species.

Predators in Switzerland: Reasons for Existence or Lack of Public Acceptance

M. Hunziker, Swiss Federal Instit. of Forest, Snow, and Landscape Research, Birmensdorf, Switzerland

Rural as well as urban areas of Switzerland are currently experiencing an increase in predator populations. This development is not well accepted among parts of the public. Government agencies and non-governmental organizations are therefore conducting campaigns to raise public acceptance of predators. An important prerequisite for successful campaigns is a thorough understanding of the underlying reasons for the existence or lack of acceptance. So far, not enough knowledge has been available regarding in the specific situation in Switzerland. To fill this gap was the aim of this project. Qualitative interviews and standardized questionnaires were used to achieve this. It was found that people's general perception of natures represents the basic background of their attitudes towards predators. If these are really accepted or not, however, is closely related with the degree of their personal involvement in the predation problem. The chances for successfully improving predator acceptance depend strongly on the quality of the relationship between those promoting the predators and those affected by the predator presence. It also became clear that acceptance cannot be improved infinitely; many people will not accept more than a limited number of predator individuals in their region. It can be concluded that survey data gained from a majority of people not affected seem to overestimate the acceptance of predators and are therefore an uncertain basis for predator management. In order to improve acceptance, establishing an atmosphere of confidence and tolerance among the relevant actors has the highest priority. To achieve a long-lasting effect, people's perception of nature should be influenced by education. And sometimes, the revision of the, perhaps unrealistic, goals of predator management might be the adequate solution.



Resolving Conflicts between Nile Crocodiles and Humans in Africa

J. Hutton, World Conservation Monitoring Centre, Cambridge, U.K.

Capable of growing to over 5 m and weigh in at 500 kg, the Nile crocodile is the largest predator in Africa. Still found in good numbers throughout much of its historical range in sub-Saharan Africa, this animal frequently comes into conflict with legitimate human interests. Nile crocodiles eat domestic livestockand often its owners. Hard data are hard to come by, but it is likely that Nile crocodiles account for more human lives than any other wild animal on the continent. On the other hand, human activities also have dramatic impacts on the Nile crocodile. In the 1940s and 1950s they were hunted for their valuable skins and reduced to very low levels in many localities. Today, this sort of hunting is a thing of the past, but crocodiles understandably make unpopular neighbors and are often killed when the opportunity presents itself. In addition, there is a ferocious competition for the sandy riverside sites that crocodiles need for nesting, and on which people like to moor their boats and build their camps. Crocodiles destroy gill nets and in turn are persecuted by fishermen. Throughout much of Africa the future must be one in which the animal slowly gives way in the face of human expansion. However, in several countries there has been an attempt to raise tolerance toward the crocodile, and even to encourage healthy populations, by the application of economic incentives. In the 1970s and 1980s, with a lead from Zimbabwe, crocodile ranching evolved under the umbrella of CITES until it was practices in over 12 countries, from Ethiopia to Madagascar, but 1990. In these programs eggs are collected from wild crocodile nests; after hatching, the young animals are raised until they are large enough to be slaughtered for their skin. Through systems of concessions, permits, and other regulations, the economic benefits of this management system provide conspicuous economic incentives for crocodile conservation. Unfortunately, as might have been predicted, the reliance on markets to support conservation has its problems. As the world economy slumped in the late 1990s so did prices for crocodile skins. As a result many national programs have closed and the future of others is in doubt. Does this mean the end of the accommodation between crocodiles and humans?

Managing People-Wildlife Conflict in Tibet

R. M. Jackson, International Snow Leopard Trust, Seattle, WA

Since the Qomolangma (Mt. Everest) National Nature Preserve (QNNP) was established in 1989, wildlife crop and livestock damage has become a major issue. Over 20,000 people live along this interface, depending heavily on forests and rangeland resources. One survey indicated sheep-goat losses of between 0.06 and 7.5% of the herd, with a few "hot-spots" sustaining much greater depredation from snow leopard (*Uncia uncia*), lynx (*Lynx lynx*), and wolf (*Canis lupus*), among other carnivores. On averages, losses amounted to about $25 per household, a significant sum given the lower per capita income of the local residents. This has engendered substantial animosity by many herders toward these rare species, complicating the ability of preserve managers to meet biodiversity conservation objectives. Many causative factors are implicated in livestock depredation, including widespread erosion of traditional guarding practices and knowledge, reduced herder vigilance, increased livestock numbers and other changes in animal husbandry practices. This paper reports on new techniques for engaging and involving local resident, by linking biodiversity conservation with well-defined project initiatives aimed at improving animal husbandry practices while also enhancing villager livelihoods through ecologically and socially appropriate small-scale income-generation activities. Replicable ìhands-onî training workshops provided a forum for developing remedial measures for livestock protection that meet important criteria like ìlow-cost,î reciprocal financing and shared responsibility, based on the ìbest-practiceî guidelines set forth in a recently completed QNPP ìDepredation Management Handbook.î In English, Chinese, and Tibetan, the manual describes how to undertake baseline surveys, assess and prioritize

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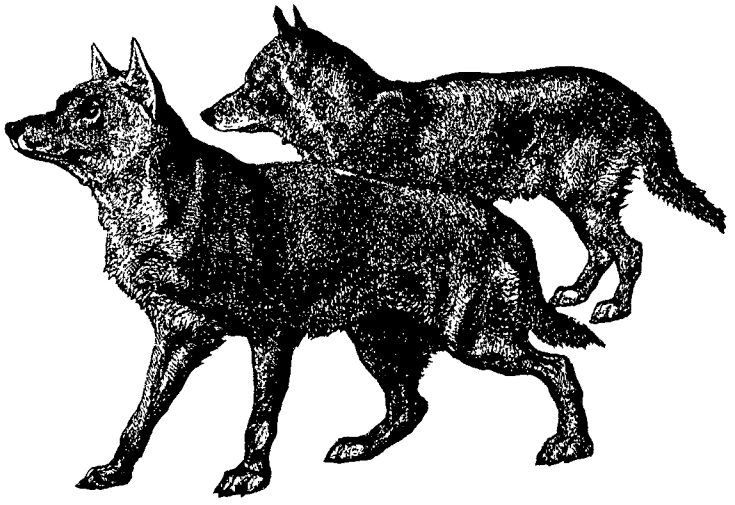
damage, and then negotiated signed reciprocal agreements with local communities to beneficially link conservation and income-generation activities so that local dependence and impact of marginal natural resources can be progressively reduced. By involving local people in preserve management, QNNP is able to rally new resources to supplement core government allocation s for park operations. Where possible, project activities and outcomes are tracked using indicators developed by participatory means, thus building consensus and support for increased community-motivated and directed natural resource management and development initiatives.



Human-wolf Conflict in India

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The Indian wolf inhabits degraded habitats, arid and semi-arid landscapes, and is the dominant large carnivore in the agro-pastoral regions of India. Most of the 2,000-3,000 strong wolf population of India survives outside of protected areas and in close proximity to people. These wolves primarily subsist on livestock. Cattle are not consumed by people in most regions of India; rural India supports a very large cattle population. The tendency of discarding cattle and buffalo carcasses that die of disease, old age, and starvation around villages sustains high densities of carnivores like wolves, hyenas, and jackals. Besides scavenging the wolf is also responsible for depredation on smaller livestock like goats and sheep. Wolf predation severely affects the economy of the pastoral community (nomadic and resident) that barely manages to etch out a living from the highly over-grazed and degraded landscape of semi-arid India. The pastoral community invests significantly in measures to protect sheep and goats from wolf predation. These measures include night vigils, maintaining guard dogs, building thorn corrals, and bringing the stock back to the village each night. The attitude of people toward wolves was related to the food-habits of wolves in that region. In areas where wolvesí major prey were wild ungulates, people tended to view wolves with less hostility and rarely were wolves directly persecuted. Whereas in areas where wolves subsist on livestock, people's attitudes were extremely hostile and most observed wolf mortality was human related. This analysis suggests that some form of economic compensation for wolf damage would help improve public attitudes toward the wolf in India. In the eastern part of the wolf's range, there have been several reports of non-rabid wolf attacks on children; this reached a peak in 1996 when a wolf was found to be responsible for attacks on 76 children (of which over 50 were fatal) in eastern Uttar-Pradesh. Our study suggests that in areas where there is a high human density >600 km^2) of low economic status, where there is no wild prey and with livestock populations heavily guarded, wolves could potentially attach children. Such cases were the exception rather than the rule and should be viewed within their special ecological and socio-economic context.

The Editor thanks the following contributors to this issue: Guy Connolly, Alan Merrifield, Lee Fitzhugh, Ray Sterner, Gary San Julian, Lynn Braband, and Mike Dwyer. Send your contributions to THE PROBE, *4070 University Road, Hopland, CA 95449.*

Cheetahs as Problem Animals: Management of Cheetahs on Private Land in Namibia

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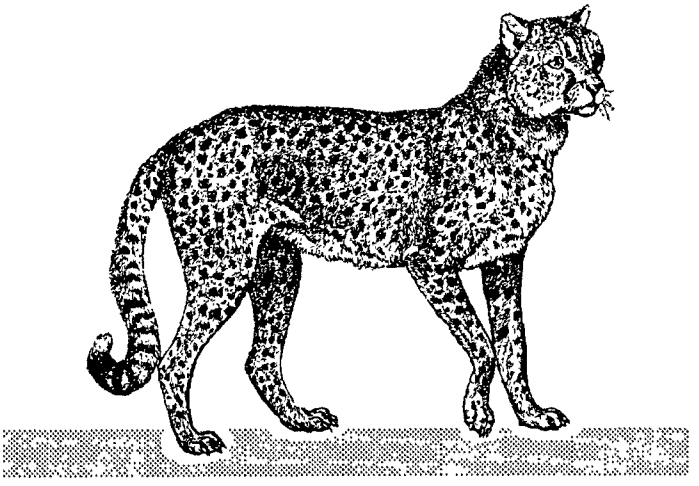
The management of problem animals on private land is a complex, difficult issue. When an endangered species is involved, the necessity for crisis management can further complicate matters. Namibia is fortunate to be in a position where cheetah numbers are, at this stage, sufficient to sustain the population. However, with growing human population expansion and the demand for more land and increased pressure on resources, time is running out for the cheetah. The extensive nature of farming practices in Namibia has inadvertently maintained habitat favorable for the cheetah. The primary problem is conflict with livestock farming, for which there are solutions other than traditional lethal predator control. In order for agricultural practices to be compatible with the survival of wildlife, new methods and policies of farm management, wildlife management and predator control urgently need to be incorporated into land management.



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Wildlife in the News

indicated no difference in deer survival rates. But Dick Ray, a rancher in Pagosa Springs, CO said strict hunting regulations coupled with bounties on coyotes on the Jicarilla Apache Indian Reservation brought the deer population from 2,000 in 1986 to 6,000 three years later.

—excerpted from an article in the ***Rocky Mountain News***

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