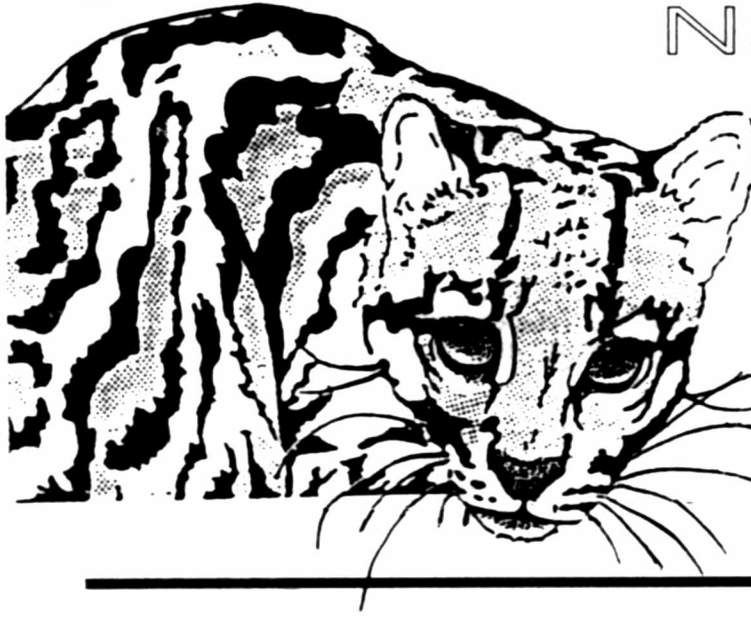


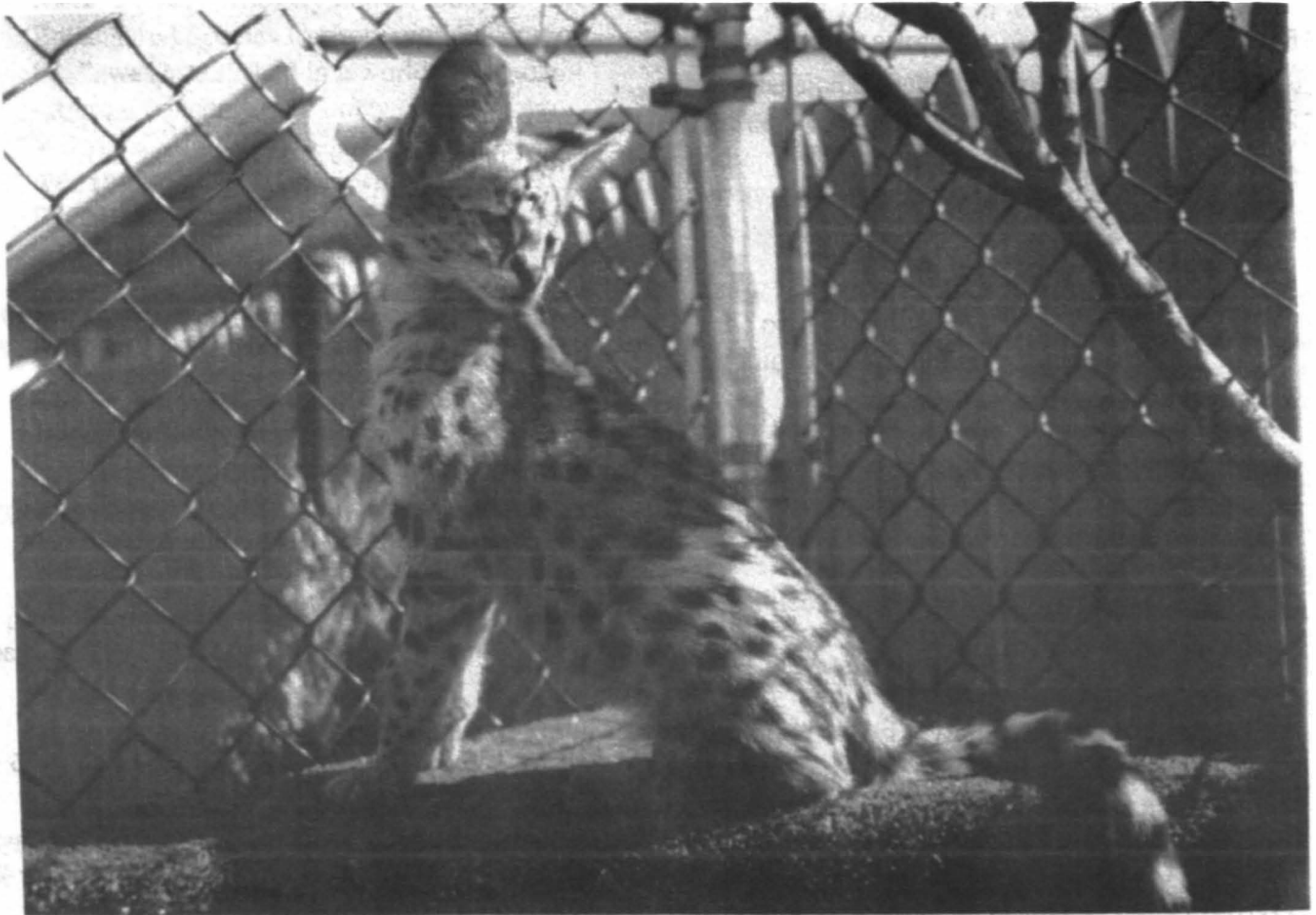
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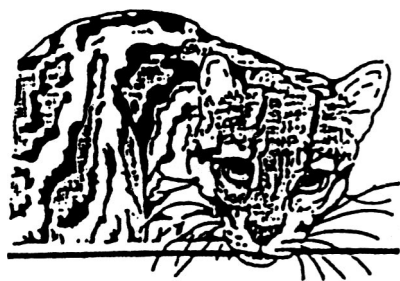
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Ron Eldridge's young serval male poses for a portrait. Ron reports that he is very healthy and is growing like a weed. See Ron's thought provoking article and more photos on page 15.



# L. I. O. C.

## *Endangered Species Conservation Federation Inc.*

This Newsletter is published bi-monthly by the LIOC Endangered Species Conservation Federation, Inc. We are a non-profit (Federal I.D. 59-2048618) non-commercial organization with international membership, devoted to the welfare of exotic felines. The purpose of this newsletter is to present information about exotic feline conservation, management and ownership to our members.

The material printed in this newsletter is contributed by our members and reflects the point of view of the author but does not necessarily represent the point of view of the organization. LIOC ESCF, Inc.'s statement of intent is contained in our by-laws, a copy of which can be requested from the Secretary. Reproduction of the material in this newsletter may not be made without the written permission of the original copyright owners and/or copyright owner LIOC.

Persons interested in joining LIOC should contact the Term Director in charge of Member Services.

Since the Newsletter consists primarily of articles, studies, photographs and artwork contributed by our members, we encourage all members to submit material whenever possible. Articles concerning exotic felines are preferred and gladly accepted. Articles involving other related subjects will also be considered. Letters and responses to articles may be included in the Readers Write column. Please submit all newsletter material to the Managing Editor.

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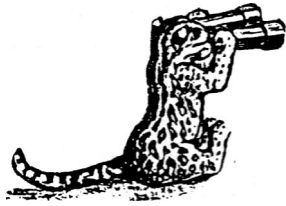
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## President's Perspective

### Election Results

...are shown on the opposite page, with all the detail you need to contact these applaudable volunteers. Do so as you see fit, and thank you for your participation in the election.

### A history lesson...

Did you know?? The organization which calls itself "LIOC," officially known today as "LIOC Endangered Species Conservation Federation, Inc.," was established in a world with quite different concerns over *thirty-five* years ago. When the original LIOC was established, there was no Endangered Species Act, no SSP's, no IUCN, CBSG or Felid Taxon Group. And zoos were at the *verge* of recognition that they might play a role in the 'conservation' of species.

However, Mrs. Catherine Cisin, *in 1954*, and her stalwart acquaintances who also cared about the ocelots they had come to own (as well as the margays, jaguarundis, tigrinas (oncillas), and Geoffroy's) understood that there was a problem. There was no base of knowledge for care -or breeding- of small wild cats. So those more caring and more farsighted ocelot owners joined Catherine in forming the Long Island Ocelot Club.

At the time the bonanza was on with virtually no restrictions. Spotted cats were taken at will by fortune hunters. And mother's young litters, when discovered, were forwarded to the pet shops of rich countries like America. Most pet shops claimed that any spotted south american cat was an ocelot. Amazing stories of the

strange acquisition of a 'little ocelot' abound among members from that time.

How little did the world know? Up until the early 70's, jaguarundis were still considered a member of the weasel family.

Those early LIOC members understood something well before their time. They did not generally put a word to it, as we do every day now. But they cared about whether the 'ocelot' species would be able to survive the hunting, the expansion of humans into their territory, and whether they could survive as species in captivity. Lucky for them, they weren't lost in the morass of philosophical arguments we find ourselves mired in today concerning *conservation*.

So the organization thrived and they shared their knowledge about the cats.

The heritage of this organization is deep and justifiably proud. During the ensuing years, LIOC members broke ground with their successful breeding of each of the spotted cat species in captivity. They advised zoos and were called upon by veterinary schools. Several of these LIOC members are cited in wild animal veterinary medicine textbooks today.

None of this was easy, for professionals do not like to require the knowledge of 'hobbyists.' And much of this natural disdain was passed on to the professionals of the 90's: The farsightedness and success of our LIOC forbearers is the seed of why we are often challenged by the professional conservationists of today.

Well, that is Lesson One in the history of this organization you receive a newsletter from approximately every two months. There is, of course, much more that makes up the story of this 'club' and where we find ourselves today.

You need to know it. Or to remember it. There is much to be proud of, to contribute to. And much to think about.

## Help!

I simply can't continue to do the *Newsletter* production and also do justice to running your organization. Is there someone out there who would be willing to take over as production editor?? Computer availability, knowledge of layout methods, and familiarity with *Pagemaker* or equivalent are desirable. Nothing but your time is required. Contact Shirley or me if you're interested in the job.



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## A Board Statement: Personal Matters

Many times in the course of governing we are entangled in the dilemma of someone's personal problems -or more precisely in putting personal feelings aside and acting beyond our own feelings and in the best interests of LIOC. This is never easy, however the Board is charged with overseeing the best interests of LIOC, no matter how much we might empathize with individuals we know and care about. We may feel sorry that someone is experiencing problems in their personal life, but we are entrusted to safeguard the organization first. Personal problems are tricky enough to negoti-

ate as a caring colleague, but when the problems are legal or criminal, dealing with the situation becomes more important than personal feelings.

Over the last decades, our organization has suffered because the Board was too willing to make allowances for a Board member's personal problems. The intent was good, the consequences disastrous. If LIOC is to present a professional image, let alone survive as an organization of any effectiveness at all, your Board must act within the best interests of the organization. This at times means that we must put personal considerations aside for the good of the whole.

At all times the Board tries to act discreetly so as not to add to any individual's problems. Unfortunately this allows a great deal of latitude for misunderstandings, especially when non-Board members may hear only the aggrieved's side of things. It is wise here to remember - and history shows us - that any individual will justify their actions or downplay the need for Board action under these circumstances.

Although we speak of "the Board," you must remember that this is a group of individuals who have been elected by you to run LIOC: Although any one individual may have a personal axe to grind, the organization is run by majority vote and it is doubtful there are enough dull axes on the Board to pass a motion on such a basis alone.

Our point is that when you hear rumors concerning injury by the Board to an individual, you might ask yourself why eleven elected individuals decided on this particular course of action. Perhaps they took their duties seriously and, knowing more sides of the situation than you do, voted in the best interest of LIOC.

THE BOARD

# CompuCat

By George Stowers

If we are to prevent further erosion of the privilege for private individuals to own non-domestic cats we must understand the concerns of our critics and to the extent that such concerns are valid, be responsive to them. During the last year I have had the opportunity to 'talk' with several hundred individuals concerning private ownership of non-domestic cats while acting as the LIOC's contact on the PRODIGY(R) interactive computer network. Prodigy is a large service with over 2 million subscribers. Demographically the average subscriber can be characterized as being well educated and belonging to the upper-middle economic class. Because of their education, financial resources and the time they have available to dedicate to issues they believe in, such individuals typically have a significant influence on public opinion. My 'on-line', conversations have been an interesting and educational experience and I would like to share some of what I have learned with you.

Only about 10% of the individuals I have talked with expressed support for private ownership of non-domestic cats. A similar percentage strongly oppose such ownership. This leaves about 80% who expressed no strong feelings one way or the other. It is this group that we must positively influence if we are to retain our privileges.

An absence of strong opposition did not necessarily mean a lack of concern about private ownership, in fact most undecided individuals mentioned one or more specific concerns. These concerns normally fell into one or more of four areas. In order of frequency mentioned they are: animal abuse, perceived threat to public safety, contribution to species endangerment, and exploitation of animals in general.

Issues concerning abuse include: direct physical abuse, inadequate facilities, inadequate diet, inadequate health care, and inadequate consideration of the animal's physiological needs. Concerning public safety: risk of injury to a member of the public due to escape (i.e., inadequate physical security), authorized contact (e.g., neighbor bitten while petting cat in owner's presence), or unauthorized contact (e.g., child bitten after gaining access to the animal in owner's absence) were the issues. The basic issue regarding species endangerment is a perception that the capture of wild born non-domestic felids to meet the demand of the private pet market is a significant factor threatening the survival of felid species in the wild. Those whose concerns included exploitation maintain that any human intervention into the lives of animals for our own enjoyment or benefit is exploitative and question if such activity is morally acceptable.

I'm sure that most of us recognize that all of the concerns mentioned are at least to some extent valid. Some animals are abused, members of the public have been injured, endangered animals are removed from the wild without proper permits/licenses, abusive exploitation is not acceptable. I am also sure that most of us are aware of the many positive benefits of private ownership, for both the cats and for the public. The question is then: Is the information available to the public an accurate reflection of the realities of private ownership? I don't believe so. As the vast majority of the public have had no direct experience with privately owned non-domestic cats, their perceptions and opinions are based upon what they hear and see in the news media. Unfortunately the realities of media economics dictates that the news reported be as unusual/spectacular as possible. Thus we hear of drug dealers, child abusers, and owners who abuse their animals, but seldom hear of those who avoid drugs, parents who do a good job of raising their children, or respon-

sible cat owners. For this reason it is not enough that we do our best to encourage responsible ownership, we must also try to better educate the public.

I believe that through appropriate educational efforts the LIOC-ESCF can have a measurable, positive impact on public opinion. But to do so we must be both visible and credible. Visibility is largely a matter of choice but credibility, like respect, must be earned. This does not mean we all need to have Degrees in animal husbandry, but it does mean that the LIOC-ESCF and its members must be perceived as adhering to the highest practical standards of animal care. As a first step toward this goal I believe the LIOC-ESCF should consider adopting a formal code of conduct. As a starting point for future discussion on this subject I submit the following for consideration:

### **Exotic Cat Owner Code of Conduct**

I believe private ownership of an exotic cat is a privilege which carries with it an obligation to ensure that the health and safety of the animal, the animals species, and the public is not significantly or unnecessarily threatened. Toward this end I commit to the following principles regarding animals under my care:

I will comply with all applicable local, state, and federal regulations.

I will take appropriate precautions to ensure the health and safety of the public is not jeopardized.

I will, to the maximum extent practical, ensure the source of animals I acquired does not threaten the viability of the species in the wild.

I will ensure the physical and psychological needs of animals under my care are adequately provided for.

I have discussed these four principles with many people on Prodigy during the last year. As expected there are considerable differences of opinion on exactly what it takes to satisfy the last three statements. However, there is near unanimous agreement that these four principles provide an acceptable basis for private ownership of exotic cats.

### **Now for the discussion...**

George has presented some well-researched information and an interesting recommendation. Here are further questions you may wish to ponder.

- Should LIOC have a formal Code of Ethics?
- Should compliance be mandatory or voluntary?
- Should benefits be attached to compliance, i.e. voting benefits, reduced membership fee... ?
- What penalties/procedures could be brought to bear if the code were violated?
- How could the requirements for compliance be quantified?

Send your comments and ideas to the Editor by May 10th, and we'll forward them all to the Board as well as publish a representative set.

## **Speaking out Against Furs**

"Because of the sorrow to living creatures, specifically because it involves brutality," Chaim David Halevy, Sephardic Rabbi of Tel Aviv, has issued a new religious ruling that forbids the wearing of fur.

## Another Spotted Cat Transfer to Appendix I

In 1989, three small spotted cats- the ocelot, the margay, and the oncilla - were transferred from Appendix II of CITES (Convention on International Trade in Endangered Species) to Appendix I. By that action, the signatory nations recognized that these species were threatened with extinction and prohibited trade in them.

A major contributor in the cats' decline was exploitation for the fur trade. Beginning in the 1960s and continuing into the '80s, hundreds of thousands of skins from these three species entered the international market.

Now it appears as if another South American felid, the Geoffroy's cat, is in need of the same level of protection. When ocelots, margays and oncillas were added to Appendix I, the rationale for not including Geoffroy's cat was that it was more numerous and the threat to its survival was not as great, despite the fact that between 1978 and 1984 more than 387,000 Geoffroy's cat skins were exported from South America. At the time, some experts expressed concern that pressure from legal hunting, shifted from the other three cats, would quickly reduce Geoffroy's populations to critically low levels as well. Jose Truda Palazzo, and advisor to Brazil's Minister of the Environment, says that "surveys of population levels for this species indicate that habitat destruction and harvesting for fur has caused the same decline previously documented for ocelot, margay, and oncilla."

Yet another serious problem has been created by the lack of Appendix I protection for Geoffroy's cats. The International Wildlife Coalition points out that the illegal trade in ocelot, margay, and oncilla pelts has been perpetuated by the similarity of these species to

Geoffroy's cat." By simply mislabeling endangered spotted cats as "Geoffroy's cats," illegal trade continues in these species because inspectors have difficulty telling the cats apart. Consequently, the numbers of ocelots, margays, and oncillas continue to decline.

The need for increased protection for Geoffroy's cat has prompted Brazil to propose the transfer of that species from Appendix II to Appendix I. The proposal will be considered at the CITES meeting scheduled to be held in Kyoto, Japan, in March. Germany, which at one time was the primary importer of Geoffroy's cat skins, is expected to support it.

People wishing to express their views on the listing of Geoffroy's cat, *Felis geoffroyi*, should contact their CITES Management Authority. In the U.S. : Office of Management Authority, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, Room 432, Arlington, VA 22203; 703/358-2093, fax 703/358-2281.

by John Becker,

reprinted from Wildlife Conservation



John Perry's geoffroy baby



# Pet Industry Joint Advisory Council Defends Pet Business

By Bruce N. Gyory, Esq.  
from PIJAC newsletter

What do you think your challenges are as a business owner in the pet industry? Keeping employees happy? Maintaining the proper inventory? Turning a healthy profit?

While all these are important, the real challenge facing pet industry members is keeping their right to do business, which animal rights extremists want to obliterate. And the best way to defend this right is to organize an effective, successful grass-roots lobbying program that meshes the power of local pet industry members and their customers with the expertise of the national watchdog for our industry, the Pet Industry Joint Advisory Council (PIJAC).

## A Case in Point

The conflict between extremists and the pet industry crystallized in New York State in 1984, in the form of the Wild Bird Act. This story shows why pet business owners must learn to use the techniques of grass-roots lobbying if they are to survive the onslaught of animal rights extremists whose ultimate goal is the de facto elimination of pet stores from our society.

The Wild Bird Act was passed by the New York State legislature in the closing hours of the 1984 session and later signed into law by the governor. There was no lobbying presence at all during this time, and very little was known about the bill when it passed.

Many legislators we later learned, thought they were voting to prohibit the sale of imported birds that were endangered or threatened species. Instead, the bill explicitly prohibited,

except by stringent regulation, the sale of all live wild birds that were not born and raised in captivity.

The bill had appeared to have no chance of passage, but was slipped through in the closing hours of a late-night session. Until this escape occurred, neither PIJAC nor any other pet industry association monitored state initiatives. Although PIJAC presented substantial information after the bill passed and before it was signed into law, it lacked the critical grass-roots support to stop the bill.

## PIJAC Takes Action

In 1985, under PIJAC's leadership, New York pet industry members mobilized themselves and their customers to fight for an amendment, not a repeal, to the Wild Bird Act.

A statewide petition was circulated among thousands of bird lovers who wanted to narrow the Wild Bird Act to limit its prohibition to endangered and threatened species, and to implement a regulatory system that paralleled the federal system. I was proud to serve as the lead lobbyist from my firm in that effort, working under PIJAC and with the New York group formed to lead in organizing the action.

A group of gallant pet industry members gathered; together with Marshall Meyers, PIJAC's general counsel and executive vice president, we organized ourselves and then, our customers. We operated on a slim budget, in contrast to the seemingly inexhaustible resources of the animal rights forces.

For the first time in New York, we began to match the zeal of the extremists with a growing passion among small business owners and their



customers who wanted a chance to be heard. Soon legislators learned there was another side to the story on wild birds!

In 1985, our bill passed in the Senate and narrowly failed to be reported from the Assembly Committee. In 1986, the Senate again passed the bill, but we were rebuffed in the Assembly. By 1986, our effort attracted the attention of the nation's animal rights activists, who targeted us. They bombarded the New York Legislature with ads and editorials, and created enormous pressure to hold the line.

### **We Learn from Failure...**

Our version of the Wild Bird Act never passed, but we could still claim a victory: We made important strides in developing respect for the rights and views of the New York pet industry. New York's pet industry members were fighting back with facts in the halls of the Capital and in the media. Pet business owners and their customers were gaining new-found respect by insisting upon the truth-that animal lovers come to pet stores to buy animal from other animal lovers who happen to own and manage pet stores.

The grass-roots mobilization campaign of 1985 and 1986, while unsuccessful in terms of amending the Wild Bird Act, enabled PIJAC to succeed in other legislative endeavors.

### **...And Go on to Succeed**

In recent years we have worked with the Legislature to pass fair, landmark legislation here in New York-the so-called "lemon puppy law" which seeks to balance consumer rights with the realities of the marketplace. Each year, PIJAC is called upon to respond to numerous proposals affecting the importation, sale and possession of companion animals. PIJAC has supported various laws and regulation that improve the well-being of these pets, and is viewed as a reliable credible organization.

In New York, we have formed a loose coalition with the farming community and the academic research community to pass a bill that imposes stricter penalties for the violent disruption of scientific research. We have also been successful in defeating punitive animal rights legislation.

All these successes derive, I believe, from our grass-roots mobilization in 1985 and 1986. We have presented arguments to rebut the misleading propaganda of the animal rights extremists. We have found legislators willing to listen to our case. We have also found animal rights groups that are willing to be reasonable. We have built coalitions with academicians, veterinarians and the farming community.

PIJAC's ability in New York to be prepared to oppose unreasonable legislation and, at the same time, to work with the Legislature to craft reasonable legislation or alternatives on animal issues has earned our group the contempt of extremists who don't like our results. They'd prefer to see an unorganized group of small-business men and women who are not willing to stand up for themselves.

### **A Lesson for the Industry**

You can't beat the zealots without mobilizing a grass-roots campaign. And because their resources match their zeal, particularly as they court the support of our society's most wealthy, we will have to go beyond simple petitions to campaigns that include direct mail, phone banks and advertising.

Our mobilization must become more targeted and more sophisticated, and our coalition-building more systematic and ever-constant. Unless the pet industry is willing to mobilize its customers, every industry member will be vulnerable to legislative attacks which seek to curb or end their trade.

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# National Alternative Livestock Association

The National Alternative Livestock Association is a newly forming organization which has been spearheaded by Charlie Hume of Hume's Exotic Wildlife Ranch, 1406 Busse Rd., Marengo, IL 60152. You may be familiar with articles published in industry publications referring to his plan as, "Charlie Hume's Action Alert Plan".

NALA is being set up to work on a national level to follow legislation and work to represent the livestock industry as a political action type of group. It was purposely called National Alternative Livestock Association in order to shift the focus from "Exotic Livestock" and to help band together groups and organization in individual breeds and states regardless of their specific area of interest. A steering committee of ten members, from many geographic locations of the country, has been appointed.

It is important to recognize that NALA is formed to serve animal owners and breeders of all types from pets to rare animal to domestics. None are excluded from this organization and none are excluded from the possible ravages of damaging legislation and unfair rules and regulations.

NALA will serve as an umbrella organization to work with state organizations and specific breed organizations to:

1. Protect the rights of animal owners.
2. Aid in securing fair regulations and

legislation.

3. Educate animal owners in their responsibility to animal care and public safety.
4. Educate others about the value of the animal industry in it's role of financial contribution to an area, preservation of breeds and species, family values, etc.

National Alternative Livestock Association offers a single membership for \$10, a farm membership for \$25 and other membership categories.

Contact NALA at HC77 Box 66, Crawford, NE 69339. Phone (308)665-1431. Fax (308)665-1931.

By Maureen Neidhardt, Secretary NALA

## Vital Statistics

From *National Wildlife* magazine come the following fascinating facts:

- The number species that biologists believe inhabit the earth: **5,000,000 to 30,000,000**
- The number of identified insect species: **750,000**
- The percentage of species believed to live in tropical forest destroyed each hour: **5,800**
- The annual value of plant-derived medicinal drugs: **\$40 billion**
- The number of species no longer considered threatened since Congress passed the Endangered Species Act in 1973: **6**
- The number of endangered animals in this country with improving populations: **33**
- The number of animals with declining populations: **122**

# Rhinos and Tigers Die as Taiwan Buys and Sells -You can Help

Rhinos are being pushed toward extinction by human activity faster than any other land mammal. Indeed, the world's remaining five species of rhinoceros may be extinct in only five years. The African black rhinoceros has declined from approximately 65,000 in 1970 to only 2,400 today... that's a decline of 96 percent in little more than twenty years! The other four rhino species are not faring any better ... only about 10,000 rhinos are left in the world. The principal cause of this decline is poaching of rhinos for their horn which is ground up and used as a traditional "fever-reducing" medicine in Taiwan, China, and South Korea (there is no scientific evidence supporting its medicinal properties); the horn is also carved into traditional dagger handles in Yemen. Rhino horn continues to be illegally traded even though all five rhino species were placed on Appendix I of the Convention on International Trade in Endangered Species (CITES), thus banning the legal international trade in rhino horn among its (now) 117 member nations.

Investigations into the illegal trade in rhino horn indicate that Taiwan, in particular, can be blamed for the decline of the rhino species. A very wealthy nation, wealth gained by selling Taiwan exports here in the U.S.A., the Taiwanese can afford to buy the expensive rhino horn drug which sells for up to \$23.587 per pound. In Taiwan, horn is openly displayed and sold to customers and the government does little to stop its trade.

Investigations have also implicated Taiwan in the continuing destruction of other endangered species, including the world's few tigers of which only 6,000 remain in the wild. Like the

rhino horn, tiger bones are used in traditional medicine in Taiwan. One Taiwanese company advertised that it imports the bones of up to 100 tigers per year to make its product. At this rate of use, it is thought that tigers, too, may become extinct by the end of the decade.

## What Can You Do?

Taiwan does not have an embassy in the U.S. because formal diplomatic relations do not exist between our two countries. Instead there is a Coordination Council for North American Affairs to which you could write to express your concern for rhinos and tigers (Mr. Mou-shih Ding, Senior Representative, Coordination Council for North American Affairs, 4201 Wisconsin Avenue, NW, Washington, DC 20016). Tell Mr. Ding that you want the Taiwan government to strictly enforce a ban on the trade in endangered species, including rhinos and tigers. And that the Taiwan government should donate money to help protect rhinos and tigers from poachers.

Please also write your Senators (The Honorable \_\_\_\_\_, U.S. Senate, Washington, DC 20510) and Representative (The Honorable \_\_\_\_\_, U.S. House of Representative, Washington, DC 20515). Ask them to ask the new administration to seek a suspension of U.S. trade with Taiwan unless they strictly enforce a ban on the sale of endangered species, including rhinos and tigers. Rhinos and tigers are protected by the U.S. Endangered Species Act and the U.S. has signed the CITES treaty that bans their international trade. Thus, Taiwan is undermining the good efforts made by the U.S. to save these species from extinction.

# NY Cat Club Supports Lynx Release

THESE DAYS, most breeders and cat lovers won't buy purebred kittens sight unseen, no matter how far away the kittens' catteries are. A potential owner usually requests good photos or a video of a kitten before deciding to buy.

Recently, however, fellow members of the Half Moon Cat Club and I bought a cat sight unseen—one without a pedigree or even a clue as to its parentage. We know we will never see our cat "in person" and will never be able to show him. Yet we brag about our new cat all the time and, through our enthusiasm, encourage other clubs to buy a cat like ours.

The unusual, unshowable cat we bought is a Canadian lynx, a cobby, short-tailed cat with a ticked coat, large feet, prominent ear tufts and a pronounced facial ruff. As part of the Lynx Restoration Project, a live trapper in the Yukon shipped our cat to New York, where scientists outfitted him with a radio collar and released him into the Adirondack Mountains.

Why did we buy the lynx? Because we are concerned about the impact that the extinction of various species is having upon our planet. We wanted to do something to help restore nature's delicate balance.

## Shy, Secretive Cats

After seeing a National Geographic television special on the Lynx Restoration Project, our club members jumped at the chance to contribute. On a unanimous vote, we sent a check to Syracuse University, the research center of the project.

A few months after we sent our donation, four

club members interviewed Kent Gustafson, Ph.D., director of the Lynx Project, at the Adirondack Ecological Center in Newcomb, New York. To prevent captured lynx from becoming dangerously familiar with civilization before their release, Gustafson keeps them in a remote, secluded, grassy area at the back of the center. The director allowed us to photograph and videotape seven adult cats and five kittens. Only a few people in North America have ever seen these shy, secretive cats up close, so the experience thrilled us.

## Returning to Lost Habitat

To save animals from extinction conservationists are researching methods for returning extirpated species to their native habitats. An extirpated species is one that has lost its native habitat due to natural or man-made causes but has survived elsewhere.

The lynx is a good example of an extirpated species. Before the 1880s, lynx lived throughout the New York Adirondack and Catskill mountains. The arrival of the logging industry and the damage caused by subsequent forest fires radically changed the lynx habitat. Since the creation of a state park in the Adirondacks, much land is again potential lynx habitat, particularly in the High Peaks Wilderness Area of Adirondack Park.

Gustafson and a team of scientists and students have released several lynx in the High Peaks Wilderness Area. Other researchers are watching the Lynx Restoration Project as a test case in the unpredictable field of rehabilitation. They hope to learn methods useful in the restoration of other extirpated species.

## Helpful Donations

Proceeds from the Half Moon Cat Club annual Cats in the Catskills Cat Show, sanctioned by the Cat Fanciers' Association, will benefit efforts toward wildcat breeding and preservation in the Catskills, including the

## Russian Campaign to Protect Tigers

Field Report: Russian environmentalists are waging a campaign to halt proposed logging operations in Primorsky Krai, the prime stomping ground for endangered Siberian tigers. The region's forest service has given permission to the Hyundai Corp. of South Korea to log about 300,000 hectares of old-growth forest near the headwaters of the Bikin River, greatly expanding current operations and seriously jeopardizing the tigers habitat. Goskompriroda, the Russian counterpart to the U.S. Environmental Protection Agency, has recommended against the logging, as have several other agencies. But Primorsky Krai's governor told the Siberian press that he would fulfill the contract with Hyundai unless Russian president Boris Yeltsin personally interceded. Lend your support to Russian efforts to save the Siberian tiger by writing Vladimir Lukin, Ambassador, Embassy of Russia, 1125 16th St., NW, Washington, DC 20036, and asking that Russia take every step necessary to save these magnificent creatures. Protest Hyundai's expansion of logging operations to D.O. Chung, President, Hyundai Motor America, PO Box 20850, Fountain Valley, CA 92728-0850.

### Cat Club Helps, continued

#### Lynx Restoration Project.

Other cat clubs across the country are joining in the effort to save the lynx. For more information, send a self-addressed, stamped envelope to Half Moon Cat Club, Dept. CF, Rt. 1, Box 108, Leeds, NY 12451. You also can send contributions to Dr. Rainer Brocke, Dept. CF, 350 Illick Hall, Syracuse University, College of Environmental Science and Forestry, NY 13210.

reprinted from Cat Fancy

### A Special Gift, cont from p. 21

to ask him: "What should I do?" Greg looked over at Oscar, and said: "Good boy, Stay."

Oscar, resigning himself to his fate of kittensitter, lowered his head to the floor, and fell asleep as well. Greg sat, and watched them for over an hour, and then walked to the front door to look out. Snow was falling gently outside, transforming the trees, and bushes into a fairyland. Greg called softly: "Oscar, do you want to go out?" At this Oscar gently got up, careful not to disturb Silver, who was still sleeping, and went outside to answer nature's call. After he came back in, he went back into the kitchen and again laid down next to Silver so that Silver was once again at his chest. Greg looked down at his two true friends, smiling. This would work out for the best.



Jean Hamil's bobcat Runte

# Missouri establishes modified rules

Remember the flury of reaction to Missouri's proposed new wildlife restrictions reported in the *Newsletter* last summer? Local members responded *en masse* to the Department of Conservation under the leadership of Life Director J.B. Anderson, a Missouri resident. New rules which became effective in late 1992 established several changes for hunting, trapping and permitting in Missouri. But for the moment, they are very different than what was proposed. The portions of interest to LIOC members are synopsisized here.

New furbearer hunting and trapping rules also clarify that only the taker may possess, transport and sell furbearers.

Applicants for a wildlife hobby permit or a wildlife breeder permit must now obtain the permit *prior* to acquiring the wildlife. The wildlife hobby permit fee has been increased to \$10. The wildlife breeder permit fee has been increased to \$50. Wildlife breeders may now exhibit wildlife under that permit.

Amendments to the wildlife confinement standards rule specifies acceptable construction standards for cages, pens and other enclosures; stipulates that animals must be confined at all times; and stipulates that dangerous wild animals may not roam freely anywhere within the residence or inhabited dwelling.

Public input into the Department's regulatory process resulted in rescission and modification of several proposed rule changes that involved private ownership of dangerous wild animals as pets. The Department remains concerned about the welfare of those animals and public safety. A study is under way to reconsider this subject, and proposed rule changes in the future will

include the concerns and needs of the affected private owners.

For additional information on regulations, consult the 1993 summaries of fishing, hunting and trapping regulations, the Wildlife Code, or the Department of Conservation personnel.

*reprinted from an article by Ken Babcock, an assistant director of the Department of Conservation, and chair of the Department's Regulations Committee.*

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## Do Not Use Scoopable Litters

I just lost a Leopard cat because of the new SCOOP AND FLUSH litters. As you know, Leopard cats like to play in water, so when their paws are wet and they get into the litter box, their paws become caked with the sticky goop so they lick them to clean them off. Even those of you with outside kennels, etc., when you hose down your cages, or it rains and the feet get wet, and they use or play in the sand box, you stand great risk of losing your animal.

This stuff stays like clay in their stomach and intestines and absorbs all of the liquid from their food and water and stays like wet cement. Some males are having problems with this matter becoming impacted in their penis and needing vet care and even surgery. It does not take a long time for your animal to die, mine died in one month from starvation because it could not retain any nourishment from any food it tried to eat.

A very large cat litter company has called me after they heard about my problem, and want to do testing on the stuff found in the cat after the autopsy. In the mean time: Don't use it!

For more info call Jan 818-345-5140 or write WPS-PO Box 570343-Tarzana, CA, 91357

# Choices for our World

by Ron Eldridge

We are keepers because we share a common interest. We are all concerned and interested in the fate of all animal and plant life on our earth. By providing the public with information we help activate them. Action is what all of our endangered species need to survive. Action is the end product of information processing; without it you can't have usable knowledge.

How can we help? Habitat destruction by human beings of our rainforest is threatening the survival of many species. You can't talk about protecting the animal without saving the trees it lives in. You can't talk about saving the trees in the tropical forests and forget about the people who live there. The world is a very complicated place where everything is connected. The question is: "How can I help save a species?" Knowledge is what you need to help. Knowledge of: What you buy. What and how much you use of anything... paper, fuel, food, clothing, etc. What you say to another person about our global environment. What you teach to your children and visitors at our facilities. Remember, get out and vote. Make your concerns public through your government representatives. If you don't like what they say, don't vote for them.

In all the world, there aren't enough zoos to effectively maintain even 1% of the species currently threatened. It has been reported by one genetic expert that you would need about 100 breeders per species to maintain a healthy gene pool. Zoos, governmental agencies and non-profit groups don't have enough money or person-power to do this job. That is where people like you and I come in. By educating the public and, more importantly, the children, maybe the animals, plants and yes... our earth may have a better future. Our vehicle to do this BIG job is **LIOC ESCF, INC.**

Many of us believe that all our problems: habitat destruction, pollution, poaching and global warming will be solved by our government or someone else. Historically, any change in society, ultimately was brought about by the people. People like you, who finally said, "I've had enough, I'll do it myself." **MAKE IT HAPPEN!**



Ron's male serval at 16 weeks, enjoying his enclosure. He is out of Donna Amos's lines and becoming a big boy fast. By 22 weeks, he weighed in at 20 lbs.



## Q.I.D. part II

Dr. Alan MacMillan, a veterinary eye specialist who frequently advises our veterinary staff, viewed Rimau's condition with great interest. The pigment dispersing from the pupils was unusual and probably not correctable. The condition was due to an underlying iritis that can also be found in domestic cats, but it didn't seem to hamper vision too severely. Initially the cataracts were only established in one eye and were not as developed. They had obviously progressed since the initial diagnosis to the point where they impaired Rimau's depth perception a great deal. By October, we were preparing for the cataract surgery.

Practice sessions ran the gamut of combinations possible for four trainers and one cat. We tried using drugs which tended to miss more often than not, and then switched to ointments until Rimau's entire face was a greasy mess from our near-hits. We tried training him to target for a food reward, until he quickly learned to bypass the target in search of the treats he knew were hidden nearby. We even tried sneaking in quietly as he lay sleeping and speedily medicating his eyes before he woke up-until his hearing picked up our footsteps and readied him for our arrival before we even got there. All methods worked sometimes, and sometimes none of them worked. Then we would have to take a break and try again later. Ultimately, what worked best was introducing a glistening glob of ointment to each eye on the sterile fingertip of one hand while the other hand fed him.

Rimau could easily have grown impatient with all of us probing, poking, swiping, and wiping at his eyes, but, true to his nature, for the most part he remained totally controlled and continued to accept the raw meat, bone marrow, and Velveeta cheese we offered. Discovering quite a few ingenious methods that insured success,

we scheduled Rimau for surgery on December 18, 1991.

Dr. Darien Nelson, a veterinary ophthalmologist, performed the actual surgery. Rimau was initially sedated with Telazol by intramuscular injection and then transported to Dr. Nelson's specially equipped surgery clinic in Mission Valley. Under general anesthesia, the corneas - the clear, outer covering of the eye - received a three millimeter incision. The phacoemulsification needle was inserted through this incision into the cataractous lens. Utilizing ultrasound, the cataract was liquified and then aspirated from the eye through the needle. The tiny incision was sealed by three microscopic stitches. Incidentally, quite a few of those little black threads wandering around from the pupil also went out with the evacuated fluid. Rimau was home by 5:00 pm., with one large hangover from the anesthetic that would last for a couple of days.

Phaco surgery is relatively new procedure with animals, but it has been used extensively on humans for the same cataract condition. It's a great improvement over the rather invasive



Ron Eldridge visits with Al Porges' female snow leopard during filming of an educational program.

cataract removal used previously, which involved cutting around half of the cornea in order to allow for the entire cataractous lens to be extracted. There were many stitches required back then and much more potential for scarring, infection, and postoperative pain. Rimau's eyes were a little sensitive to the touch, but his postoperative lethargy allowed us to more gently apply the first few medications. His prognosis was very good, there were no surprises, and time would tell whether optimal healing occurred.

The eye medications came in different forms and served different purposes. Atropine was applied to dilate the pupils 24 hours a day, for several days after surgery, and essential treatment following intraocular surgery in cats. Maxitrol was an essential steroid-antibiotic combination to combat both infection and inflammation. These applications of medications would slowly be reduced in number per day as time and successful healing became apparent. At first, however, the prescriptions on each tube read Q.I.D. - four times a day.

Along with the post operative medications, it was also important to have Rimau housed out of direct sunlight as long as the pupils were being dilated. This involved restricting him to an inside cage for at least the first week. He did not seem to mind, but Asia and Dahan seemed perplexed about where he was. Dahan, especially "cried out" a lot, attempting to make contact with Rimau. Under normal conditions. Rimau and Dahan view each other as rivals for Asian's attention, and they spend a lot of time and energy concerned with each other's whereabouts. The males share time with Asia when she is receptive to them, but they do not share living quarters. Each cat has its own cage and physical contact is made under supervision of trainers.

After a week, Rimau was allowed access to his

darkened, outside cage during parts of the day, much to Asia's and Dahan's relief. This movement allowed us to expose him to objects to test his improving vision. He could now track people passing by his cage - before, he would lose them but continue to stare at the place where they had been, unable to follow them with his eyes. He now acknowledges our presence with a "chuffle," his prusten response, before we can speak, indication that he recognizes us when we enter his cage. He can also easily see the pieces of meat and cheese we drop on the floor to lure him back into his inside pen at night. In June of this year, we reintroduced him to the sage and the jumping platforms, and he is now leaping in show once again.

The eye medications have been reduced in number, and they are now such an integral part of our day that we not longer suffer anxiety at the prospect. Through it all, Rimau has been a super and willing patient. Had it not been for his extraordinary tractability, sight restoration could never have been attempted. We are all very proud and pleased to have been able to afford him the chance.

by Heidi Ensley, Animal Trainer

reprinted from Zoonooz

### In Memoriam

Former Florida chapter member, Tracey Johnson, of Sarasota, was murdered recently. Tracey had been involved with other LIOC members in Florida for many years and was working at Robert Baudy's compound on weekends when the tragic event occurred late last year..

## A Special Gift II

by James Godsmark, LIOC member, Ontario,  
Canada

The Holidays were now over, and things were beginning to return to some semblance of normal for Greg Tanner. His Sister, his Brother, as well as their spouses, and all of their children had come to visit him on Christmas Eve as planned, and they'd had a good, though quiet time together. They had wanted to see Silver all night long, but Greg had kept him in the bedroom until it was time to feed him. You see, Greg did not want to cause him any more stress that was absolutely necessary. Fortunately, his nieces, and nephews seemed to understand, and did not mind waiting to see Silver after Greg told them that it would be better for the kitten this way. Silver had been a total angel as he drank from his bottle, and Greg's relatives watched in silent wonder. None of them had ever seen a bobcat kitten before. Afterwards, Greg helped Silver eliminate, and placed him back in his basket. His relatives were reluctant to leave that evening, but Greg assured them that he would allow them to spend more time with Silver when he got a little larger. In the meantime, he would occasionally call them to tell them how Silver was doing. Silver was growing rapidly, and now at four weeks of age, he was beginning to walk around a little bit, making experimental tottering steps, but not yet venturing too far from his basket. He was starting to eliminate on his own, and he would loudly cry for his bottle when he felt that it was time for a feeding. So far, he seemed to be a healthy, happy, and normal kitten, and this was a fact for which Greg was profoundly grateful.

Today was January 15th, and Greg was just finishing up his breakfast, and washing the dishes. Soon, he would have to leave for work, and he certainly did not want to be late. He was still taking Silver to work with him, and almost

everyone at the Advertising firm had fallen in love with him, and looked forward to seeing him every morning. Silver, it seems, had become the company mascot. Fortunately Mr. Anderson did not mind, because far from distracting the Employees from their work, Silver's presence seemed to boost the Company's morale, and the Employees seemed even more willing to cooperate with each other, and get their work done. And when Mr. Anderson had to come into Greg's office to give him instructions, he always took an extra few seconds to see how Silver was doing.

As Greg was putting away the last few dishes, Silver was tottering around the kitchen floor, occasionally making a high-pitched grunting sound. Strange as this description sounds, it was the best way for Greg to describe it. After finishing the dishes, Greg got into his Corporate suit, and tie, took Silver, and his basket, and headed for work. When he stepped outside, he placed Silver's basket, and his bottles in the car, and before he left, he said a few quick goodbyes to Oscar. The drive to work went relatively smoothly, as the road crews had already cleared the snow from the previous night, and rush-hour traffic moved smoothly this morning. Forty minutes later, Greg pulled into his parking space, and shut off the car. As he walked into the building with his briefcase in one hand, and Silver's basket with Silver's bottles and Silver himself in it in the other, the first thing the Desk Secretary said was: "How's my wittle buddy Syilvewr?" Greg obligingly stopped for several seconds as Angela fussed over Silver, talking to him in baby talk. Greg tried to suppress a small laugh. "What's so funny Greg?"

"You. You sound kind of funny talking like that."

"I can't help it", replied Angela returning her attention to Silver, "I just wuv you so much! You're my wittle buddy, and you're purring!" "Anyway, I hate to cut this short, Ange, but I do

"Anyway, I hate to cut this short, Ange, but I do have to get to work. You can see him again when I leave" With that, Greg began to walk to his office.

"Bye, bye, Silver!", called Angela, "Oh, and take it easy, Greg."

Upon entering his office, Greg first put down his briefcase, and then put Silver's basket beside his chair. Silver went to sleep almost immediately, and Greg started his day's work, first reading a note that was on his desk.

"GREG: The people at Sugar Flakes are not quite satisfied with the slogan you came up with. They're not worried about how fun it is for kids to eat them, but they want something that says Sugar flakes are good for you. Work on it. - Norm."

Sugar flakes are good for you? That was a new one to Greg.

Greg thought to himself, "Hmm, let's see: Sugar Flakes - Loaded with energy for the hyperactive child in your family. Guaranteed to have him bouncing off of the wall!"

"Or," Greg looked down at Silver, "Bobby Bobcat says 'Sugar Flakes are purr-fectly nutritious.' No, too much like Tony Tiger."

"Ah, I guess I'd better get serious about this."

Greg stopped for a minute to see if Silver would drink any formula from his bottle. However, he did not seem very thirsty, and he only drank about a quarter of the contents before refusing it, and falling back asleep.

About two hours later, Greg finally came up with what he thought was a serviceable slogan: "Sugar Flakes - the breakfast cereal for kids that's fun to eat, and good for you too! Contains 16 essential nutrients to give you that extra energy for running, jumping, swimming, or just plain horsing around. Sugar flakes - Start your morning off the fun way!"

All this for a sugary kiddie cereal! But it was

just Greg's job.

At this moment, Mr. Anderson came into Greg's office. Walking over to Silver's basket, he said: "How's my little buddy, Silver? Is your mean, old Daddy, Greg treating you right? Oh, by the way, Greg, do you have that Sugar Flakes slogan finished?"

"Yes, here it is."

"What I need you to do next, is an Ad for this new restaurant that's going in across town. Hamburgers, and your usual greasy garbage. Their drawing card is that they want themselves seen as a great after-school kids' hangout. They call themselves "Bobcat Burgers", and they would like to use Silver in one of their ads. I told them that they'd have to wait until he was a little older, though. Are you interested? It'd be a little extra money for you to help you feed your animals, and all."

"I dunno, Mr. Anderson, let me think about it.

The real question is 'Would Silver mind doing it?' we might be able to do something for them in a few months. As long as he doesn't have to eat any greasy burgers. It might do him in!"

Mr. Anderson laughed. "anyway, I just need your to do the soft drink Ad, and the new soup Ad today, and that'll probably do you for the rest of the day. Here's the information on them." With that, Mr. Anderson placed two file folders on Greg's desk. Bending over Silver's basket he said: "Goodbye, Silver, be a good boy."

With that, he left.

For the remainder of the day, Greg did the other two slogans, the soft drink one first, and then the soup slogan. Finally after what seemed like an age, it was 5 p.m., and time for Greg to leave. On the way out, he decided that he would keep his promise to Angela.

"Hi, Angie, I'm just about ready to go. I just thought you'd like to see Silver for a few minutes before I left."

"Oh, I'd love to see my little friend! By the

way, the people for Sugar Flakes called me, and said that they liked the new slogan better. They want us to make their T.V., and radio spots for them using it against a background of kids playing sports, and stuff."

"It's good to know I'm rotting my brain out of my head for something, anyway!"

At this moment, Silver began to squirm, and complain in the basket.

"Oh, look at you", Greg said, "You want your bottle again now, don't you? Let's see what we can do for you." Greg set down the basket, and picked up one of Silver's bottles in one hand, and picked up Silver in the other. He then sat down in one of the plush lobby chairs, and began to feed Silver. As Silver began to drink from the bottle, Angela came over, and sat down next to Greg.

"Oh, that's so adorable, can I feed him?"

"Sure, as long as you're very careful, and don't tilt the bottle up too much, or squeeze it. He's still very small, and you could choke him if he gets too much milk in his throat."

Greg gently handed Angela Silver, who was a squirming, complaining bundle of sharp little claws. As he sucked from the bottle, he would constantly push against Angela's hands with his little claws that he had not yet learned how to retract.

"It hurts to feed you, you know that?", said Angela to Silver.

"You've got to expect that Ange, he can't control his claws yet. Just bear with it, and make sure he drinks."

After Silver drank about half of the bottle's contents, he refused the nipple, as he was now full. Angela gently handed Silver back to Greg, the hand which she had held the bottle covered with small scratches.

"I don't know how you handle it, Greg, he's worse than a child!"

Greg showed her all of the scratches on his own hands, "It's not easy, Ange, but if you love something enough, you can handle all of the

little negatives for the one big positive. I don't mind helping him eliminate, making his formula, getting up in the middle of the night, and all that. I love him a lot, and I made a commitment to raise him. I owe it to his Mother.

Besides, he makes a better friend than a lot of people do."

"Well, I like him a lot too, but I think I'll like him a bit more when he gets larger. I don't think that I could do it myself, I'd be too worried that something would go wrong, and I think I'd have a hard time going everywhere with scratches all over my hands. I'm sure Silver loves you too."

"Anyway, Ange, I need to get home to make him some more formula. What you just gave him was the last I had made for today, and he'll be hungry again in a couple of hours. Besides, he likes his formula better when it's fresh, and still warm. It's like Mother's milk then. Poor thing, he doesn't have a real Mother."

"Yes, I know about that, Greg, but it wasn't your fault. There wasn't really anything you could have done about it anyway. At least you cared enough to try, and raise Silver. And he seems to be doing very well. If he had stayed with his real mother, he might have ended up being eaten by a fox, or something."

"Anyway, I'll see you later, Ange."

"See you on Monday, Greg. Take good care of Silver."

"I will."

With that, Greg left the building, and walked to his car to begin the forty minute drive home. He was looking forward to the weekend, and being able to spend it with Silver and Oscar. Greg decided that when he got home, he would introduce Silver to Oscar, and see if they could get along. He would just have to be right there with them, and keep a hawk eye upon them to make sure that Oscar did not harm Silver in any way. Greg was beginning to feel sorry for Oscar, and it was clear to him that Oscar was beginning to resent having to spend every night

in the garage, for what seemed to him to be no particular good reason.

Greg really liked Oscar, and when he had bought his property, he had had it fenced in just so Oscar could run free anywhere on the property during the day. So, when Greg finally pulled into his driveway a while later, Oscar was already at the gate, barking, happy to see him. After Greg parked the car, he greeted Oscar, who by now had learned to keep his nose away from Silver's basket. Oscar was very happy to see him, and was licking the hand that held Greg's briefcase. When they reached the house, Oscar automatically walked towards the garage door, expecting Greg to let him in there as he had been for the last few weeks since he had found Silver.

Greg looked over at Oscar, and said: "C'mon, boy, we're going in the house!" Oscar's ears perked forward, and his eyes lit up. He excitedly trotted over to the front door, and stood there eagerly.

Greg set down his briefcase on the front step, and using the free hand, he opened the front door. Oscar bounded right in, happy to be back in the house. Greg then proceeded to take off his jacket, set down his briefcase, and then walked into the kitchen with Silver. Greg then set down Silver's basket, removed the blanket covering Silver, and proceeded to make new formula for Silver, and get Oscar's dog food ready. During this time, Oscar laid in the kitchen doorway, looking warily at Silver's basket, and Silver himself, not quite knowing what to make of all of this.

Greg set Oscar's food bowl down on the floor, and said: "C'mon, Oscar!"

Oscar warily sidled into the kitchen, and began to tentatively eat his food.

While he was eating, Greg picked up Silver, and began to bottle feed him. This time, with the fresh, warm formula. Silver sucked at the

bottle with greater gusto than before, and soon drained it. Afterwards, Greg took Silver into the bathroom, and helped him to eliminate, and afterwards, took him back into the kitchen to allow him to walk around on the floor for a while. Almost as soon as Greg put Silver on the floor, he made a small, yellow puddle. He had obviously not finished eliminating. But this accident did not bother Greg, because it meant that Silver was now beginning to be able to do it on his own.

Oscar had now finished eating, and Greg was just getting paper towels to clean up the mess, when Oscar slowly walked over to Silver, and sniffed at him. Silver arched his tiny back, and hissed at Oscar. Oscar jumped back startled, and slunk over to the stove, where he laid down, dejectedly. Greg quickly cleaned up the mess as Silver walked around his feet, playfully grabbing at Greg's ankles with his sharp little claws. Greg made himself a coffee, and sat down at the table to drink it, and watched Silver totter around the kitchen floor. After a while, Silver seemed to grow tired of playing with Greg's ankles, and he began to totter towards Oscar. Oscar's eyes widened, but he laid still, perhaps hoping that this scary little beast would change his mind. But no such luck, Silver kept walking towards Oscar, and Oscar began to tense up, in preparation to run out of the way, if necessary. Greg watched fascinated, but ready to intervene, should anything happen. Silver walked up to Oscar, and tentatively tapped Oscar's paw with his own. Oscar jerked backward in fright, but, perhaps realizing that Silver meant him no harm, but was only curious, he laid still. Silver began to sniff at Oscar's leg and Oscar, in turn tentatively began to sniff Silver. This time, Silver did not hiss, or spit, but allowed Oscar to sniff him over.

Oscar began to lick gently at Silver, the force of his tongue almost knocking Silver over. After a few minutes, Silver laid against Oscar's chest, and fell asleep. Oscar looked up at Greg, as if

**Continued on p.13, c2**

# Mark Your Calendars for Convention '93 in San Diego

What - LIOC ESCF Convention '93 When- August 11-15

Where- Regency Plaza Hotel San Diego California

Rooms are \$79. per night single/double and this includes breakfast each day! To get these rates your reservations must be made no later than July 11th and of course you must mention LIOC. Call 800-229-8048. Transportation from the airport is free via the hotel shuttle.

Jan Giacinto and Lil Smith are working on a behind-the-scenes tour of the world-renowned San Diego Zoo as well as several notable speakers.

We'll keep you posted. This will be a really great Convention.

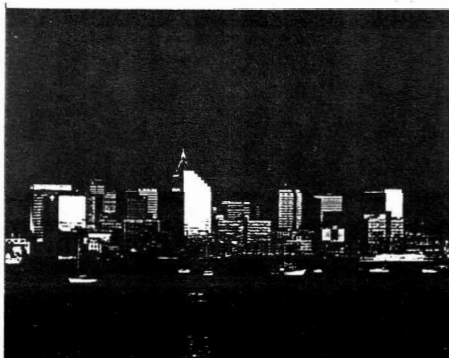
Plan now to attend.

If you can't make it but want to send a contribution for the auction, you may send it to:

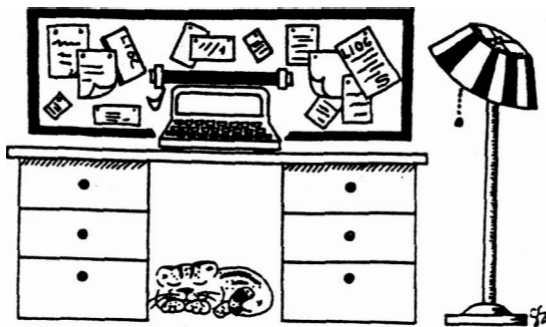
Jan Giacinto, 19400 Santa Rita, Tarzana, CA 91356

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## THE SAN DIEGO ZOO.







## FROM UNDER THE EDITOR'S DESK

### Distinctions

As most of you know LIOC's beginnings were rooted in the "pet" exotic feline; ocelots, margays, etc. These are small cats when compared to lions and tigers or even leopards and cougars, comparatively easy (and cheap) to house and feed. Although they can give you a nasty bite when improperly handled, they usually are not considered "dangerous".

With those thoughts in mind, we have through the years discouraged the use of the term "wild" - opting for "exotic" instead. And now we must acknowledge the term "endangered" as well. In the case of lions and tigers, we know they are becoming endangered in the wild, but are in fact plentiful in captivity. So another case in which a distinction must be made. The small cats, though not "dangerous" are endangered and becoming scarce not only in the wild but in captivity as well. In fact the large cats, because of their large litters are more plentiful than ever, bringing us to the point which must be made - a distinction if you will.

Being too firmly rooted in our "small cat" mentality, many of us fiercely defend our right to own these animals. In days of yesteryear, no one dreamt of keeping a tiger with the smaller cats available. Now large cats are all too easily available and unfortunately there are too many scrupulous folks out there unwilling to inform novice owners of the needs of the cat. How big

it will really get, how much it will eat and what exactly will be needed in the way of housing, veterinary care, etc., much less how much it will cost. But we still blindly defend our 'right' to own an exotic without regard to the adult size of the animal we're talking about. I would hope no one out there would honestly recommend a novice buy a tiger as a pet! Yet I know those who sell large cats to novices. Is it not time that as an organization we recognize the difference between a margay and a mountain lion?

A serval takes a nip and you might need a few stitches, but you still have a hand - but a tiger? The bobcat gets cranky when strange children visit so you scoop it up and return it to its run, but a 300 pound lion get cantankerous and .....? There are I think important distinctions to be made here.

We must think ultimately of the animal's well being. But in the case of the large cat we must additionally take into account the public's well being. We have all laughed at the saying "Big cats can be dangerous, but a little pussy never hurt anyone," but folks perhaps this really is nervous laughter - we know all too well that it's true and perhaps it makes us a little bit uneasy. Perhaps we really already know the distinctions which need to be made?

*Snirl*

PACIFIC NORTHWEST EXOTICS  
MEETING MINUTES  
NOVEMBER 22, 1992



The November meeting was hosted by Bill and Linda Hobson, and held at the Redland Grange. There was a turnout of 26 members and 2 guests.

- Jackie Vanderwall brought two Chaus/Bengal Cat kittens who were six weeks old. The female was spotted, and the male was black.
- Marv & Sandy Hammersley brought their Bobcat, Kota

The meeting was called to order by Jerry Boyle.

Jerry announced:

- That there is a 2-1/2 year old breeding pair of Cougars available for sell/adoption. If interested, call Gayle Schaecher.
- OALA representatives requested written comment regarding Oregon Fish & Wildlife's proposed "Draft Rules Private Holding of Cervids" to be mailed to commissioners prior to Dec. 18th.
- To receive information direct from Oregon Fish & Wildlife, you need to register with them prior to November 23rd.
- Contact Jerry for list of Oregon's commissioners and their addresses.

Shirley announced:

- The Washington Dept. of Wildlife has extended the moratorium another 120 days. Presently, exotic hoof stock is being addressed. Exotic cats will be addressed early in 1993.
- She feels the hoof stock ranchers will not be supportive of the cat owners, as the hoof stock is a financial investment and the cats are an emotional investment.
- Larry was responsible for several hundred letters regarding private ownership being sent to WDW.

Dave Smith advised that has received his state permit for his Bobcat, and is ready for his county inspection.

Gayle made a motion to extend Steve Belknap's membership at no charge for 1993 dues, in gratitude for his contribution in preparing monthly meeting notices. Clem second, motion passed.

Jerry has talked to people in Central and Southern Oregon that would like to be a part of PNWE, but hold separate meetings until their membership grows large enough to stand on their own. LIOC has approved this request, and Jerry asked that club members vote on this. Gayle made a motion to approve this with a stipulation that there is an LIOC member participating in each sub group. The motion was carried.

Glen commented that these groups meet on a different date from the PNWE meetings, so that members may have the options of attending these other meetings.

Gayle has the Oregon Dept of Agriculture permit applications. She stated that you don't need this permit if you have an Oregon State Wildlife permit or a USDA permit. This permit is \$20.00 every two years.

Dave Smith advised that the State of Oregon is being sued over the Liger incident, and that if the State loses this suit, no further permits will be issued.

Jerry asked Shirley about the other club, and if any of our members were going to run for office in PNWE and merge with this other club? Shirley said no, that there have been discussions regarding forming a Washington group to help fight the current issues within the state, which would have nothing to do with PNWE.

Connie announced that Sharon Roe asked her to announce that she would not be running for any office in PNWE for 1993.

Again, Sandy Hammersly is trying to get a group together to order bulk raw turkey, as she is having difficulty ordering a large enough quantity from Norbest. Jerry volunteered to help form this group and further suggested that PNWE look into renting a food locker.

Nominations for 1993 officers were held.

President	- Glen Davis
Vice President	- Gayle Schaecher
Secretary/Treasurer	- Jackie Vanderwall

Gayle asked is there were any other LIOC members present who would like to run for any of the offices. Due to no opponents, the above were elected.

Respectfully submitted,



Connie Miller, Secretary/Treasurer

# Racing Against Genetics

## Technology helps rare species outpace limits of shrinking gene pools.

Norman Myers predicted in his 1979 book *The Sinking Ark*, that of the 5 to 10 million living biological species then thought to exist, as many as 1 million would probably become extinct by the turn of the century. Thirteen years later, it is no longer a matter of if life forms will disappear - but *when*.

Scientists generally agree that we are witnessing a period of extinctions unrivaled since the dinosaurs' demise. "Our planet's wildlife is now so critically endangered," says renowned feline geneticist Stephen O'Brien of the National Cancer Institute, "that active intervention is necessary in order to save it."

Most people are aware of the global efforts being made to protect natural habitats, thwart poachers, and legislate restrictions on trade in endangered species. But behind the scenes, in a few laboratories across the country, far more subtle, more pervasive forms of "intervention" are now taking place. Less publicized are the high-tech biomedical efforts being made to assess and computerize population gene pools, genetically fingerprint individual species, establish species stud books, and collect and freeze sperm and fertilized eggs (embryos) from endangered species.

"Ultimately, sperm banking, artificial insemination, in vitro fertilization, and embryo transfers may be the only hope for many animals doomed to extinction," says Betsy Dresser, director of research at the Cincinnati Zoo's Center for Reproduction of Endangered Species (CREW). "It's now a race against the clock to protect existing gene pools."

Due to the rapid, ongoing loss of habitat and natural resources, preserving the vast biodiversity so precious to our fragile global ecosystem is a difficult challenge. It is also a controversial one. There are those who believe human needs for resources preempt any concern for species preservation. And there are those who question efforts to save endangered species if survival without habitat means only life in a zoo.

Whatever one's belief, wild animals are being squeezed into smaller and smaller patches of remnant habitat. Isolated and diminished in numbers, their ability to maintain genetic diversity is becoming seriously jeopardized. Often, such constricted populations are no longer able to reproduce to environmental factors. Worse yet, those that do survive may only be able to breed by mating with close relatives.

A diverse gene pool is the basis upon which evolution progresses through the process of natural selection. Inbreeding reduces genetic diversity with alarming results. Infertility, birth defects, increased juvenile mortality, and an inability to combat infectious disease are typical endproducts of liaisons between siblings, mother and son, or father and daughter.

The endangered Florida panther is living testimony to the tragic cost of incestuous matings. Less than 50 individuals survive in the cypress swamps of southern Florida - the only big cats remaining east of the Mississippi. So inbred is this relict cougar subspecies, that kinked tails, fur cowlicks, solo testicles, and congenital heart defects are now the norm. Sperm samples show a 95 percent abnormality rate.

"Their genetic structure is as flat as it gets," says O'Brien. "Not only has inbreeding pro-

murmurs, but it has left them vulnerable to parasites and disease through weakened immune defenses.”

And so it goes for many endangered species. The inbred lions from the Gir Forest in India show a tenfold depletion in testosterone; and captive cheetahs have an infant mortality rate higher than any zoo animal. According to O'Brien, “such loss of genetic variation is the prelude to extinction. It threatens the very survival of any species.”

To stem the global loss in biodiversity, scientists are developing new ways to monitor and preserve the gene pools of at-risk species. With an acronym that reflects the critical nature of its purpose, NOAHS Center (the National Zoological Park's Center for New Opportunities in Animal Health Sciences, based in Washington, D.C.) is a modern day ark for endangered animal genes. Here, innovative techniques based on decades of reproductive research on humans and domestic livestock are being applied to the conservation of endangered species and the maintenance of genetic diversity both in zoo and free-living populations. In April 1990, this progressive research facility succeeded in producing the first “test tube” tiger cubs following in vitro fertilization.

NOAHS Center was established in 1987 as a direct result of genetic and reproductive probing of the cheetah. Two questions puzzled the founding directors, Mitchell Bush, David Wildt, and Stephen O'Brien. Why were cheetah populations declining so rapidly in Africa? Why did cheetahs reproduce so poorly in captivity?

First, NOAHS scientist screened cheetah blood proteins and DNA. By analyzing 52 proteins in samples taken from 55 South African cheetahs, they found that many of the cheetah's problems stemmed from an appalling lack of genetic diversity. In effect, cheetahs look as genetically

similar to each other as purposely inbred lab mice.

Cheetah sperm counts are one-tenth that observed in domestic cats. The sperm itself has an extremely high rate of abnormalities, with 71 percent showing curled and bent tails and small heads. Most remarkable, a test on captive cheetahs showed a failure to reject skin grafts surgically exchanged between unrelated animals - indicating an extreme level of genetic uniformity. Even features on both side of their skulls, which are normally uniform, show a high degree of asymmetry - another characteristic indicative of long-term inbreeding.

How did the cheetah get in this predicament? O'Brien and his colleagues propose that roughly 10,000 years ago, during the Pleistocene extinction of mammals, cheetah populations experienced a major decline. Today's genetically homogeneous cheetahs are the ancestors of the few that survived. Such genetic bottlenecks occur when ecological factors such as climate, drought, flood, epidemics, predation, or loss of prey push a species close to extinction. The inbreeding that follows produces well-documented genetic consequences commonly referred to as *founder effects*.

One of the best examples is the lions living within the Ngorongoro Crater of East Africa. Since 1979, Craig Packer and Anne Pusey have painstakingly reconstructed the genetic history of the 100 lions confined within the crater. Their genes can be traced back to only 10 crater lions - 9 females and 1 male - that survived a horrific epidemic of bloodsucking flies in 1962. The current population represents offspring from these few survivors, plus 7 Serengeti males that immigrated into the crater between 1964 and 1965. Highly inbred, the Ngorongoro lions have retained only 30 percent of the genetic variability seen in the free-ranging Serengeti lions just beyond the crater rim.

Asiatic lions represent another classic bottle-

neck. Over hunting in the late 1800s left less than 20 individuals alive in the Gir Forest of western India. The 250 lions that inhabit the forest sanctuary today are the highly inbred descendants of those original survivors. Gir males show high levels of abnormal sperm production and lowered testosterone concentration. Most striking, blood protein analysis revealed that these isolated, inbred felines have less than 1 percent of the measured genetic variation found in the Serengeti lions.

Civilization has also put the squeeze on China's giant pandas - reducing wild populations to isolated pockets totaling fewer than 1,000 animals. In fact, human intrusion has reduced the genetic diversity of just about every endangered species from Brazil's golden lion tamarin, the African wild dog, and the black rhino to the great blue whale and the California condor - of which there were only 30 in 1985.

Not to be overlooked is the ongoing effect that poachers and big-game hunters have on animal genes. Genetic diversity is further depleted when they kill breeding females to capture live young, or seek out the largest antlered, alpha breeding males- the trophy animals that may have been contributing the most or best genes to the population. Aggressive eradication campaigns against wolves, coyotes and other "pests" have also caused genetic loss and population extinctions.

According to O'Brien, however, it is the loss of genetic variability responsible for parasitic defense that is one of the most serious effects of inbreeding. The genetically weakened cheetah is a prime example. Between 1982 and 1988, 60 percent of all captive cheetahs at the Wildlife Safari Park in Winston Oregon, died due to a coronavirus epidemic. In non-inbred colonies of domestic cats, that same virus has an average mortality rate of only 1 percent. Likewise, demographic constriction and subsequent inbreeding of North America's bighorn sheep

has left this species genetically vulnerable to outbreaks of lungworm infection and pneumonia. Though black-footed ferrets were deemed extinct in the mid-1970's, a relict population was discovered in 1981. Just four years later, an outbreak of canine distemper nearly wiped them out - forcing scientist to quickly capture and vaccinate the 17 remaining wild ferrets in order to save the species.

It is now understood that parasites - pathogenic viruses, protozoans, bacteria, worms, and anthropods - are equivalent to predators in determining the success or failure of natural populations. Viruses in particular show great genetic adaptability, and can evolve up to a million times faster than host defenses to infiltrate immune systems. Classic examples of the speed with which viruses can recombine and mutate are the Asian influenza virus, which returns each winter as a new, often more virulent strain, and the new epidemic HIV virus, which shows as much as a 20 percent variance between isolated virus samples. Genetic variability is not only adaptive, but crucial if an animal is to remain competitive in the evolutionary cold war waged against parasites.

Realizing the far-reaching implications of a diminished gene pool, scientists are now traveling the world to collect biological samples from healthy, wild animals. Genetic analysis of blood and tissue samples can shed light on the health, reproductive state, and genetic status of individual animals and populations, as well as whole species.

"In order to better plan and manage protected areas in the wild, develop successful breeding programs in captivity, and undertake potential translocations or reintroductions," explains William Karesh, director of the New York Zoological Society's Field Veterinary Program, "a complete genetic portrait of isolated populations is essential."

To that end, Karesh, invented a unique biopsy



dart that can be used to collect skin samples from wild animals without having to immobilize them. On contact, the dart pinches a small piece of the animal's skin and falls to the ground for retrieval.

In order to preserve an endangered species, not only must a minimum number of reproductively variable individuals be saved - 250 according to O'Brien - but they in turn must have access to each other. Efforts are now being made to create access corridors that connect protected wildlife areas. Where such access has been destroyed, scientists rely on animal translocations and artificial insemination to keep the genes flowing between isolated populations both in captivity and the wild.

And once species or subspecies have been identified as being genetically vulnerable in the wild, scientist work to develop vaccines and medical treatments needed to protect them from life-threatening disease. Veterinarians then administer on-site medications - such as rabies, and parvovirus vaccines to African wild dogs and medications to prevent respiratory illnesses and infections for wild mountain gorillas in Rwanda.

While such efforts are being made in the field, people are going to extraordinary lengths to save threatened wildlife back in the lab. Utilizing advances made in cryopreservation, the sperm of endangered species is now being frozen and stored. To prevent inbreeding crises in zoo populations, NOAH's scientist are developing methods for freezing sperm from free-living wild populations to boost the genetic diversity of captive species. As demonstrated with livestock, frozen sperm can be held for decades and still produce live offspring. "The potential of this frozen germ plasma has already been demonstrated," explains NOAH's Wildt. "In the past year we have produced living offspring from five wild felid species. Particularly significant is the recent birth of two

leopard kittens from the use of frozen, thawed sperm."

Hormone therapy is also being used on such captive exotics as rhinos to evaluate the possibility of using superovulation and embryo transfer technology. According to Cincinnati Zoo's Dresser, large numbers of embryos may be recovered from a single donor female through the use of hormone injections that cause the ovaries to produce more than the usual number of eggs. The fertilized eggs are then collected with a uterine flush and transferred into the uteruses of surrogate mothers, where they implant and are carried to term.

Just this spring, the Cincinnati research team produced the world's first kitten litters from in vitro fertilized domestic cat embryos that were first frozen, thawed, and then transferred to surrogates. The team is now working on trying to unlock the secrets of egg maturation, hoping to stimulate eggs to develop in vitro to the fertilization stage. This would make it possible to save far more eggs gathered from exotic animals, including those collected posthumously from valuable zoo animals that suddenly die.

Another milestone came in late May, when the Cincinnati Zoo put their priceless collection of frozen embryos and sperm on public display in the world's first "frozen zoo" exhibit. "If you are able to freeze embryos," explains Dresser, "you can literally keep a species from going extinct. We need to do this kind of work now while we still have the animals. Once a species becomes critically endangered, it is often too late - you no longer have the animals to work with."

Commenting on the species that will survive the current wave of extinction, photographer James Balog recently predicted that their "home ranges will be surrounded by human dwellings and fastfood franchises. Their mates will be

**Continued on p. 31**





## Book Review

### Studying Animal Behavior

**Beastly Behavior: A Watcher's Guide to How Animals Act and Why**

Janine M. Benyus

Illustrated by Juan Carlos Barberis

Addison-Wesley, \$29.95

This book should be in the book case or backpack of every nonprofessional zoophile, a amateur ethologist, armchair naturalist, creature watcher or even just found relative of young zoo fans. A long introductory essay, "How Animals Behave: A Primer," describes in precise but lively prose the primary activities common to all mammals, birds and reptiles, among them sleeping, communicating, fighting, yawning, grooming, moving, courting, copulating and parenting. Of course we advanced primates have added a few flourishes, but it is sobering to realize how adequately these few works also describe most human behavior. The great differences between, and sometimes within, most species are not in what they do but how they look. This is one of the great charms of nature, but a mystery too since the variations in diet, climate, predators, habitat or history do not quire seem to account for the extravagant extremes in size, structure and ornament of moose and mouse, flaming and wren, or even borzoi and Chihuahua.

Each of the 20 short subsequent chapters is devoted to a creature of particular appeal, menace, oddity or beauty, such as the panda, crocodile, penguin or peacock. Every section is

adorned with detailed drawings, and a chart of "Vital Stats" gives taxonomy, typical size, weight, longevity, and also habitat, a subject on which Benyus has written several guides. A paragraph or two deals with some unique aspect of that animal - like the zebra's handsome camouflage, the crane's courtship dance - as well as with the creature's role in history or myth, or the talismanic value of its horns, ears, tusks or tail. A somber theme is the rapid decline of these wild animals whose tribes have been decimated by pesticides, hunting, poaching and most inexorably, shrinking habitat.

Benyus often explains the animal's variant on basic behavior patterns: for example, after the male and the major hen laboriously hatch them "while the minor hens walk away scot-free". She also notes such colorful pastimes as neck wrestling, knuckle walking, mud wallowing, whisker stropping and feather painting. Even such variations and diversions, however, like the more obviously crucial activities, are presented as survival maneuvers or reproductive strategies - techniques for saving oneself or perpetuating one's genes. Benyus stresses this bleak sociobiology in her introduction. But then, moving from the general to the specific, she cannot entirely avoid a hint of affectionate anthropomorphism (who can - or should?) in the sections on the gently elephants and sociable zebras, the playful penguins and sea lions - or the dolphins, those clever creatures who nonetheless seem so fond of us.

Any compact compendium of basic animal

information provide a great service, but it helps to have it served up so attractively. Along with the drawings and witty paragraph headings, sidebars brighten the pages: for the lion chapter, "A Mane is a Mixed Blessing" and "What do Males do, Anyway?" Small sketches show how to read each species' body language, to tell a grin from a snarl. The author's scientific descriptions are often enlivened with colloquial comments; on the subject of breeding - a major concern for zoos and naturally for most animals, as well - she says of pandas: "Females can be picky and, because the world's captive community is so limited, finding a compatible mate can be like dating in a very small town."

"The world's captive community" of course means the network of zoos, a subject on which Benyus, like so many animal lovers, is ambivalent. After a grim history of early menageries in a preface called "What's New with Zoos?" she moves on to praise some modern zoos, especially for exhibits designed to duplicate natural habitats. Their animals are healthier and happier than the shabby, moth-eaten, autistic camels and lions one remembers from city zoos of the past. At their best, she suggests, such zoos can provide wholesome entertainment and useful education. Moreover, like most modern zoo directors, she sees the zoo as a Noah's Ark: the very existence of many endangered species may depend on breeding in captivity for later release. There have already been some successes of this kind: the vanishing but now-reestablished golden lion tamarin and Arabian oryx. Even so, in a concluding chapter called "Zoo Critique", Benyus laments that many zoos are inadequate or worse: she provide a detailed checklist for evaluating your local zoo, and a chart of how to reform or even close down a serious offender.

But at last there is hope of reconciliation among those who regard zoos as educational, those who condemn them as prisons for animals,

those who praise them as nurseries for endangered species, and many others who find zoos depressing but dread the loss of beauty and the loneliness of a world in which one might never see live wild animal larger than a raccoon. This common ground is the BioPark. Michael H. Robinson, director of the Smithsonian's National Zoological Park, who calls the conventional zoo "an anachronistic entity," has worked for years to promote this concept of "a holistic form of bio-exhibitry portraying life in all its interconnectedness."

A BioPark is a large, natural, protected environment containing most of the birds, mammals, insects, trees, flowers and minerals indigenous to a certain region, such as an African savanna - or even several of these extended "exhibits" in one vast area.

The U.S. Humane Society last summer urged the establishment of 6 to 12 large regional BioParks containing native wildlife. And in November 1992, "Amazonia," a tropical rain forest environment, opened at the National Zoo and Cleveland opened its own large BioPark.

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### **Racing Against Genetics, cont. from p. 29**

chosen by computer selection, and their sex acts will take place in petri dishes."

It's sobering thought to realize that many species of wild animals we have known in our lifetime may ultimately be reduced to precious droplets of frozen sperm stored in liquid nitrogen tanks. Conservation biologists now and in the future will be wearing less khaki and more green gowns and surgical masks as they tinker with rare animal genes kept alive long after the original donors have died.

by Barbara Sleeper, reprinted

# North America's Cats In the Wild Can They Be Saved?

by Phil Maggitti

This spring Northland Publishing in Flagstaff, Arizona, will release the second edition of *America's Great Cats* by nature writer Gary Turbak. The volume about the cougar, bobcat, lynx was printed in 1986. At the time Turbak warned, "The future of North America's great wild felines is in our hands. Politicians and wildlife managers must be told...that habitat destruction and over trapping must cease. They need to hear that you and I hold as high treasure the knowledge that somewhere out in the nearby woods prowls a great sinewy cat, the zenith of predatory evolution and the epitome of raw power perfectly controlled."

When Turbak posted this notice five years ago, only the bobcat was not imperiled by the progress and predilections of macho sapiens, a four-wheel-driven, land-devouring predator who wipes out species like there's no tomorrow. The bobcat, known formally as *Lynx rufus*, "usually will not hit 25 pounds," wrote Turbak, and it is killed at the rate of 90,000 a year in the 37 states where it is hunted and trapped. Yet the bobcat is the most plentiful large feline in North America. It has a 12-year life span, a cantankerous, four-fisted personality, a short tail, a shorter fuse, and a range that extends from the Yucatan to southern Canada, from the Atlantic to the Pacific.

"It is not plentiful in the Northeast and Midwest," wrote Turbak, "but it probably never was. Experts guess that there are between 700,000 and 1.5 million breeding, adult bobcats in the United States, with a few thousand more in Canada."

For the cougar and the lynx, however, time were not the best of times when *America's Great Cats* was first published in 1986. In California, Governor Deukmejian mysteriously vetoed an extension of a 14-year moratorium that forbade killing mountain lions for sport, and the state Fish and Game Commission began dutifully printing death warrants for 210 of these big cats that weigh as much as 160 pounds and measure up to 8 feet from the tips of their noses to the ends of their tails.

Though the mountain lion is also known as the cougar, panther, catamount, or puma, its Christian name is *Felis concolor*, cat all of one color. It was once the most widely distributed mammal in North America, excepting humans, but today it is largely confined to the Western states, Texas, British Columbia, Alberta and south Florida.

Between July 1983 and December 1990 there were 770 reported cougar sightings in the 23 states east of the Mississippi, but U.S. Fish and Wildlife remains unconvinced that these are not bobcats or exotic pets that outgrew their owners' back yards or cougars that have escaped from roadside zoos.

The only cougar known to live east of the Mississippi is the Florida Panther (*Felis concolor coryii*) which is down on its luck, its numbers, and all too often on a desolate sunset strip of highway that borders its habitat in lower Florida. Charles Bergman, author of *Wild Echoes, Encounters with the Most Endangered Animals in North America*, spent several days in the winter of 1986 with a team of biologists that was tracking the panther, trying to find a way to rekindle its flickering population.

"The official estimate, while I was in Florida... was 27 panthers," wrote Bergman, an active environmentalist and a professor of English at Pacific Lutheran University. The panther is "a deeply endangered animal, perhaps unsaveable," he said, "and is almost never seen except, ironically, in pictures as the official Florida state mammal."

While biologists were busy in the tangled swamps of Florida that winter of 1986, pelts taken from the 22-pound, stub-tailed *Lynx canadensis* were selling briskly in the fur trade. Perhaps the shyest of America's three great cats-for whom diffidence is a saving grace-the lynx is the only one that is not native born. It emigrated from Europe across the Bering land bridge 600,000 years ago.

The lynx prefers the character-building solitude of a cold, northern climate where the woods are dark and deep, the summers short. Unfortunately, when it is seen at all, it is most often spied on the backs of the would-be chic. Thanks to the fur industry's belief that the only good lynx is a dead one, this beautiful and reticent animal has been crushed unmercifully in the steel-jawed traps of fashion.

The lynx "once occupied much of the forest land in Canada and Alaska, parts of most northern states, and the Rocky Mountains as far south as Colorado," wrote Turbak. "During the first half of this century, however, overtrapping eliminated the cat from much of its U.S. range and large section of southern Canada."

Pat Tucker, a biologist at the National Wildlife Federation's Missoula, Montana, office, reports that lynx are exceedingly rare in Idaho and Montana and only somewhat less so in the state of Washington. "In those places they're num-

bered in the tens, not in the hundreds," says Tucker. Yet lynx, which are managed by individual states, are not on the federal endangered species list.

After Governor Dukmejian had declared re-opened season on the mountain lion in 1986, the California State Fish and Game Commission announced that it would permit hunters to harvest 210 cougars the following year. Persons opposed to the harvest argued that Fish and Game had failed to prepare an adequate environmental-impact report describing the

cumulative effect that hunting would have on the mountain lion population. A San Francisco judge agreed. The 1987 harvest was canceled. So, too, was the 1988 harvest ball.

The next year Richard Katz (D-Panorama City) introduced Assembly Bill 860 to the California legislature, a bill that would have outlawed permanently the sport harvesting of mountain lions. When Katz realized that AB 860 was

going to be trapped in the ways and means committee forever, "we dropped the bill and went to the initiative." The initiative was Proposition 117, the shots not heard round the animal-protection community.

Passed by a margin of 52 to 48 in a June 5, 1990, referendum, Proposition 117 declared that mountain lions shall not be harvested for sport and that \$30 million a year for the next 30 years shall be spent to provide habitat for lions and for other troubled animals in California.

Among its several glories, one shining feature of 117 is its timing, for the mountain lion is not presently an endangered species in California. In fact, the mountain lion population, which had dwindled down to a precious 600 before sport



harvesting was outlawed in 1972, may now be as high as 5,000. It is encouraging, therefore, that people began swimming before the straits had become dire.

It is also encouraging that Californians were able to wrest the mountain lion's fate from the clutches of the Fish and Game Commission, a group referred to by one animal-rights activist as "a bunch of hook-and-bullet boys." Indeed, the *Los Angeles Times* reported in 1987 that all five Fish and Game commissioners were hunters and that Harold Cribbs, the commission's executive secretary, had a deer head hanging on his wall.

The most glorious aspect of Proposition 117 is the provision it contained for purchasing land to provide habitat for the mountain lion and other animals. The implied assumption here is that whatever's good for progress is generally bad - and often fatal - for wildlife. If you're inclined to doubt this wisdom, talk to the Palos Verdes blue butterfly. Nine years ago the remaining members of this species were making a last stand in a seven-acre meadow on the Palos Verdes Peninsula just south of Los Angeles. Then the city of Rancho Palos Verdes decided to put a baseball field in the meadow, and one species' field of dreams became another's field of extinction.

Though Proposition 117 was criticized by some opponents as an attempt to solve a problem by throwing money at it, California is doing more than writing checks to insure peaceful coexistence between people and mountain lions. In 1986, after two children had been injured by mountain lions in separate incidents in a wilderness park in Orange County, a pride of scientist began studying four female mountain lions that live in a 120-square-mile range within the park and its surrounding area. By putting collars that transmit radio frequencies around the lion's necks, the scientists hope to track their movements and to learn more about their habits.

(Scientists have already learned that one of the lions has become the mother of two 50-pound kittens). This study is particularly interesting because the lions in question inhabit an area of rapid development and population growth, and similar brushes between cougars and humans have occurred in other states where habitat encroachment brings humans and cougars into closer-than-usual proximity.

In associated research the Orange County scientist learned that half the fatal mountain-lion attacks (five out of 10) reported in the United States and Canada during the last century have occurred in the past 20 years. "During that time mountain lion density and recreational use of wilderness areas have also increased," said Paul Beier a University of California wildlife biologist involved in the Orange County study. (Of 37 documented non-fatal attacks during the last 100 years, 23 occurred since 1970, Beier added).

While the mountain lion appears to have a safe niche in California's increasingly crowded ecology, the fate of the panther in Florida is less secure. In fact, the panther nearly suffered its worst fate at the hands of those purporting to save it.

Last year federal and state authorities announced a crash program to trap panthers, breed them in captivity, and release them in suitable areas. Critics said that this program would trap too many panthers too soon, and could possibly render the cats extinct in the wild. Other critics argued that this high-profile, captive-breeding program was calculated to lead the public off the scent of the panthers' greatest need: the acquisition and protection of the land they live on.



"Habitat loss is the most important problem facing panthers," says David Maehr, a wildlife biologist with the Florida Game and Fresh Water Fish Commission.

Almost half the 4 million acres the Florida panther inhabits are privately owned. Citrus and vegetable farming and urban development are a growing threat to that habitat, as are a portion of the 8,000 people who matriculate to Florida each week. Maehr compares the land-development rush and the subsequent deforestation of southern Florida to the plundering of the Amazon rain forest. The only difference in Florida, he says is that the damage is being done by "corporations and ranchers, people who have money to begin with."

No one knows if friends of the panther have the muscle to stop development in Florida, but they did recently prevent the wholesale capture and captive breeding of the 30 to 50 remaining Florida panthers. In a court decision handed down in February, state and federal authorities were prevented from removing more than a few adult panthers-and a handful of kittens under one year of age-from the wild for trial captive breeding.

What Florida needs, too, is a law similar to the one passed in Massachusetts last year, a law that protects the habitat of endangered species even when that habitat is on privately owned land. In keeping with the provisions of this law, Massachusetts state wildlife officials will begin next year to put under protection all private land considered significant habitat for endangered or threatened species. An owner of any land so designated cannot make alterations to it without a permit from the state Division of Fisheries and Wildlife, and permits will be granted only when DFW is satisfied that proposed changes will not significantly impair the ability of the habitat to support the species living there. (In the past 150 years Massachusetts has lost 72 species, including the eastern

mountain lion and the lynx.)

A still more powerful law-the law of economics-is working on behalf of the lynx. After factoring out the sales volume accounted for by furriers who switched to leather garments, The ANIMALS' AGENDA, the leading animal-rights publication in the United States, reported last November that fur sales are at their "lowest figure since 1982." As a result, only 231,073 trappers bought licenses in the United States in 1989, one-third less than the 1987 figure, and the average reported take per trapper dropped from 50 animals in 1988 to 17 the following year. Since Canada is the home of the greatest number of lynx, one of the most heartening figures reported by AGENDA is the 55 percent drop in the Canadian trapline kill between 1988 and '89. Also encouraging is the drop in the price of a lynx pelt from \$560 in 1986 to \$100 in 1990. (Could it be a coincidence that several dozen lynx were flown from Alaska and re-introduced to New York state's Adirondack Mountains last year?)

Officials at Northland Publishing are optimistic that sales of the second edition of America's Great Cats will be as healthy as the first edition's. Considering the happy advances that have occurred in the fortunes of the cougar and the lynx during the five-year interval, one hopes that Turbak's book will reappear every five years. Most fervently, one hopes that more people will hold the survival of the great cats as "high treasure," for we must, for entirely selfish reasons if for no others, be concerned for the preservation of species.

No species -including and perhaps least of all our own- is safe from extinction. Only by preserving other species can we hope to preserve any part of the human species. Even by acting from self-interest, ironically, we can save that part of ourselves which is most worth saving from extinction.

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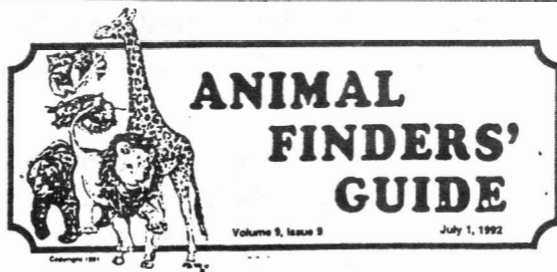
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including several well-known speakers  
and vendor's booths.  
in San Diego August 11-16.**

More details on page 22.



### The Classifieds

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