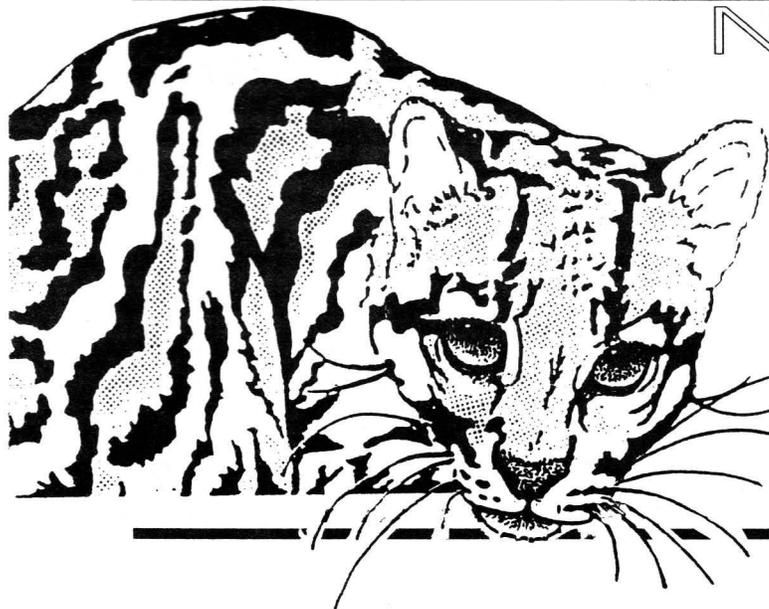


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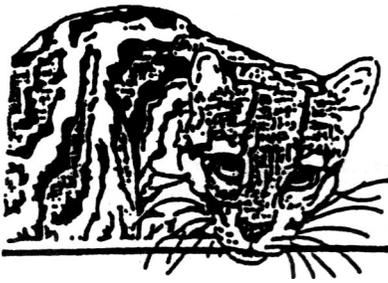


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A new baby ocelot, Tres, graces the family of our Editor, Shirley Wagner, who has re-entered the world of daily cat care. See Under the Editor's Desk on page 21 for more.



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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President's Perspective

The Directory -It's Working

It gladdens me to see that many of you have been putting the Membership Directory you received several months ago to use. Not only is it proving to be a valuable tool for contact among members, but seeing it in use encourages those of us who volunteered our time to construct it.

A few individuals have expressed their dismay at old data which it contains. Well, this version was based on data from well over a year ago and we had not planned on updating the information after we received your info sheets back. I hope we can issue a new Directory at the end of this year. But even then it will only be current at the moment that we gather the data.

A few others expressed alarm that they were not included. Remember that *you* had to return a filled out sheet to the Board if you wished to be included -something we requested several times in the Newsletter last year. Hope we get your response next time.

Our History Continues...

As the Endangered Species Act was implemented and interpreted in the early 70's, significant changes began to occur in LIOC: There were relatively small and widely scattered captive populations of the various small South American cats upon which LIOC was founded. Importation of new blood became rare. Scientific focus on endangered species began to turn up extensive new information about these animals. Permitting under ESA was generally deemed extremely burdensome if

possible at all, so few transfers occurred between the existing bloodlines.

These factors collectively resulted in a virtual stagnation of LIOC's little spotted cat population. Yet for reasons I have never fully understood, availability of large cats grew -and grew. (Larger litters is one obvious reason. Larger states in which they were held and traded without need for ESA permitting is another possibility.) Thus, the makeup of LIOC membership and the types of cats they care for shifted.

Now, we are made up of as many owners of large cats as small. The small cats we care for are rarely of an endangered species and are often hybrids. Our ranks constitute a large proportion of the breeders of all types of cats, and interestingly include many non-owner fanciers of wild cats. There are only a few lines of ocelots or margays to be found among our members these days. And most of them trace back three or more generations to a pre-ESA import.

Most of the LIOC members who, over time, became quite serious about the conservation, preservation or even the professionalism of caring for the cats, left LIOC and moved on to pastures more appropriate to those concerns. For LIOC has remained steadfastly the hobbyist's club. Or, at least that is its historical reputation. As is often the case, though, there is much more to this reputation and the contributions of our members upon closer look...

'til next time -

A handwritten signature in cursive script, likely belonging to the President of LIOC.

Call for Nominations: The Engler-Douglas Award

Nominations are sought for this year's Engler-Douglas Award. The Award was instituted last year and is provided through funds held as a result of the previous Florida Branch activities. Last year's award was presented to Pat Quillen, a previous Lotty winner, for her continuing work with rare South American cat breeding and native release programs. The cash award will be presented at Convention. Forward nominations for evaluation to Danny Treanor, 1898 Twin Lake Dr., Winter Garden, Florida 34987.

Call For Agenda Items

All interested members are requested to provide agenda items which they wish to be addressed at the Convention meetings in August. Please submit your agenda request to Shirley Wagner in writing (by mail or fax) prior to July 28. Items for the annual General Members meeting as well as for the Board meeting are sought.

Responses to CompuCat

Discussion

Though some informal discussions among board members resulted, only one response was received regarding the Discussion questions in the CompuCat article last issue. As you remember, George Stowers proposed a Code of Ethics for LIOC members and we raised questions to see what the membership thought. The only response was from the author! Shall we discuss it at Convention?

State Legislation Not Passed

During 1993 legislative sessions, as you already know, many states posed new legislation concerning ownership permitting of wild cats. It would appear that bills introduced in Arkansas, Texas, and Alabama were premature or simply couldn't compete for attention with the important funding issues at hand. None of those states passed new legislation.

In Texas, there will be two more years before another regular session. In Arkansas, no agreement on content and insufficient support for the bill remains the case. And in Alabama, the bill was not passed in regular session and Shirley Wagner is working with other representatives of wild animal ownership to bring in a desirable bill for permitting in the special session this summer.

This is only a partial update. Results from other significant state activities have not yet been provided.



Did You Know?

An animal can weigh as little as one pound above normal and be overweight. If a pet's weight is 15 percent above normal, the animal is classified as obese. A 10-pound cat is overweight at 11.5 pounds, and a 20-pound dog is obese at 23 pounds. (Source: American Animal Hospital Association)

1992 Executive Summaries -

AAZPA Felid Taxon Advisory Group

Availability of captive space for felids (both present and future) was assessed via a comprehensive survey that evaluated 95% of the AAZPA accredited institutions. Currently, there are: 89 enclosures devoted to felids <10 kg (139 adults and 16 juveniles); 64 enclosures devoted to felids 10-20 kg (272 adults and 134 juveniles); 664 enclosures devoted to felids >20 kg (1,174 adults and 180 juveniles); 32 enclosures devoted felids (species unspecified) (8 adults and 1 juvenile) for a total of 949 enclosures housing 1,593 adults and 331 juveniles.

Long-range priorities for Regional Collection Plans for North American institutions were established by the Felid TAG based upon information developed via the CAMP/GCAP processes. Intensive management plans were recommended for the following species:

Africa: cheetah, lion, black-footed cat, golden cat, serval, caracal, leopard

Asia: Siberian tiger, Sumatran tiger, Indochinese tiger, Asian lion, clouded leopard, rusty-spotted cat, Pallas' cat, sand cat, golden cat, marbled cat, fishing cat, leopard cat

Europe: none

North America: Florida panther, Texas ocelot, North American Puma, Canadian lynx, bobcat

South American: tiger cat, jaguar, Pampas cat, margay, ocelot, jaguarundi, Geoffroy's cat

Recommendations include managing generic populations to extinction.

The Felid TAG established a 1992-1993 Regional Collection Plan. This plan included a recommendation of: 1) no breeding for bobcat, lynx, generic leopard, generic lions, puma (except Florida panther), jaguar; 2) establishing nuclear populations (i.e., 25 pairs) for serval, caracal, rusty-spotted cat, black-footed cat, *tigrina*, Pallas' cat, fishing cat, ocelot, (animals of known origin); and 3) following SSP plans for clouded leopard, snow leopard, cheetah, tiger.

No other species of felids currently are recommended for breeding or maintenance in North American institutions.

Captive Breeding Specialist Group

All taxa (species and subspecies) in the family Felidae are reviewed on a taxon-by-taxon basis to assign a category of threat and to recommend captive programs as well as other intensive management action. Currently, 37 species and 264 distinct taxa are recognized in the family Felidae.

Approximately 5,500 living specimens are registered with ISIS. The number of living mammals registered with ISIS (65,000) represents about 25% of the total mammalian specimens estimated/reported to be maintained in the world's 1,100 zoos. Hence the number of felid captive "spaces" in the world's zoos is conservatively estimated to be at least 11,000.

Of the 264 taxa, 195 (74%) are assigned to one of three categories of threat according to Mace-

Zoos:

Illusion or Reality?

By Ronald S. Eldridge, BS, RVT

The next time a "Zoo type" person tells you that keeping wild animals for personal satisfaction and show is wrong, tell him this:

First, ask him, "Where did Zoos come from?" If he is smart, he will probably say the Romans, the Assyrians and the Egyptians. Now you have him where you want him. Ask, "Why did these people keep animals?" The answer will be the birth of the first Zoos. The first recorded zoo was established by Alexander the Great in Alexandria, Egypt. With few exceptions, ancient zoos were created to display their founder's wealth and power.

Entertainment was the prime function of these zoos, not the welfare of the animals. It was not until late 1700 to 1800 that the first zoo opened for the public. It was the London Zoo that first began to be viewed as a place of learning and dedication to the study of natural history.

Now the zoos of today talk about 'Zoo 2000.' This means conservation, reintroduction of species back to the wild and the most sacred of all, The Species Survival Program (SSP). It only took about four hundred years for zoos to start the SSP and other conservation programs.

LIOC ESCF, Inc. has been in the animal keeping business for about 43 years. It only took us about 40 years to realize having wild animals for pets and entertainment would not be enough to insure their survival. Our goal is to ensure survival of the feline species through conservation, preservation and propagation for future generations to see, study and yes, enjoy.

So, Mr. or Dr. Zoologist, don't be looking down on me. It only took my organization, LIOC

ESCF, less than 50 years to realize what it took you 400 years to find out. Keeping wild animals just for entertainment is history.

"We cannot teach compassionate action on behalf of animals or their habitats by imprisoning exotic animals in Zoos."¹

¹ Ref: HSUS News. Summer 1992, Grandy, John W. Ph. D.

Captive Breeding Specialist Report, cont. from p.5

Lande criteria, while 69 (26%) are considered Safe (i.e., not under threat at this time):

Critical	31 (11.5%)
Endangered	60 (23.5%)
Vulnerable	104 (39%)
Safe	69 (26%)

Of the 264 taxa, 98 (37%) are recommended for one of four levels of captive program:

90/100 I	25 (10%)
90/100 II	18 (7%)
Nucleus I	9 (3%)
Nucleus II	46 (17%)

Of the 264, 30 (11%) are recommended for population and habitat viability analyses (PHVAs).

Of the 264 taxa, 80 (30%) are recommended for more intensive *in situ* management.

Of the 264 taxa, 120 (46%) are recommended for research:

Taxonomic research	101 taxa (38%)
Surveys	120 taxa (46%)
Husbandry research	39 taxa (15%)

Endangered Species Left out in the Cold?

Bankrupt safari park faces dilemma

By Richard O'Mara
reprinted from Baltimore Sun

London - Maybe it's a measure of how deep the recession is biting in Great Britain that even the king of the beasts faces redundancy.

So does the lordly elephant, the humpy camel, the patriarchal baboon, the monogamous wolf and all the others among the 600 or so animals at the Windsor Safari Park.

Their futures are cloudier than those of Britain's miners. There's not much work around for miners these days, even less for tigers and dolphins, not to mention emus, lemurs and eland antelopes. They can't get on at the London Zoo. That place is forever hovering on the edge of bankruptcy.

All these creatures once delighted more than 1 million visitors a year to the Windsor Safari Park. This is a 144-acre spread just west of London, near the castle where the queen sometimes hold court.

The royal family has nothing to do with the park. They are simply neighbors.

Now the park is closed for the season, and it is doubtful it will reopen in the spring for its 23rd year. The Windsor Safari Park has been in receivership for about nine months. The receivers, a company called Cork Gully, have been trying to find somebody to take it over as a going concern. That is, animals and all.

They have had no luck, and may have given up: they've handed pink slips to 90 of the 145 employees. The rest were retained to take care of the animals through the winter. Not surprisingly, most of the concern over this unhappy outcome seems to be expressed for the animals rather than the humans involved.

That does not reflect a hard-heartedness or indifference to the fate of those being let go, but simply an appreciation that layoffs of people in Britain occur so frequently and in such great number it is not news any longer.

Recently, the government announced it was firing 30,000 of the country's 50,000 miners, a threat from which it subsequently retreated. Against potential disasters of that magnitude, word that 90 more people are going on the dole at a safari park doesn't even rate a one-column headline.

But the question of what to do with 34 lions, seven elephants, 45 baboon, seven tigers, 13 wolves, eight dolphins, 16 cheetahs and representatives of a variety of other species, now that's a poser. And it is the question asked most frequently of the receivers, the people who have to figure out what to do with them.

The receivers have been solicitous, earnestly insisting that great care will be taken that the menagerie is humanely distributed. A committee of animal experts is to be assembled, said Oriana Pound, a spokeswoman for Cork Gully. They will decide on any and all destinations.

Circuses were ruled out, although Pound said she isn't certain why. Animal groupings, such as they are, will be kept together. Zoos will be queried. The animals will be given away, not sold.

But 600 animals are too many to find new homes for, and the receivers do admit that for some at least this might be the end of the line. "It is no part of our strategy now or in the future to destroy animals," said Chris Barlow, another

spokesman for Cork Gully.

However, Barlow added: "It is possible that very, very old or seriously ill animals, under veterinary advice, may have to be the subject of euthanasia." However, Pound said the company has not completely given up on finding someone to buy and operate Windsor Safari Park.

The attraction reportedly hasn't been losing money but is being closed because its parent company, Themes International, has been unable to service its debts.

Barlow said the only serious negotiations are being carried out with a company not interested in animals. Lego, the Danish toy company, is looking for a place to locate another Legoland theme park.

Gone Fishin' at Brookfield Zoo

Brookfield Zoo's fishing cats, southeast Asian felines with a hunger for aquatic prey, are keeping their species and the zoo "in the swim."

When Wilma Fishing Cat gave birth to a litter of three male kittens on July 6, 1990, the event marked the first successful reproduction of this species at Brookfield Zoo. Zoo officials note that the historic birth carries an even greater significance for the zoological community as a whole: unlike many zoo-kept animals, these precious triplets- Warren, Rich and James- have few captive cousins.

At the end of 1989, zoos worldwide were home to as few as 25 fishing cats, according to the International Species Information System (ISIS). ISIS is a data collection system widely

used by U.S. zoos and a growing number of zoos throughout the world. Of the 363 institutions in 38 countries that report to ISIS, only six exhibit fishing cats. These zoos include Royal Rotterdam Zoological and Botanical Gardens, the Netherlands, and five U.S. zoos: Brookfield Zoo; San Diego Zoo; Cincinnati Zoo & Botanical Gardens; Washington Park Zoo, Portland; and San Antonio Zoological Gardens & Aquarium. All of the cats were born in captivity, reports Lucy Greer, Brookfield Zoo registrar.

Brookfield Zoo's fishing cat group includes Wilma, on loan from Royal Rotterdam Zoo; Mephi, the triplets' father, on loan from Cincinnati Zoo; and Wanda, also on loan from Rotterdam. In accordance to the loan agreement, Brookfield Zoo gains custody of the first and third kittens fathered by Mephi. Cincinnati Zoo gains custody for the second and the fourth, and so on. Even though one of the recently born fishing cats belongs to Cincinnati, the kitten may remain at Brookfield Zoo on loan, like its parents, reports Bruce Brewer, Ph.D., curator of the mammals.

The low number of cats and exhibiting institutions presents a unique problem for those interested in propagating the species. It's going to be difficult to find someone to take (manage) these kitties, because there are not a lot of cats to pair them up with," Brewer says. To improve the situation, Brewer is working to bring more female fishing cats into the United States to establish additional breeding groups. His search has, so far, involved querying Ragunan Zoological and Botanical Gardens, Jakarta, Indonesia, in northwest Java. The facility has a surplus of fishing cats.

The United States Department of the Interior does not list the fishing cat as an endangered species because its numbers in the wild remain unknown. However, the cat is threatened by progressive habitat destruction in its native lands.

The species' southeast Asian habitat includes the islands of Java and Sumatra, as well as Sri Lanka, peninsular India up to Pakistan and Kashmir, Indochina, and South China. Within these regions, the creature frequents marshy thickets, mangrove swamps, and areas of dense vegetations along streams. Unusual for a feline, this cat sports partially-webbed feet, well-adapted to aquatic activities. Fishing cats will freely enter the water and have even been spotted swimming and diving in pursuit of prey. Their diet in the wild is not restricted to fish and includes crustaceans, snails, snakes, frogs, small mammals, and birds.

Visitors to The Fragile Rain Forest, one of the two naturalistic interior exhibits of The Fragile Kingdom, may be fortunate enough to watch Wilma, Mephi, and their diminutive offspring fish for golden roach minnows near a rushing waterfall - right in the swim of things.

reprinted, contributed by Nikki Martin

Animal rights group may sue on cougar plan

A New York-based animal rights group is threatening to sue the government unless it is allowed to review plans to release cougars in the Osceola National Forest.

The cougars, who are closely related to the endangered Florida panther, are being released to determine whether the panther can be reintroduced to Florida.

Fewer than 50 panthers remain in the wild in South Florida. The last confirmed sighting of a panther in North Florida was in the early 1960s.

The cougars are in a wooded, remote area known as Pinhook Swamp, near the Osceola National Forest and not far from the Georgia border. They were expected to be released into the wild late this week or early next week.

The plan could be put on hold because the Fund for Animals has threatened to sue if the U.S. Fish and Wildlife Service does not uphold its end of an out-of-court settlement known as the Panther Policy.

"We're in full support of the reintroduction. We think it is very important to assure that eventually the Florida panther can be released,"

said D.J. Schubert, the fund's director. "But they have apparently disregarded the Panther Policy statement."

Under the Panther Policy, the U.S. Fish and Wildlife Service agreed to allow an independent panel of scientists to review the government's plans for the panther.

The Fund is especially concerned that the cougars will be released in an area of the Osceola accessible to hunters and off-road vehicles, Schubert said.

During the last experiment in 1988, seven cougars were released. The experiment fell apart after hunting season began. Poachers killed two of the cats and some of the other cats abandoned their home range.

However, the state does not plan to stop hunting in the Osceola National Forest or on adjacent lands, said Robert Brantly, executive director of the Florida Game and Fresh Water Fish Commission.

But this time, it is contended, the state-protected cougars are being given more time to establish a home range before hunting season starts.

Cougar release plan gets second life

It at first you don't succeed, try, try, again.

That's the plan of wildlife researchers, who five years after a Florida panther experiment failed, are planning to try again.

On Friday, 12 Western cougars will be taken to a wilderness area near the Osceola National Forest in preparation for their release about a week later. Once free, the cougars will act as surrogates for the endangered Florida panther.

Wildlife officials predict that if the cougars survive in the North Florida forest, the panthers ought to be able to survive there as well and could one day be released. The only wild panthers in the state now live in an isolated area in South Florida.

"If we can do this successfully, we'll have doubled the population in the wild, and numbers are the most important thing," said Tom Logan, head of wildlife research for the Florida Game and Fresh Water Fish Commission.

In 1988, seven cougars were released. Four died within 10 months, and wildlife experts blamed the problems on human interference. This time, they are hoping to gain more cooperation from people.

One wildlife expert said the program's success will boil down to whether humans will leave the cats alone. The key "is whether people will tolerate them," said John Lukas, director of the private White Oak Conservation Center, near Yulee.

Three of the 12 cougars are coming from White Oak, and the others are wild cougars that were captured in Texas.

Logan said he's optimistic - "We think this is going to work."

He added: "As you develop your techniques

and identify your problems, you get closer to success.

The second experiment, which is being paid for by the state and federal government begins Friday when the cougars will be placed in pens in Pinhook Swamp in eastern Columbia County.

They'll remain there for a week or so getting used to their surroundings and then be set free, said Chris Belden, the project leader for the state Game and Fresh Water Fish Commission. The cats will be fitted with radio-tracking collars that will enable biologists to monitor the animals in the wild.

The Florida panther, the state animal, once roamed North Florida's woods, but the last confirmed sighting in the area was in the early 1960's. The number of panthers has declined through the years because of the loss of habitat. Biologists estimate there are between 30 and 50 panthers left in the wild.

The Western cougar is a close relative of the Florida panther, but the panther can be distinguished from its Western counterpart by white-flecked shoulders and a cowlick along its back. The last three bones of the panther's tail are bent, forming a crook at the end.

Unlike the panther, the cougar is not endangered.

During the first cougar experiment in 1988, two of the seven cougars were killed by poachers. The third died of unknown causes, and the fourth had to be killed after it was injured while being captured by wildlife officials.

Officials captured the cat because it had killed livestock at a farm near Whitehouse and they thought the animal was going to return to the farm.

A fifth cat took to hunting exotic deer at a private hunting preserve near Lake City and was removed from the wild. A sixth cat wandered into a Westside Jacksonville neighborhood, where it was found catnapping in a tree. It was captured and re-released in the national forest. However, that cat and a seventh cat were later rounded up after officials decided to cancel the experiment.

Although the biologists canceled the first try, they said they learned a lot and are planning to do some things differently this time.

Younger cougars will be used in this experiment because they tend to set up home territories quicker than adults, who wander around for a long time before setting up home base, said Belden, the project leader.

The state also is meeting with hunting clubs to let hunters know they're not competing with the cougars for the same deer - hunters want the trophy deer, where cougars will take any deer, including the sick and the slow. Therefore, the

reintroduction program is not a threat to hunters' stock, said Logan of the Florida Game and Fresh Water Fish Commission.

The plan is for the cougars to remain in the wild for three years. A determination then would be made about whether to release the panthers.

Wildlife officials also are working on other experiments to help the Florida panther population, including a captive breeding program. Panthers are selectively being taken from the wild and placed in three facilities in Florida, including two in Northeast Florida.

The Jacksonville zoo has two panther cats, and the White Oak Conservation Center has eight panthers. Officials hope to breed the cats and increase the population.

Researchers also have experimented with artificial insemination and in vitro fertilization. Thus far, they have been successful at producing a baby cougar through insemination, but not a Florida panther.

PIJAC goes online with CompuServe

Members of the Pet Industry Joint Advisory Council (PIJAC) have another way to find out the latest information, news and events affecting their businesses - by plugging into CompuServe, the world's largest computer information network.

"This is an excellent way for our members to instantly receive the kind of information they need to stay on top of what's happening in the pet industry," said Marshall Meyers, PIJAC executive vice president.

When members connect with CompuServe and select the Pets/Animals Forum, they can access

information libraries and electronically communicate with other members. In the forum, a private section has been set aside for PIJAC members to communicate with PIJAC Washington headquarters and to access support files.

To subscribe and connect to CompuServe, PIJAC members need a computer, modem and simple communications software. For a free introductory membership with \$15 usage credit, call CompuServe at (800)524-3388 and ask for representative 177. For details from PIJAC, contact Barbara Bell or Meyers at (202)452-1525.

PACIFIC NORTHWEST EXOTICS
FEBRUARY MEETING MINUTES



Linda Hobson hosted the meeting held at the Redland Grange. After the introductions, Jerry Boyle welcomed the 19 members and 3 guest.

Dave Smith reported after many months and over \$3000. he has finally gotten his Exotic Animal Permit for Mult. County.

Jerry talked about what he had tried to do during his 3 years as President. Keeping on top of the changing laws, trying to keep peace. He explained to everyone on the misunderstanding between a couple of members, a non-member and a Serval. It has really been a busy 3 years,

The meeting was then turned over to Glen Davis, President for 1993. After thanking Jerry and Connie Miller for a job well done, he presented letters of resignation from Sharon Roe and The Torlands. They were left out for the members to read if they so wished. Glen then read a letter from Lynn Nobbs thanking our Club for helping her with her Serval Tasha with her bonedisease problem. She wanted to let us know that Tasha bone were back to 90% of normal. She also wanted an application to join our group.

Jerry reported on the goings on at Fish & Wildlife meetings. It may come down to us having to prove through an expensive blood test, our cougars and bobcats are not hybrid, as if they are, they could be destroyed. He has been attending and testifying at the meetings. Also attending all the OALA meetings. He advised all members to get on F.& W. mailing list and to attend the meetings, as an United Force. Steve Belknap believes that in 6 months, they will try to ban ownership of cougars.

Larry Campbell, State Rep. is putting together a bill to introduce, all captive born wildlife be under the guidelines of Oregon Dept. of Agriculture and the wild born under F. & W.

Gayle speculates since there are so many subspecies there are probably no pure blood and all could be destroyed if this rule passes.

Dave wonders about raising funds to help fight these rules

Gayle reported she talked to Jan G. from Cal. that she had just lost a 8 month kitten from the Clump type kitty litter. Connie has read that the clump litter gets and stays on kitten hinhquarters and stops them from being able to urinate.

The membership decided to renew L.I.O.C. membership to 3 of our Vets.

Dave reported on using PRO-SPOT for fleas control on his bobcat. Since there are pro & cons, Gayle will check it out with another Vet.

Glen reported on using Sargents ear mite medicine on one of his Chau hybrid. He feels the cat had an reaction since its 3rd eye lid came up. It took 2 to3 weeks to come up and longer to go back down.

The only 4 legged member there was Gayles Bambi the Chau, who birthday was that day. It was her first and was the perfect little feline member letting everyone give her a birthday pat on the head.

The rest of the days was spent sharing good food and cat storys.



NORTHWEST EXOTIC FELINE SOCIETY

MEETING MINUTES

Date: February 21, 1993

Location: Marshall Center, Vancouver, WA

Our first meeting was kicked off with an attendance of 65 persons, and eight different species of exotic cats, i.e., Leopard Cats, Geoffroys, Bobcats, Caracals, Safaris, Cougar, Bengal Hybrids, and Canadian Lynx.

The purpose of this meeting was to introduce new membership and guests to the different types of exotic felines. Six local artists were in attendance, who were interested in the felines for their future subjects.

One such gentlemen was Peter Slaney, who is preparing a 1994 calendar which will feature felines among his subjects. Mr. Slaney graciously donated a stack of 1993 calendars which were distributed to the membership. It featured Oregon scenes, and was printed on high quality paper equal to Cats of the World by Winston Safari.

Ethel welcomed and introduced two 1993/1994 LIOC ESCF board members:

Barbara Wilton - Director Member Services
Sharon Roe - Director Legal Affairs

Our guest speaker was Ken Hatfield, a past President of LIOC, who presented a talk on Hyperparathyroidism. He answered many questions about the different types of calcium and the ratio of calcium to phosphorous found in different diets.

Ethel distributed pages from a presentation paper by Steve Gardner DVM, entitled "Exotic Felid Medicine Common Nutritional Diseases and Other Recommendations. The subject was information on vitamins, calcium ratio, nutritional composition of feed, feeding techniques, prepared foods, and metabolic bone disease.

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The following topics were discussed:

1. Shirley Malar read an article from local newspaper about plans to kill surplus deer at Northwest Trek, a wildlife game park. Due to recent law/regulation changes, the state will not allow Northwest Trek to release to the wild nor transfer ownership of these deer. We as a group are saddened by this decision.
2. Larry Torland read an article regarding Wildlife Care (Costly in Tough Winter). This subject covered the increased cost of feeding 6,700 elk on a daily basis, which brought up comments from the group of the massive starving of the deer in Washington. It was suggested that these animals could have been harvested by state agencies and used to feed the poor instead of allowing them to lay and rot in the fields.
3. Barbara Wilton contributed information entitled "Scientist Track Oregon Cougars." This research reveals the lifestyle of 43 Mountain Lions.
4. Ken Hatfield discussed the pros and cons of declawing and defanging exotic felines.
5. Phyllis Bobst read an article "Before you Buy a Boa or a Big Cat," by Dr. Lewis Berman, covering laws, fragility, health care, nutrition, sanitation, and habitation.
6. Corrine Carey read an article "King County Orders Limit on Exotic-Pet Ownership, Seattle, WA area.
7. Sharon Roe advised that she has available to interested persons, copies of the Oregon and Washington state laws/regulations.

New this year is our agenda item "Shared Information."

**Darryl Scheel's presented his experiences on being a new exotic feline owner. He talked about the stress he felt in wanting to do the best for his animal. He pointed out that these exotics require special care and attention, and also the importance of networking with other exotic feline owners to draw on their knowledge and experiences.

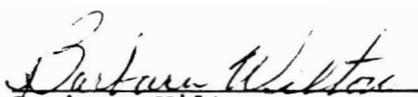
**Shirley Malar shared her experience on the dangers of toys for exotics. She alerted members to watch for animals eating toys sewn together with nylon thread, and the possibility of bowel strangulation by ingesting rubber materials.

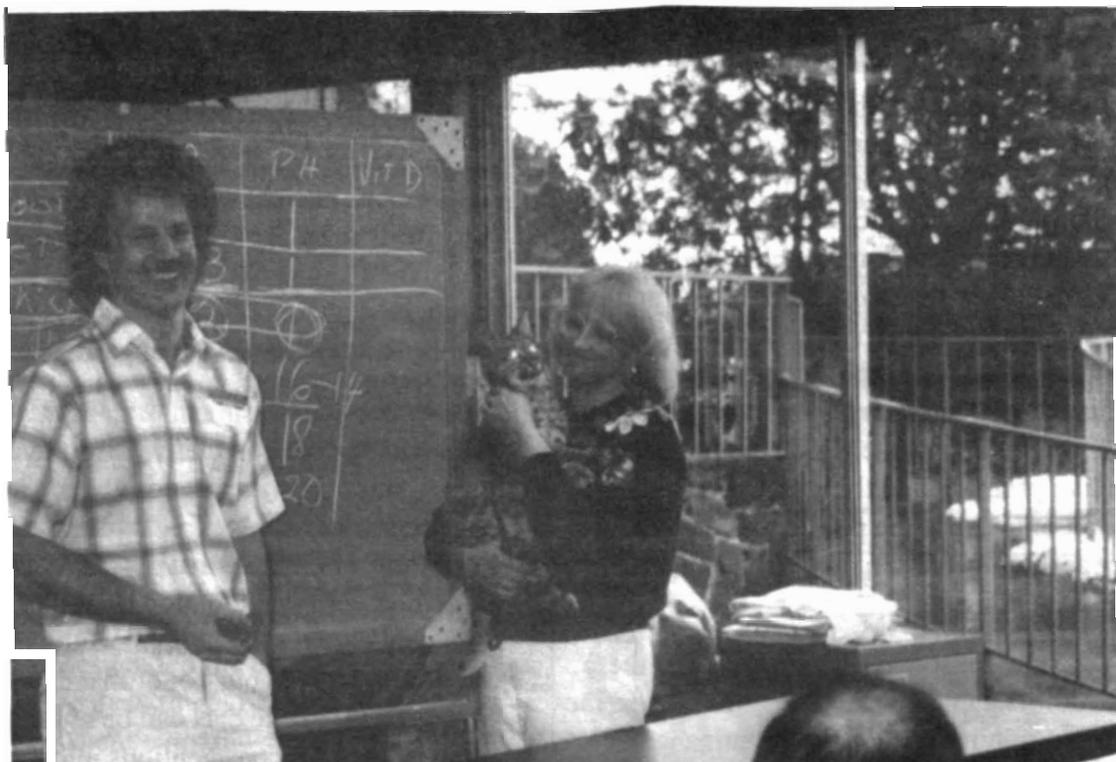
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**Ethel Hauser made members aware of Bait Block and Rat Poisoning. Treatment - Hydrogen Peroxide, 2 Tblsp to induce vomiting. Take to vet immediately for shots to control internal bleeding. Also advised not to use Shell No Pest strips.

**Ethel further advised of a sad circumstance of a Geoffroy cats death when this feline came in contact with a type of kitty litter which forms hard cement like clumps when wet. The cat cleaned his feet, ingesting this material which solidified internally.

The balance of the meeting was show and tell of each type of feline by its owner, picture taking, door prizes, and potluck.


Barbara Wilton
Secretary/Treasurer



Exotic Cats As Pets - A Member's Opinion

By George Stowers

I have noticed in recent issues of our newsletter, several individuals have suggested that photographs of exotic cats which are not in cages, are interacting directly with their owners, or in domestic settings should be avoided as they present the 'wrong impression', or are 'unprofessional'. Similar objections have been stated regarding the use of the word 'pet' when discussing exotic cats. Taken at face value these statements seem to indicate that we should keep our cats locked in their cages and avoid all unnecessary contact, or at least attempt to convince the public that such is the case. I cannot agree with either interpretation.

Openness and honesty are vital if we are to maintain and/or improve our credibility and level of respect with the public. I'm sure it is clear to all of us that it is not unusual for cats kept by members, particularly the small to medium size species, to spend a considerable amount of time out of their cages in close contact with their owners. That such owners wish to provide their cats with the greatest amount of freedom practical, consistent with applicable regulations and public safety, and can form close psychological bonds of mutual trust and respect with their cats, does not sound to me like a 'wrong impression' to give the public. To call animals living in such conditions, particularly those which are not part of a breeding program, anything but pets is absurd and can only cause the public to wonder what other aspects of private ownership we are misrepresenting.

I'm sure that most of us understand that there are conditions under which continuous confinement and minimal contact with humans is necessary. Zoos and conservation programs aimed at the release of captive bred animals to the wild are two obvious examples. But it

would be a mistake to assume that as acceptable in all captive situations.

During the last year I have discussed the pros and cons of private ownership of exotic cats with several hundred individuals on a computer network called PRODIGY. As a result of these discussions I can assure you that the picture of a cat confined to a cage for its entire life, with little or no direct contact with its owner is definitely not an image we want to project if we wish to retain the privilege of private ownership of exotic cats.

As for pursuit of a professional image, I understand the attraction of the label 'professional.' However, in the context of private ownership it seems to be the wrong focus. To be sure, we do have members who have dedicated their lives to the study and husbandry of exotic cats. But I believe most of us are at best enthusiastic amateurs who pursue our love of exotic cats in the time left over from our true profession, be it doctor, homemaker, farmer, or engineer. I believe our interest would be far better served by efforts to be recognized for what most of us truly are: responsible owners who are deeply concerned about the welfare of our animals, public safety, species endangerment, and regulatory compliance.

There is no question that we must avoid creating an erroneous impression that ownership of an exotic cat as a 'pet' is appropriate for everyone who thinks they might want one regardless of their situation or ability to adequately care for the animal. But we should not be afraid to voice our belief that captive bred, hand raised, exotic cats can be appropriate companions for conscientious individuals who are willing and able to make the significant commitment of the time, effort, and resources that responsible ownership demands.

Test could aid survival of Florida Panther

If the Florida panther is to survive, it's important that Northeast Florida and Southeast Georgia residents lend their support to an important experiment getting ready to unfold in this area.

Wildlife officials are planning to release 10 Western cougars into an area near the Osceola National Forest to see whether they can survive. The cats are to act as surrogates for the Florida panther, one of the world's most endangered animals.

Biologists estimate there are 30 to 50 of the tawny panthers left in South Florida. The animals once roamed Florida, Georgia, Alabama, Mississippi, Louisiana, Arkansas and South Carolina.

It's important that the cougars do well in the wild. If they do, Florida panthers could one day be released. A small number of Florida panther kittens are captured each year and raised in captivity, including two at the Jacksonville zoo. Those captive-bred cats could be released into the national forest.

But it's up to us. Florida Game and Fresh Water Fish Commission officials say they need our help and cooperation.

'We're attempting to maintain a wilderness animal in an urban state,' said Robert Brantly, director of the state's game and fish commission. 'This is something that if it is to be successful, it's going to need support.'

Larry Martin, director of the commission's Lake City office, called the experiment 'a last ditch effort we need to get behind. If there's no success here, there's not much chance for the Florida panther.'

This is the second time wildlife officials have

used cougars as surrogates for the panther in North Florida. In 1988, seven cougars were released. Two were shot one died of unexplained causes and two wandered into populated areas. The experiment had to end early.

A game and fish commission study conducted after the 1988 experiment concluded that 'human compatibility limits successful panther reintroduction.'

The study found that the problems developed when hunting season started. 'Coincident with human hunting activity, our study animals were either killed or sufficiently disturbed to leave their established home ranges,' the study said.

The state does not plan to stop hunting in the Osceola National Forest or on adjacent lands next fall, Brantly said. However, if problems develop, there could be some minor restrictions, such as a shorter hunting season.

We urge the commission to maintain a vigil during the hunting season to make sure the cougar experiment is not disrupted. In addition, the commission should establish a public education program to help residents understand the importance of the experiment.

It would be a shame if Florida's magnificent state animal were to become no more than a symbol.



Convention 1993 in San Diego:

Schedule and Speakers Announced

Conventions in LIOC are getting better and better.

Are you prepared to join us August 11 through 15 in beautiful, sultry San Diego as we

- go through our annual get-together of LIOC members and board
- have a chance to visit with feline-fancying friends, old and new
- hear for the first time from animal product exhibitors
- listen to at least four renowned speakers: Dr. Murray Fowler's and Jeanne Maynard's bios may be found in this issue. Dr. J. Peddie and Sue Goodrich will also be featured speakers.

Convention registration begins on Wednesday at 1pm in the Hospitality Suite.

General Membership Meeting is at 9 am on Thursday.

At 1pm speakers, presentors, and exhibitor presentations begin.

Thursday evening will bring you to a pool-side party with other LIOC Convention goers.

Presentations are scheduled throughout Friday morning and Saturday.

Friday afternoon is on your own (a visit to one of the famous animals parks, maybe?).

Saturday evening, the Annual Awards Banquet tops the Convention, while Sunday morning's Farewell Breakfast completes your official Convention 1993 experience.

Are you Ready???

Forward convention fees of \$120 to Jan Giacinto, LIOC ESCF Convention Coordinator, 19400 Santa Rita St., Tarzana, California 91356. Donations of items for our famous, raucous Auction on Saturday evening may also be sent to Jan for those of you who wish to make a contribution but cannot attend. (Poor Souls!)



FROM UNDER THE EDITOR'S DESK

This column is personal - to let you know what's going on in the Wagner household. After too many years without an exotic, we find ourselves with a new ocelot kitten through the generosity of Jean Hatfield. Katie Knight-Monteiro was kind enough to take time from her busy schedule to accompany me on a marathon, turnaround drive to Ft. Lauderdale and back.

The old timers out there will remember that for many years I was custodian of an aging population of oncillas, the last of which died at an advance age some 5-6 years ago. Prior to that, while breeding oncillas and margays, our babies were leaving us for their new homes at the stage which this little girl arrived. It sure is a change of lifestyles - bottles, weaning and potty-training. Something which after all these years strikes a vaguely familiar cord, yet is totally new. The "new cat jitters" still haven't lessened - one would think that after raising 15 or more kittens, we'd be old hands - NOT! Each stool is

a still a looked-forward to event to ensure her diet is right. Each new development is wondered at. The house takes on a new dimension - what will she find next that might imperil her?

At 7 weeks, she's trying to decide whether she's too big for the bottle - so she plays at it, not taking as much as she did a week ago, but is eating ground turkey with supplements of calcium and vitamins - is she getting enough - too little? You can't help but wonder. Toys are bought and discarded in favor of the everyday - paper-roll from the paper towels - is favored over a latex squeaky. It's a new and wondrous world - much different from 1968 when my first ocelot arrived from Ecuador.

Then, captive breeding was seen by "professionals" as an impossible task, which evolved to the National zoo declaring ocelots were "semi-domestic" and too common to be displayed. This little girl, now called Tres - as in 3 - my third ocelot (not counting the rescues which passed through the house over the years) is 4th generation domestic-born. Although being severely hampered by the ESA and other policies of our government, state, local and federal, over the years, we have prevailed, however feebly, on our efforts. Now a new "Plan" is being touted which totally discounts all "generic" animals whether endangered or not. Generic my little girl may be - but a creation of God ?



Shirley

Feeding and Spatial Ecology of *Felis Geoffroyi* in Southern Patagonia

Warren E. Johnson and William L. Franklin

Patagonia Wildlife Research Center, Torres del Paine National Park, Chile
Department of Animal Ecology, Iowa State University, Ames, IA 50011

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Geoffroy's cat (*Felis geoffroyi*) is distributed from southern Bolivia and the Parana Basin of southern Brazil to the southern tip of Patagonia in Chile and Argentina (Cabrera, 1957; Ximenez, 1975). In 1980, this spotted cat became the most commonly traded felid species in the world (MacMahan, 1986) with more than 450,000 skins exported from 1976 to 1980 from Argentina alone (Fujita and Calvo, 1982).

Despite its economic importance, almost nothing is known about the biology and ecology of the species, especially in its native South America habitat. In Chile, where Geoffroy's cat is classified as endangered, research on this species is considered to be a priority (Glade, 1988). The only published field study was the report of the home range of one subadult female in Paraguay based on 12 radiotelemetry relocation (Berrie, 1978).

Study Goals The goal of our study was to obtain basic ecological information on Geoffroy's cat in the southern portion of its distribution. Specific objectives were to describe home-range sizes and distribution patterns, habitat use, activity patterns, and food habits of Geoffroy's cat.

The study was conducted from 1986 through 1989 in the eastern part of Torres del Paine National Park (51°3'S, 72°55'W), an International Man and Biosphere Reserve located in

the eastern foothills of the Andean mountain range in southern Chile.

Park Diversity The park encompasses 2,400 km² and provides almost undisturbed habitat for wildlife. The park has a high heterogeneity of plant associations and habitat from glacier-covered mountains to dense *Nothofagus* deciduous forest and grassland. Approximately 70% consists of a steppe biome, or pre-Andean, dry-shrub association, and the remainder is a mosaic of lakes forests, and arid-mountain alpine zones.

The steppe is characteristic of the pampa of southern South America, found in Chile and Argentina at elevations <500 m (Pisano, 1973, 1974). The locally dominant species of this biome (or association) is mata barrosa (*Mulinum spinosum*), a spiny, dome-shaped shrub, common in thin, rocky upland, and rapidly draining soils and mata negra (*Verbena tridens*), a 1- to 1.5-m shrub covering large areas.

Other common species are senecio (*Senecio patagonicus*), calafate (*Berberis buxifolia*), and paramela (*Adesmia boronoides*). The woodland areas are dominated by two medium-sized species of trees, nirre (*Nothofagus antarctica*) and lenga (*N. pumilio*). The dominant grass species in the study area are

Festuca gracillina, *Anarthrophyllum patagonicum*, and *F. palliscens*, in order of decreasing cover (Ortega and Franklin, 1988; Pisano, 1973, 1974; Texera, 1973).

Prey Species The park has a high diversity of mammalian species (Johnson et al., 1990). Potential mammalian prey species included the introduced European hare (*Lepus capensis*) and several cricetine rodents such as *Auliscomys micropus*, *Oryzomys longicaudatus*, *Phyllotis darwini*, *Reithrodon physodes*, and several species of *Akodon*.

Numerous avian species also were potential prey items for Geoffroy's cat, such as the upland goose (*Chloephaga picta*), austral parakeet (*Enciognathus ferrugineus*), and eared dove (*Zenaida auriculata*).

The puma (*Felis concolor*), culpeo fox (*Dusicyon culpaeus*), chilla fox (*D. griseus*), Patagonia hog-nosed skunk (*Conepatus humboldtii*), Patagonia weasel (*Lyncodon patagonicus*), and several raptors, including the great-horned owl (*Bubo Virginianus*) and black-chested buzzard-eagle (*Geranoaetus melanoleucus*), were potential competitors.

There are two general climatic periods, a relative cold, dry typically windless season from May through September (July mean temperature = 0.2 °C) and a relative warm, windy, rainy season from October through April (January mean temperature = 12.6°C). Mean annual precipitation is 550 mm, with 60% falling from January to May (Pisano, 1974). Adjacent mountains and ice fields create local weather patterns as reflected by a large variability in precipitation (Pisano, 1974).

Capture Methods Geoffroy's cats were captured either in padded leg-hold traps (Victor no. 1 1/2 soft-catch coil spring) or in trees by use of trained hunting dogs and immobilized with ketamine hydrochloride (Ramsden et al.,

1976) administered intramuscularly by TELINJECT blowgun (approximate dosage: 15-40 mg/kg body weight). Sex, age, weight, and measurements were recorded for each cat. Individuals were tagged in both ears with numbered plastic ear tags and fitted with a motion-sensitive radiocollar (164MHz; Advanced Telemetry Systems).

Daytime locations were obtained randomly two to three times a week by use of a Yagi three-element antenna and were recorded on aerial photos. Several nighttime relocations also were obtained, but the rough terrain and our inability to approach animals without disturbing their activity made this sampling impractical. Individuals usually were located within 50 m to determine habitat characteristics.

Habitat was classified as: trees >3 m tall, trees <3 m tall, trees mixed with shrubs, shrubs, or cliffs and rocky slopes. Density of each habitat was categorized based on the percent of canopy cover as high (75-100%), medium (26-74%), or low (0-25%).

Tracking Activity Diel cycles in activity patterns were assessed by monitoring all radiocollared cats from prominent hills by using either the Yagi antenna or an omnidirectional whip antenna mounted 3 m above the ground on a vehicle. Activity patterns were determined in relation to changing day lengths from August through October (spring), November through January (summer), February through April (autumn), and May through July (winter).

Percent activity was calculated for each of the 24 1-hour periods. Activity was sampled randomly during 4- to 12-hour observation periods, with no more than one sample per hour for each individual.

Home ranges were determined by use of the minimum-convex polygon technique (Mohr, 1947). Because these areas were calculated

primarily with daytime locations (thus, are likely to be low estimates) and because assumptions necessary to use home-range models are difficult to meet, these values are most useful only as broad comparison between individuals or studies.

Nighttime locations, however, were in the same areas as the daytime locations, and monitoring of nighttime activity patterns from prominent hills suggested that Geoffroy's cat primarily used home ranges described on the basis of daytime relocations.

Food habits were determined from analysis of feces collected from March 1988 through February 1989.

Estimated age, location, and date were recorded for each fecal sample; time since deposition was estimated by comparison with feces of known age.

We were confident that collected feces were from Geoffroy's cats as the only potential misidentifications

were the noticeably more twisted feces from cupleo and chilla foxes and the much larger feces of pumas.

Feces were air-dried and the major components separated (Ackerman et al., 1984). Hard parts (bones, teeth, nails, hair, and feathers) were compared directly with reference specimens for identification to species level for mammals and family level for birds. Results are presented as percent occurrence (number of times a prey item is found as percentage of the total number of prey items found). Analysis of food habits

was divided into four ecological seasons, spring (September-November), summer (December-February), autumn (March-May), and winter (June-August).

Adults Measured Nine Geoffroy's cats, two juvenile females, two adult females, and five adult males, were captured and released. Adult males outweighed adult females ($X=4.8$ and 4.2 kg) and had longer bodies ($X=691$ and 578 mm), tails (347 and 312 mm), feet (132 and 130 mm), and ears (55 and 49 mm), but the differences were not significant.

Feces of Geoffroy's cat were collected from 17 locations. Of 325 feces, 7% were found at

middens at the base of trees or under large fallen trees, and the other 93% were found in arboreal middens in the crooks of trees. These arboreal middens generally were located in old *Nothofagus* trees 3.5 m above the ground and where the main trunk split into several smaller

branches forming a natural bowl or platform.

Defecation sites, particularly the arboreal middens, often were reused. Two to 42 feces were found originally at all locations. Feces were found several times after the initial removal from three arboreal middens.

Mammalian species composed 93% of all items in the cats' diet (Table 1). The European hare was the most common item, accounting for 57% of the prey species, followed by rodents (29%) and birds (7%). Percent occurrence of



prey items varied for each season. Remains of European hares in the feces decreased in occurrence from 79% in spring to 41% in winter, and rodents increased from 18 to 50% during the same time.

High Density Cover Geoffroy's cats were found predominantly in cover of high density (77% of 456 telemetry relocations), especially in areas with high densities of trees or bushes and trees combined (67% of radio locations). Areas with high densities of bushes and with cliffs and rocks formed habitat at which 9 and 1% of the radio locations, respectively, were recorded. Geoffroy's cats were in medium cover 22% and low cover 1% of the radio locations. Daytime resting spots, either in high-density ground vegetation or in tree cavities occasionally were reused, primarily by females with young.

Geoffroy's cats primarily were nocturnal, with two activity peaks each night. Activity patterns varied from summer to winter. During winter, the cats commenced activity earlier and reduced their overall activity levels (Fig. 1).

Ranges Studied Home ranges of adult females tended to be smaller than those of adult males (Table 2), and several females had overlapping home ranges compared with the males, which exhibited no overlap in home ranges. Two of the five males were documented to have dispersed >25km from home range each had maintained at least 3 months and 5 months, respectively. The fate of the other three mates was unknown.

In comparison, one adult female maintained her general home range for 3 years, until the end of the study. A second female, captured as a juvenile, also remained in the same area for 2 years.

Aspects of the ecology and social structure of Geoffroy's cat in southern Patagonia are similar

to that of other species of small cats. As with other felids, vertebrate prey composed 100% of the diet. Seasonal changes in diet probably reflect availability of prey species. The decrease of European hare in the diet, accompanied by the increase of rodents, is indicative of a shift in predation from one prey species to the other. Further study is needed to determine the extent and cause of this relationship.

With few exceptions, felids are solitary species (Gittleman, 1989, Sandell, 1989). Complete verification of solitary social habits for Geoffroy's cat from our study was impossible, but our observation indicate that they generally were solitary.

Of 20 visual observations, Geoffroy's cats were observed with conspecifics on only five occasions, in each instance a female with kittens. Two females were observed on different occasions with kittens, one in April with a 1-2-month-old kitten, and the other in March with a 3-4-month-old kitten.

Activity patterns of felids vary from species to species (Gittleman, 1989). Geoffroy's cat primarily was nocturnal, with activity peaks similar to those found in the ocelot (*Felis pardalis* - Konecny, 1989; Sunquist et al., 1989). Winter-activity patterns of Geoffroy's cats were similar to those of the sympatric Patagonian hog-nosed skunk, with major activity commencing earlier and total activity decreasing slightly (Fuller et al., 1987; Johnson et al., 1988).

Tree Shelters Old-growth *Northofagus* trees are the only native species with diameter at breast height > 25 cm and that attain heights > 10m: as they age, they die and fall over, providing shelter for Geoffroy's cats.

Geoffroy's cats made extensive use of roosts, hollows, and cavities in these trees for their arboreal middens and daytime resting spots.

Twice cats were seen carrying a European hare carcass into a tree.

The predominant use of areas of dense vegetations by Geoffroy's cats probably relates to the influence of prey availability and the need for protective cover. The major prey items, the European hare and small rodents, occur in greatest density in habitat of bushes mixed with trees (Iriarte et al., 1990), and hunting success may increase in areas with sufficient cover.

Geoffroy Predators Dense vegetation also may provide security the cat from potential predation. We documented the harassment and probable killing of a Geoffroy's cat by a culpeo fox. Pumas and domesticated dogs also are potential predators. Dispersal over extensive open grasslands is therefore likely to be limited. A 30-m-wide, fast flowing river through the study area did not seem to restrict movements, however, because one female crossed it at least 20 times, and two males crossed it when dispersing.

Female Geoffroy's cats had nonexclusive home ranges, consistent with the hypothesis that ranges of females of solitary carnivores overlap when resources vary temporally and spatially (Sandell, 1989). Male Geoffroy's cats had exclusive home ranges, but because we were not certain that all animals in the area were radiocollared and did not monitor movement extensively at night, this should be treated as only a tentative observation. Males tended to have larger home ranges, however, and appeared to have greater tendency to disperse.

We thank G. Arribillaga, F. Barrientos, S. Catir, G. Blundell, T. Fuller, G. Garay, J. Gonzalez, O. Guineo, K. Harms, J. Hoffman, R. Lawrence, A. Phillips, P. Ricci, G. Santana, and J. Toro for their cooperation and aid in our field research at Torres del Paine National Park. We

give special thanks to the Chilean National Forestry and Park Service for their assistance and collaboration and to K.A. Johnson, for his early assistance in getting this project started.

This study was made possible by grants from the National Geographic Society (no. 3581-87) and Patagonia Research Expeditions, Iowa State University, to W.L. Franklin; the Organization of American States to K.A. Johnson and W.L. Franklin; and the National Wildlife Federation and the International Telephone and Telegraph Corporation International Fellowship Program to W.E. Johnson. This project was conducted under research agreement (Proyecto Puma) between Iowa State University and the Chilean National Forestry and Park Service. This is journal paper no. J-14037 of the Iowa Agriculture and Home Economics Experiment Station, Ames, Iowa, project no. 2519.



In sudden disgust, the three lionesses realized they had killed a tofudebeest — one of the Serengeti's obnoxious health antelopes.

Biographies of Convention Speakers

Murray E. Fowler, DVM

Murray Fowler received a DVM degree from Iowa State University in 1955 and joined a predominantly equine practice in Southern California. That practice also cared for animals in movie and television productions, which included wild animals. He joined the faculty of the School of Veterinary Medicine, University of California in 1958 and is now Professor Emeritus of Zoological Medicine.



In 1968, he started the first program in any veterinary school that dealt specifically with captive and free-ranging wild animals. He has served in various offices, including the president, of the Journal of Zoo Animal Medicine from 1978-1986. He directed the organization of the American College of Zoological Medicine, the specialty group sanctioned by the AVMA. He has been the veterinarian for the Sacramento, California Zoo for 24 years.

His publications include a definitive text on Restraint and Handling of Wild and Domestic Animals and he was the editor and an author of the first English language textbook, Zoo and Wild Animal Medicine, which is now into its 3rd edition. He has published over 185 papers in professional journals.

He has taught special seminars, workshops and intensive courses in zoological medicine for local, state and national organizations and in the following countries: Canada, Mexico, Australia, Peru, Brazil, South Africa, West Germany, East Germany, England and Kuwait.

Jeanne Maynard, CEO and Co-Founder

Jeanne started as an Administrative Assistant in various fields prior to co-founding and becoming the vice-president of the Exotic Feline Breeding Compound, inc. The compound started with a couple of cat boarders and today is open to the public 6 days a week. The compound is home to 47 different personalities representing 14 different species of endangered or rare cats and is staffed with 27 volunteers. The compound maintains credibility with the zoo community and is currently working with researchers on Intra Uterine Insemination and Invitro Fertilization.



Jeanne and Lolita. The joy of such friendship is the reward.

Emergency and Critical Care Medicine: CPR

by Ronald S. Eldridge, CVT, BVSc

Cardiopulmonary arrest by definition is a sudden cessation of ventilation and effective circulation that requires emergency intervention in order to prevent death.

OBJECTIVE: To provide an adequate oxygen supply to the brain and heart until advance life support techniques can be restored to normal cardiopulmonary function.

PREVENTION: Prevention is always the best medicine. Some clinical signs of impending cardiopulmonary arrest include: A change in respiration, a weak pulse, a pale or cyanotic mucous membranes, and hypothermia. Recognizing and correcting these signs early may prevent cardiac arrest. Other groups of cats that should be considered to be at risk are: The neonate (very young) and the geriatric (very old), those debilitated by disease or injury, and those with conditions or histories that might predispose them to cardiopulmonary instability.

Most cardiopulmonary arrest are unanticipated. Either they occur without the mentioned warning signs, or the signs are unrecognized until an emergency exists. It is imperative to recognize an arrest promptly and begin CPR. If CPR is not initiated immediately, irreversible and often fatal changes occur within three (3) to four (4) minutes.

THE A B C (s) of CPR: Cardiopulmonary resuscitation's treatment priorities are known as the 'ABC' of CPR:

- A = represents the cat's airway
- B = stands for breathing
- C = represents circulation

The "ABC" of CPR used in human medicine

apply to small animals with some modification. Lets discuss these three (3) important steps carefully. Before we get to the 'A', Your first step to take when your cat is in arrest is make a quick assessment of the cat's condition. If listed signs are noted, have someone call for help and you start CPR.

AIRWAY (A) - If the cat has difficulty breathing or unconscious, the first step in CPR is to secure an airway. The pharynx must be cleared of obstruction (vomitus, mucus, blood, or foreign bodies) so that resuscitative efforts are effective, When you open the moth, pull the tongue out to open the airway. Make another visual check for foreign bodies. Clear airway of vomit and mucus by hand (put finger in mouth and clear away foreign bodies). Invert the cat or use a suction devise if available. (see figure 1)



figure 1

BREATHING (B) - Once an airway is established, the next step in CPR is to breathe for the cat. Ventilate by breathing into the mouth and nose for small cats. For larger cats, hold jaws closed with one hand and place your mouth over the cat's nostrils. Blow breath into nostrils (mouth & nose small cats) steadily for 2-3 seconds. The volume of air should be enough to expand the cat's ribcage. Remove your mouth and allow air to exit the cat's lungs. If cat vomit or rattling sounds are heard, elevate the cat's hindquarters above the level of the head to assist drainage. Continue artificial respiration until breathing is restored. (see figure 2)

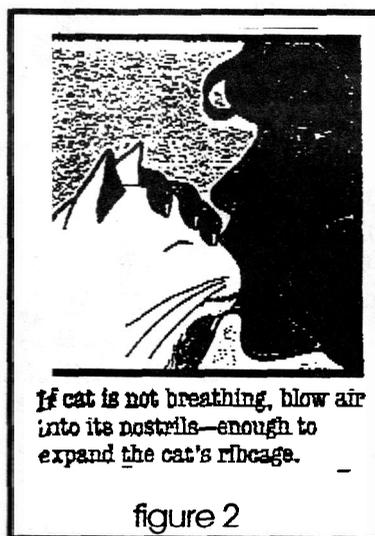


figure 2

CIRCULATION (C) - If a pulse or heartbeat cannot be detected, external cardiac compression should be initiated. Maintaining adequate blood flow to the brain and heart is the goal of cardiac compression. (see figure 3)

- Place cat on its right side
- Place your dominant hand over the 8th rib, count up from the back edge of ribcage, palm side down, right behind armpit.
- Place the flat of your other hand beneath the cat's chest opposite the other hand.
- Apply rapid pumping motion between your two (2) hands, compressing the heart. Pump about 60 to 120 times per minute. (most current recommended numbers for small animals)
- Artificial respiration should also be given by a helper. If no helper is present, stop every six (6) heart massages and breathe one (1) or two (2) deep breaths into the cat.
- Simultaneous ventilation and compression are

recommended to increase intrathoracic pressure.

If normal heartbeat/breathing has not been restored after fifteen (15) to twenty (20) minutes, revival is unlikely. If the cat recovers its heartbeat, take it to your veterinarian immediately.

Once breathing has been restored and heartbeat is present, do not continue with CPR. Severe cardiopulmonary complication may result if you continue CPR on a conscious breathing cat.

SUMMARY Cardiac arrest is a life or death emergency. Most cardiopulmonary arrests are unanticipated. Arrests can occur with or without warning. Know the signs. Practice CPR on a toy stuffed animal cat. Review these steps and commit .. to memory. Remember the ABC of CPR. Stay calm and efficient. Your cat's life may depend on your know-how, so know HOW!



Use a rapid pumping motion between your hands to compress the heart.

figure 3

Ref.: Journal of Veterinary Emergency and Critical Care, July-December 1992, Vol 2, No 2

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