

NEWSLETTER



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LONG ISLAND OCELOT CLUB
 1454 Fleetwood Drive E.
 Mobile, Alabama 36605

Volume 30 - Number 3
 May - June, 1985

LONG ISLAND OCELOT CLUB



SAFARI "CHICO" LIVES WITH JILLIAN BUFFUM IN PORTLAND, OREGON.
 FOR JILLIAN'S DEFINITION OF THE CREATURE SHE SHARES HER HOME WITH
 SEE PAGE 2.



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Branches

FLORIDA: Danny Treanor, 5151 Glasgow, Orlando, Fl. 32819, (305) 351-3058
OREGON EDUCATIONAL EXOTIC FELINE CLUB: Coordinator: Herb Wilton, 7800 S.E. Luther Rd, Portland, Ore 97206 (503) 774-1657
GREATERN NEW ENGLAND: Karen Jusseaume, 168 Taffrail Road, Quincy, Mass. 02169 (617) 472-5826
MID-ATLANTIC STATES: Suzi Wood, 6 E. Lake Circle Dr. Marlton, N.J. 08053 (609) 983-6671
SOUTHWESTERN: Dr. Roger Harmon, 405-C E. Pinecrest, Marshall, Tx 75670 (214) 938-6113

Affiliates

EXOTICS UNLTD: 343 Walnut St., Petaluma, CA 94952
 Bonnie Cromwell (707) 762-6944
LEOPARD CAT SOCIETY: P.O. Box 7535, San Diego, CA 92107
NATIONAL ASSOC. FOR SOUND WILDLIFE PROGRAMS: 2455 S.E. 184 Terrace, Miami, Fl. 33160
WORLD PET SOCIETY: P.O. Box 343, Tarzana, CA 91356



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Barbara Wilton
 P.O. Box 66040
 Portland, Ore 97266

PLEASE SEND ALL APPLICATIONS AND MEMBERSHIP RENEWALS DIRECTLY TO BARBARA FOR FAST SERVICE.

ALL NEWSLETTER RELATED MATERIAL SHOULD BE SENT TO THE EDITOR, SHIRLEY TREANOR

Officers

KEN HATFIELD, PRESIDENT, 1991 S.W. 136 Ave. Davie, Florida 33325 (305) 472-7276
JOHN PERRY, VICE PRESIDENT, 6684 Central Ave. N.E., Fridley, Minn 55432 (612) 571-7918/481-2673
SUZI WOOD, SECRETARY/TREASURER, 6 East Lake Circle Dr., Marlton, N.J. 08053 (609) 983-6671

LIFE DIRECTORS

CATHERINE CISIN, FOUNDER, Amagansett, N.Y. 11930 (516) 267-3852
ROGER HARMON, 405-C Pinecrest, Marshall, TX 75670 (214) 938-6113
KEN HATFIELD (See above)
ETHEL HAUSER, 14622 N.E. 99th St, Vancouver, WA 98662 (206) 892-9994

TERM DIRECTORS

VIRGINIA ENGLISH, 7009 Willoughby, Hollywood, CA 90038
KAREN JUSSEAUME, 168 Taffrail Rd., Quincy Mass. 02169 (617) 472-5876
DANNY TREANOR, 5151 Glasgow, Orlando, Fl 32805 (305) 351-3058
SHIRLEY TREANOR, 1454 Fleetwood Dr. E., Mobile, Al. 36605 (205) 478-8962-evenings
 Emergencies 8-5 433-5418

Staff

EDITOR: Shirley Teanor, 1454 Fleetwood Dr. E., Mobile, Al. 36605 (205) 478-8962
ADVERTISING: John Perry, 6685 Central Ave. N.E. Fridley, Minn. 55432 (612) 571-7918/481-2673
MEMBERSHIP SECRETARY, Barbara Wilton, P.O. Box 66040, Portland, Ore, 97266 (503) 774,1657
REGISTRAR: Karen Jusseaume, 168 Taffrail Rd, Quincy Mass 02169 (617) 472-5826

Help Wanted

REPORTERS

LIOC urgently needs material for its newsletter publication. We can only share those experiences, funny, happy, sad or tragic, which are sent to us. This sharing is a part of the enjoyment of exotic ownership!

WRITING EXPERIENCE: None whatsoever

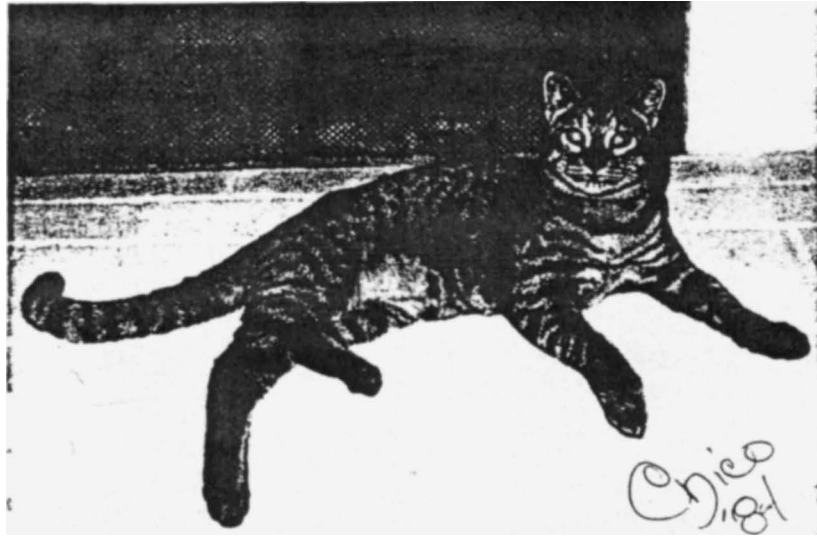
PREREQUISITES: Love of exotic cats

TYPE OF MATERIAL: Articles of happy and sad experiences, technical articles, opinions of any and all exotic cat related subjects (including LIOC) all short and long items, also day to day experiences, announcements of: adoptions, pregnancies, births, deaths, (with autopsy report if one was done) all subjects of interest; all questions - give other members a chance to help.

SALARY: The love and gratitude of all exotics, their owners and the Newsletter Editor.

STARTING TIME: IMMEDIATELY! The newsletter is waiting

is a Safari?
 I'll let others tell you of generic formulation - the omosonal marvel that decrees Safari and Unicorn permission in the same breath.
 I will tell you of Chico.....
 "Chico, Chico, burning bright, on eyelet pillow and candlelight. What does a dream dream of? He speaks to me of Incan pyramids in Geoffroy-his chosen tongue-for he learned to speak from MOM who had a definately American "meow".
 How is he different? I'm asked.
 Well, watch closely now-it's just behind the ear, it's just behind the eye. He walks as a cat but he casts the shadow of a tiger.



Is he tame? I'm asked,
 "Well, if tame can be measured by a yen for Kentucky-fried chicken,,yaa,,he's tame."
 With such a coat of decadence, fastened with six belly buttons - is he beautiful?
 Mine is an illusion on a leash. Mine is Merlin with bronze eyes, and he winks at me.
 Ode to the King of Spots
 Jillian Buffum

chico



The shrinking range of the tiger

Reprinted from NATIONAL GEOGRAPHIC

Widespread in Asia until the late 19th century, the tiger appears in the fossil record of the early Pleistocene, more than a million years ago. The carnivore adapted to diverse habitats and evolved into eight subspecies, or races, each with different size, coat pattern, and skull shape. In the past 100 years, with pressure from big-game hunting and the destruction of habitat, numbers dwindled and some races disappeared.

Now tigers enjoy protected status throughout their range. When India found that its tiger population had fallen from a possible 40,000 in 1900 to fewer than 2,000 by 1972, the government joined with the World Wildlife Fund in Project Tiger. Fifteen tiger reserves have been set up, saving varied ecosystems—from the teak and bamboo forests of Maharashtra to the mangrove swamps of Bengal. Poachers have been tracked down, education stepped up, and some 6,000 villagers relocated to create these protected islands in a sea of humanity. The number of Indian tigers has risen today to more than 3,000, a third in Project Tiger reserves

THE WEST'S COUGAR DILEMMA

By Martin Frentzel
Reprinted from Western Outdoors

They are the big cats of North America. Muscular, graceful and efficient predators, the cougar inspires deep feelings in nearly all persons who come in contact with the Lion of the Americas.

The sportsman, rancher, environmentalist and biologist view the cougar differently. The cat might be the hunter's greatest achievement. The stockman might see the cougar as an enemy, a threat to his livelihood. To the environmentalist, the cougar has become a rallying point, a symbol of the vanishing West which is worth fighting over. And to the biologist, the cougar can be nothing but a headache.

Cougars, themselves, are not quite as diverse as the opinions men have of them. Whether the lions are in the desert ranges of New Mexico or Arizona, or the northern mountains of Idaho and Montana, the cats are killers.

"Lions will kill anything they can get" says Dr. Maurice Hornocker of Idaho. He spent 10 years studying cougars in Idaho's Frank Church River of No Return Wilderness, and his work provided a foundation for much of what is known about the cats today and the studies which are being conducted.

The list of mountain lion prey species includes deer, bighorn sheep, domestic goats and sheep, mountain cats, bobcats, porcupines, javelina, horses, rabbits, and squirrels, peacocks, cattle, coyotes, beavers, pigs, skunks, domestic dogs and cats, wild turkeys, martens and grasshoppers. Cougars have also been known to eat each other and males will kill and eat unattended kittens.

But it is the killing of livestock which makes the cougar a controversial animal, at least in some states, and creates the biggest problem for wildlife managers. It is this issue which has been slowly simmering in many states and is now coming to a boil in California and New Mexico. It is this issue which clearly demonstrates a person's attitude toward the species.

"There is a great diversity in attitudes towards the animal," says Bob Hernbrode, big game program supervisor for the Colorado Division of Wildlife. "There are some who think the lion is an endangered species, and there is no reason to hunt them."

"Some people don't want to kill the last one, but will be there for the next-to-last-one. Lions do kill livestock, but I'm not sure that's not their due, and there are people who will argue that point."

Until the late 1960's, the cougar kept a much lower profile. The cats were managed as predators, or varmints, with no closed seasons and no bag limits. But mounting pressure from elements of the public to have the cougar listed as an Endangered Species in the U.S. forced the individual states to give the lions some sort of protection. California went the furthest of any state.

The Golden State paid bounties for dead cougars between 1907 and 1963. In all, more than 12,500 lions were killed for bounty during those years.

"There's no doubt that during all the years of incentive (bounty) hunting, we never wiped them out of any place," says Dick Weaver, associate wildlife manager of California's Department of Fish & Game.

But since 1971 there has been a moratorium on all sport hunting of cougars in California. In fact, the control of the cats is that done under permits issued to stockmen to kill cougars which are known to be slaying livestock. The permits are good for 10 days, and the cat can be taken as far as 10 miles from where the livestock was killed. In 1983, 30 cougars were killed under these permits.

The moratorium, however, may be on its last legs. Weaver says the complete ban on killing cougars in California is going to meet stiff opposition in the 1985 State Legislature. The moratorium will expire in January 1986 if not renewed this year.

"Frankly, I think the livestock interests and the sportsmen to a lesser degree, got the attention of the Legislature," Weaver says. "We won't end up with the status quo. Nobody's happy with what we have now."

The frequency of cougar sightings is keeping the cats in the limelight. And, a 1984 attack on a boy at Big Bend national Park in Texas has not helped the lion maintain a low profile. But if the moratorium is ended this year, Weaver is confident it will not go down without a fight.

"In California, we've got lots of people who don't want to see anything shot," he says, "A large segment of the population is such an urbanized society, and far removed from death as a way of life."

"The cat is an extremely beautiful animal and has many champions. I'm absolutely awed by it's great strength."

But some control measures appear necessary to keep the lions out of trouble. Weaver points out there has been a tenfold increase in livestock attacks since 1971: "We have a half dozen counties that have more lion depredation that the whole state did back in 1971," he says.

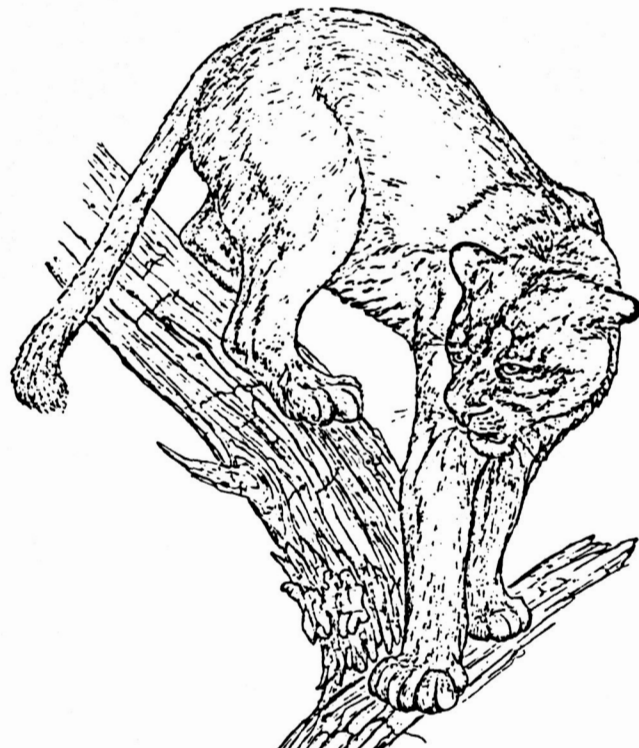
"We're seeing lots of problems with our deer herds," Weaver says, "We've come around to saying that if a deer herd is suppressed for some reason, mountain lions will keep it suppressed."

Fawn survival studies are demonstrating the impact cougars are having on California's deer herds he says. "For four years we went out and caught tiny fawns and put sensors on them so we could determine the cause of death. We found 30 percent of all mortality can be attributed to mountain lions."

"What Hornocker said in Idaho early on was that mountain lions could not suppress a healthy deer or elk population. But what has occurred is very suppressed deer populations, and we can't find just one cause for that," Weaver says.

In New Mexico, the cougar controversy is moving into its third year. The state differs greatly from California in that New Mexico had one of the most liberal cougar hunting seasons in the West - 11 months, two cat limit.

However, last April the state Game Commission reduced the cougar season to 3 months statewide, with an additional two months of quotas for 5 game management units



with high incidence of cougar/livestock conflict. The change in regulations was defeat for the livestock industry and a victory for the environmentalists. Conservationists believe they have won a significant victory in overcoming New Mexico's tradition of treating cats as varmints," says Carol Cochran, Cochran chairs Sierra Club's National Wildlife Committee.

"One major concern of the Sierra Club is that the mountain lion shouldn't be managed to benefit livestock. In the past, the only way livestock has been protected is by killing lions. There is evidence that that doesn't work. We would favor nonlethal predator control" Cochran says.

Dr. Wain Evans, research coordinator for the New Mexico Dept. of Fish & Game, was given the task of responding to the legislatures instructions to study cougar/livestock conflicts. What he told them was something the livestock industry didn't want to hear. Review of available data showed a significant decrease in cougar hunter success, a 5-10 percent slide annually. Evans determined that the cause for the decline in success could perhaps be attributed to the number of cats available to hunters. The State Game Commission has subsequently approved a 5-year, \$500,000 study of mountain lions in the San Andres mountain range. That study will be conducted by Hornocker of Idaho, if approved by the state legislature. Such a study would be unique. The mountain range is within the White Sands Missile range, and there is no grazing livestock.

Studying a lion population in an isolated Southwest area would help biologists compare the differences, if any, between the cats in southern and northern regions of the west. At present, it appears that only southern mountain lions rely on livestock to any extent for food.

"I don't know why," Hornocker says, "but if there is adequate prey species, I guess they just haven't learned to prey on livestock" The story is similar in Montana, Washington and Oregon.

But in Wyoming, Utah, Nevada, Colorado, California Arizona and New Mexico, livestock depredation by lions is a reality and a problem to stockmen, biologists and cats, themselves.

Most western states report stable or increasing lioners. New Mexico has the only state with any indication of declining numbers.

Cougar Hunting Varies From Liberal to Closed

Cougars inhabit every western state and hunting situations are almost as diverse as the states. A Western Outdoors survey of game departments disclosed the following.

ARIZONA - Tries to handle its cougar/livestock problems through a liberal sport hunting program. Cats are hunted throughout the year-annual take about 250 mountain lions

CALIFORNIA - No sport hunting-about 207 cougars killed to protect livestock since 1971.

COLORADO - The Colorado Division of Wildlife helps fund Animal Industries Fund to pay for state trappers and hunters to kill cougars preying on livestock. Sport hunting takes about 137 cats and populations are stable.

IDAHO - Lloyd Oldenburg, state wildlife manager states "we basically don't have any problems with cats" -about 200 are killed each year.

MONTANA - Expanding mule and whitetail deer herds are supporting an expansion of cougar numbers. Graham Taylor Dpet. of Fish & Wildlife biologist, reports livestock problems minimal. Approximately 140 cougars are taken by sport hunters annually.

NEVADA - Sport hunters take about 50 cats annually and an additional 25 are killed due to livestock depredation

NEW MEXICO - Game and Fish department estimates that approximately 10 ranches a year report cat problems. There are approximately 10,000 ranches in the state.

continued next page



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CONVENTION! Minneapolis August 16, 17, & 18

1985 ANNUAL CONVENTION

TOPICS TO BE COVERED INCLUDE FUS AND FELV

DON'T FORGET THE ANNUAL MEMBERSHIP MEETING,
TO HAVE SOMETHING PLACED ON THE AGENDA

CONTACT KEN HATFIELD
PRESIDENT LIOC
1991 SW 136 Ave
FT LAUDERDALE, FL. 33325

THIS IS YOUR CHANCE TO BRING UP TOPICS FOR
GENERAL DISCUSSION AND INFLUENCE THE
WORKINGS AND DIRECTION OF YOUR CLUB

PARTICIPATE-IT'S FUN!

Everybody's coming!

News to me

During a recent conversation with Shirley Treanor, I became aware of a very important and valuable service provided by LIOC. The Club will register all cats by species, sex, birthdate, and sire and dam if known and will assign a registration number to the animal.

Established registrations are checked and should bloodline relationships be evident, the Registrar can provide a certificate of pedigree much as the domestic animal breeders use. The service could prove to be an invaluable tool, particularly concerning genetic health problems, avoidance of inbreeding or line breeding too closely; behavioral characteristics, as well as providing proof of domestic birth.

The cost for this service is minimal. Considering that in a relatively short period of time you could acquire significant hereditary data, be able to trace animals, prove parentage, origin and that you acquired the animal legally-the fee is VERY reasonable.

PLEASE request the forms from the Registrar, Karen Jusseume (address on page 2) and register your animals. The more information collated by this service, the more potential help for our cats.



MEETING REPORT

Our first formal meeting for 1985 was held at Dave Baskins' beautiful home in Duxbury, Massachusetts. Twenty-five, or so, attended and more than half were LIOC members.

Some topics that were discussed were; raising our area dues from \$5 to \$10 a year to cover postage and handling costs - this was passed unanimously. Also, a club called WCI was discussed, our President and Vice President plan on joining to keep our members informed about the changing laws.

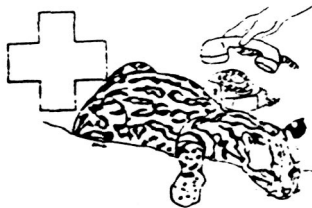
USDA laws were also discussed. Al Porges volunteered to comprise an outline for all in our area to make it easier to understand what is expected of us when trying to acquire a permit.

Our next meeting will be held JUNE 9, 1985, so watch for those meeting notices. It will be held in ecticut, at Bill & Maria Peckhams'. We will be hing for you!

Animals that attended - 2 cougars, 2 bobcats, 1 ri, 2 Geoffroy's cats, and a white wolf named ...TNEY. Members came from Maine, New Hampshire, Connecticut and Massachusetts. The Demarest's came and brought our permanent name tags which look great. Anyone interested in a name tag, contact one of our officers (Page 2).

Submitted by
Mildred Payton
Secretary/Treasurer

KNOW YOUR VET'S TELEPHONE NUMBER



COUGAR Continued

OREGON - About 100 cougars are killed by stockmen and landowners annually, another 40 cats are taken by sport hunters, but there is no requirement to report the killing of a cat. Although cougars are expanding their range in this state, livestock problems are minimal.

UTAH - Cougar numbers are reported as static with about 210 being taken in the sport harvest of 1983-84. 8-10 cats are taken due to livestock problems each year

WASHINGTON - 80 cougars a year are harvested, mostly by sport hunters. Few livestock conflicts are reported.

MINN - Statewide quota is 65 cats per year, but we harvest more than 35-40 a year. Conflicts are tied to the Bighorn Mountains.

Contributed by Ethel Hauser

By Bill Monroe
Reprinted From the Oregonian

What's in a bobcat?

Quite a bit more than one might think, judging from the results of an extensive research project completed recently in the Coast and Cascade mountain ranges of western Oregon.

Dale E. Towell of the Idaho Fish & Game Department also has some surprises here for wildlife biologists attending the annual conference of the Oregon Chapter of the Wildlife Society.

Towell did graduate work at Oregon State University involving studies of bobcat scat on the Oakridge Ranger District east of Springfield.

Scatology is the systematic study of animal feces by wildlife managers interested in what their constituents eat.

Towell sorted through hundreds of scat samples from bobcats and coyotes and other predators and got to where he could determine the difference between bobcat and coyote droppings 70 percent of the time.

Coyotes, he said, have more flexible diets and are more opportunistic and willing to turn to anything edible in times of stress. They also eat more fruit for longer periods of time in the summer months and even stay with dried fruit through the fall when bobcats are turning to meatier fare.

Not only do bobcats pause for occasional forays in salmonberry patches and trim huckleberry bushes, but there is a surprising amount of forest litter in their diets, Towell said; nearly 50 percent at some times of the year.

He said the reason is not clear, but fir needles, decayed leaf material and possibly some mushrooms are being lapped up by the shy animals as they prowl cautiously through the woods.

Bobcats, Towell said, are intense hunters, far more so than coyotes, and remain secretive, lurking in thickets and staying close to the forest floor.

Rodents, as one might suspect, are a major dietary staple. They include critters as small as mice to as large as beavers.

Seasonal entrees are grouse, small song birds, bird eggs, rabbits, hare and deer.

Towell said that in the winter, when snow covers most burrowing animals and slows down deer and elk, a major percentage of the bobcat diet is venison.

Cats routinely take down deer, and fresh elk meat was found in some scat samples. Towell said the cat probably killed an elk calf rather than tackle a fully grown elk.

There was some evidence of bobcats feeding on road-killed deer and elk, but little other scavenging, although during one severe period, a cat did turn to rotted remains of an animal that had been dead for several weeks.

Towell recalled that one morning toward the end of his study, he went to a trailer where he stayed for several days at a time while collecting and, as usual, turned on the heater so the trailer would be warmed to a toasty temperature by the time he finished his cold field work. During the day, he found a bobcat had been shot and killed and took it back to the trailer to check stomach contents. Both the cat and Towell, it turned out, had had an unlucky day-the last meal had been a spotted skunk.

Contributed by Barbara Wilton



MEETING REPORT

We held our installation of officers banquet in February at the Hearthstone in Gresham.

After a lovely dinner and lots of cat talk, the new officers were announced. They are as follows:

- COORDINATOR - HERB WILTON
- CO-COORDINATOR - GLEN DAVIS
- SEC/TREAS - GAYLE SCHAECHER
- WAYS & MEANS - RICHARD KELLY
- LIBRARIAN - ETHEL HAUSER
- HOSTES - PATTI TEAGARDEN

Ethel Hauser (past coordinator) was presented with a beautiful plaque and a big hand of applause with a personal, big THANK YOU for the great job she had done the year before. As we all know, it was convention time in Oregon last year and it is a hard job when you have to put on a convention. Thanks again Ethel.

A great time was had by all. Attending were: Alan & Ethel Hauser, Pat Parker & Friend, Don & Connie Scholes, Charles and Sue Marshall, Patti Teagarden, Tom & Lisa Reid, Herb and Barbara Wilton, Kathy Tesdal & Friend, Glen Davis, Jackie Vanderwall and Gayle & CI Schaecher. TWAS FUN!

MARCH REPORT

The March meeting was held in the lovely home of Stan & Gloria Capon in Vancouver, Washington. Herb called the meeting to order. Ethel reported on a speak-out that had been done earlier in the year. Also, she reported on ones coming up.

Barbara Wilton reported on Senate Bill 509-a new state bill trying to regulate the ownership of exotics. Types of permits that will be required. Several of our members were asked to sit in on meetings and help work out any problems before the bill was presented in Salem.

There was a great deal of discussion on what we should donate to the upcoming convention. Also how many of our members would be able to attend. We also talked about getting club jackets.

Plans for a CAT SHOW was talked about and a "Safety Committee" was appointed to set up some Club standards to insure the safety of both our animals and the public, when we have our animals out.

After the meeting, we all enjoyed a marvelous luncheon put on by Gloria. We also enjoyed seeing some of their artwork.

Our next meeting will be the CAT SHOW in April.

Respectfully submitted
Gayle Schaecher
Secretary/Treasurer



MEETING REPORT

Our Spring gathering was held aboard a "party barge" on Lake Palestine, on the outskirts of Tyler. The weather cooperated in making this gathering hosted by Jan, Jerry and Amber Neal very special. After lots of cat talk, sunning ourselves on deck, we lunched sumptuously on the spread provided by our hosts.

A recap of last years convention was done for those unable to attend the Fall meeting.

A proposed "wild and dangerous" animal bill was discussed. Unfortunately, this law would prohibit many exotics-and possibly all. Members are encouraged to write their legislators, and ask family members and friends to do the same.

Convention 85 was talked about and all reminded that airlines are offering some super rates now.

Roger Harmon related that he had used some of the DUR-A-GUARD epoxy and found it great-impervious to most anything.

We were pleased to welcome new members Janet Parr and Kathy Metzner and their delightful leopard cub. Others attending were: Dr. Roger Harmon, Faye and Kay Harmon, Shirley Treanor & Jenny serval with Donnie Wagner, Jean and Carl Hamil, Ron Barker with bobcat, John & Elfriede Vickery and John Stokes with new bride Karen (Congratulatory folks).

The next meeting is tentatively scheduled for fall at the Vickery's in Longview-its a waterfront spot and Elfriede invites all to come Friday, and stay the weekend. See you all in Minneapolis -

Shirley Treanor
Secretary/Treasurer

Match the Genders

	Male	Female		
Cat	—	—	A. Buck	L. Goose
Deer	—	—	B. Vixen	M. Sow
Duck	—	—	C. Gander	N. Ewe
Elk	—	—	D. Stallion	O. Bull
Fox	—	—	E. Hen	P. Tom
Goose	—	—	F. Dog	Q. Rooster
Hog	—	—	G. Cow	R. Boar
Horse	—	—	H. Queen	S. Pen
Pheasant	—	—	I. Ram	T. Doe
Rabbit	—	—	J. Cob	U. Drake
Sheep	—	—	K. Mare	
Swan	—	—		

Answer:

Cat P.H. Fox F.B. Pheasant Q.E.
Deer A.T. Goose C.L. Rabbit A.T.
Duck U.E. Hog R.M. Sheep I.N.
Elk O.G. Horse D.K. Swan J.S.

OREGON WILDLIFE

Printing By **PRINTRIGHT** Mall 205

Breeder Directory

LIOC MAKES NO RECOMMENDATIONS OR WARRANTIES IN REGARD TO THE BREEDERS LISTED HERE. ALL INFORMATION SHOWN IS THAT PROVIDED BY THE INDIVIDUAL BREEDER AND IS FOR INFORMATIONAL PURPOSES ONLY. BE AWARE THAT INTERSTATE COMMERCE OF ENDANGERED SPECIES (MARKED HERE WITH †) IS REGULATED BY FEDERAL LAW AND REQUIRES BOTH PARTIES TO BE PERMITTED. A COMPLETE LISTING OF ENDANGERED FELINES IS FOUND ELSEWHERE IN THIS ISSUE.

BREEDERS RESPONDING TO THE QUESTIONNAIRE ARE LISTED BELOW ALPHABETICALLY. THEN, THEIR NAMES ARE SHOWN UNDER THE INDIVIDUAL SPECIES LISTED.

Andrews, Penny
1187 Merrill Rd.
San Juan Bautista,
Ca 95045
(408) 623-4326
Permits: USDA, USDI
State

Garadino, Natalie L.
Calle Doncella #30
Punta Las Marias,
Isla Verde, Puerto Rico 00913
(809) 726-1179

Hatfield, Jean
1991 S.W. 136 Ave.
Davie, Fl 33325
(305) 472-7276
Permits: USDA, State

Boyajian, Fred
2996 Howell Mill Rd.N.W.
Atlanta, Ga. 30327
(404)351-0519
(800)251-5800
Permits: USDI, USDA,State

Killman, Murray
RR #1, Caledonia
Ontario, Canada NOA IAO
(416) 765-4261
Permits: Ontario

Krebs, Jo Anne
Rt 6, box 226
Quincy, Fl. 32351
(904) 875-1110
Permits: USDA, USDI
State

Hauser, Ethel
14622 N.E. 99th
Vancouver, WA 98662
(206) 892-9994
Permits: USDA, USDI
State

Payton, Millie
8 Woodlawn Rd
Randolph, Mass 02368
(617)961-3697
Permit: State

Perry, John
6684 Central Ave N.E.
Fridley, Minn 55432
(612) 571-7918
Permits: U.S.D.A

Mutascio, Michael J.
8 Woodlawn Rd.
Randolph, Mass 02368
(617)961-3967
Permit: State

Quillen, Pat
P.O.Box 7535
San Diego, CA 92107
(619) 749-3946
Permits: USDA, State
Local

Regap, Damian
130 Midway Dr
River Ridge, LA 70123
(504) 739-9453
Permits: USDA, USDI
State, Local

Porges, Albert & Ann
6 Westview Dr.
Stoughton, Mass 02072
(617) 344-4943
Permits: USDA

Vanderwall, Jackie
17824 S.E. Morrison Ct
Portland, Ore 97233
(503) 665-9488
Permits: USDA, State
Local

Wood, Suzie
6 E.Lake Circle Dr.
Marlton, N.J. 08053
(609) 983-6671
Permits: USDA, State

Schaecher, Gayle & Clem
10715 S.E. Oreint Dr.
Boring, Ore 97009
(503) 663-4673
Permits: USDA, State



ENDANGERED SPECIES

* = all species endangered
 ° some subspecies endangered

<u>CAT°</u> <u>(F. felis)</u>	LEOPARD CAT* <u>(F. bengalensis)</u>	Scientific Name	DATE LISTED	CONTROLLED RANGE
Andrews, Penny Hatfield, Jean Hauser, Ethel Killman, Murray Krebs, Jo Anne Porges, Albert Regep, Damian Schaecker, Gayle	Hauser, Ethel Quillen, Pat	Acinonyx jubatus CHEETAH	2/70	Anywhere found
	LYNX° <u>(F. lynx)</u>	Felis bengalensis LEOPARD CAT	6/76	Anywhere found
	Andrews, Penny Siberian & Canadian Killman, Murray Canadian Krebs, Jo Anne Siberian & Canadian	Felis concolor coryi FLORIDA COUGAR	3/67	Anywhere found
		Felis concolor costaricensis COSTA RICAN COUGAR	6/76	Anywhere found
	MARGAY° <u>(F. wiedii)</u>	Felis concolor couguar EASTERN COUGAR	4/73	East of Miss. River
	Boyajian, Fred	Felis iriomotensis IRIOMOTE CAT	6/79	Anywhere found
	OCELOT* <u>(F. pardalis)</u>	Felis jacobita ANDEAN CAT	6/76	Anywhere found
	Hatfield, Jean Hauser, Ethel Killman, Murray Schaecker, Gayle	Felis lynx pardina SPANISH LYNX	6/70	Anywhere found
	ONCILLA* <u>(F. tigrina)</u>	Felis marmorata MARBLED CAT	6/76	Anywhere found
	Quillen, Pat	Felis nigripes BLACKFOOTED CAT	6/76	Anywhere found
	SERVAL° <u>(F. serval)</u>	Felis pardalis BRAZILIAN OCELOT	3/72	Anywhere found
	Andrews, Penny Krebs, Jo Anne Wood, Suzi	Felis pardalis mearnsi OCELOT	3/72	Mexico South
	TIGER* <u>(P. tigris)</u>	Felis planiceps FLAT-HEADED CAT	6/76	Anywhere found
	Garadino, Natalie Bengal	Felis rufus escuinapae MEXICAN BOBCAT	6/76	Anywhere found
	HYBRIDS	Felis serval constantina BARBARY SERVAL	6/70	Anywhere found
	BENGAL <u>(Leopard cat/domestic)</u>	Felis temmincki TEMMINCK'S CAT ASIAN GOLDEN CAT	6/76	Anywhere found
	Hauser, Ethel	Felis tigrina oncilla TIGER CAT ONCILLA	3/72	Anywhere found
	SAFARI <u>(GEOffroy's/Domestic)</u>	Felis wiedii MARGAY	3/72	Anywhere found
	Hauser, Ethel Mutascio, Michael Payton, Millie	Felis yagouaroundi cacomitli GULF COAST JAGUARUNDI	6/76	Anywhere found
		Felis yagouaroundi fossata GUATEMALAN JAGUARUNDI	6/76	Anywhere found
		Felis yagouaroundi panamensis PANAMANIAN JAGUARUNDI	6/76	Anywhere found
		Felis yagouaroundi tolteca SINALOAN JAGUARUNDI	6/76	Anywhere found
		Felis nebulosa CLOUDED LEOPARD	6/70	Anywhere found
		Panthera leo persica ASIATIC LION	6/70	Anywhere found
		Panthera onca JAGUAR	3/72	Anywhere found
		Panthera pardus LEOPARD	6/70	Anywhere found
				except where listed as Threatened 1/82

Extinct is Forever...

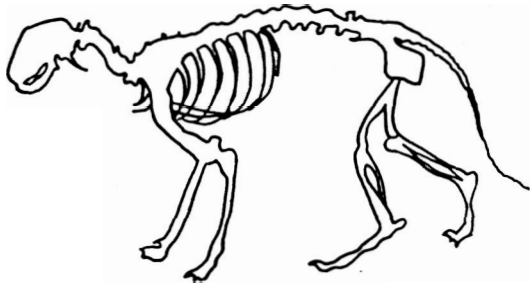
Protect

Preserve

Propagate

Panthera tigris	6/70	Anywhere found
Panthera uncia SNOW LEOPARD	3/72	Anywhere found

Anatomy of EXOTIC LEGISLATION



- Eliminates the need for permits for transporting animals through the state where the animals are in the state for no more than 24 hours and are not sold or transferred while in the state.

A very potentially dangerous bill was introduced in the Texas legislature. Although it is doubtful this bill will be passed this session, it can be reintroduced in 1986.

SB951 prohibits private ownership of "wild and dangerous animals". The list of "wild and dangerous animals" could be amended by the Texas Department of Health at present include lion, cougar, jaguar, tiger, cheetah, ocelot, bobcat, jaguarundi, foxes, squirrels, all poisonous reptiles, subhuman primates and others.

Under the "grandfather clause" those having these animal for a year prior to this bill would be allowed to be issued permits. Zoos, animal shelters, circuses, research facilities upon inspection could be issued permits.

LEGISLATIVE UPDATE

In most states, if a bill has not been passed by both houses of the legislature, it dies when the legislature adjourns. However, 23 states have a carry-over provision which would automatically re-introduce the bill in the next session. (*)

By the time you receive this, the following state's legislatures will have adjourned for the 1985 session.

Alabama	Maryland	Tennessee
Alaska	Minnesota	Texas
Arizona	Missouri	Utah
Arkansas	Mississippi	Virginia
Colorado	Montana	Vermont
Connecticut	New Mexico	Washington
Delaware	Nebraska	West Virginia
Florida	Nevada	Wyoming
Georgia	New Hampshire	
Hawaii	North Carolina	
Idaho	North Dakota	
Illinois	Oregon	
Indiana	South Dakota	
Iowa	Rhode Island	
Kansas	South Carolina	

IF YOUR STATE, TOWN, OR COUNTY HAVE LOCAL LAWS GOVERNING, OR RESTRICTING THE OWNERSHIP OF EXOTICS, PLEASE OBTAIN A COPY OF THE LAW AND SEND IT TO US. BY HAVING A COPY OF THESE WE WILL BE ABLE TO HELP MEMBERS INQUIRING INTO THE VARIOUS LAWS. ADDITIONALLY, CURRENT LEGISLATION WILL BE ON HAND TO USE AS MODELS FOR UPCOMING LEGISLATION.

SEND TO: LIOC
1454 Fleetwood Dr.
Mobile, AL. 36605



- *IA H 503 Relates to the possession of dangerous animals
- IL S.813 - Permits required to import wild animals
- MA S 1431- Prohibits the use of wild animals to promote trade.
- *MN H 1378 - Prohibits possession of all wild animals, except by circuses and zoos.
- *NE L 558 - Amends captive wildlife laws to completely ban keeping large carnivores (big cats & bears)
- *OH H 283 - Prohibits private ownership of exotic animals Still in committee-with seemingly no plans to move it ahead.
- TX H 1699, & S 951 - restricts ownership of exotic animals. Likely not to make it before legislature adjourns, but could be introduced next year.
- NC - Regulation - Amends regulations on import of wildlife

THE FIRST TWO LETTERS INDICATE THE STATE, SUBSEQUENT INDICATE THE BILL OR LEGISLATION NUMBER.

* * * *

- CHANGES IN THE GEORGIA WILD ANIMAL LAW combine dealer and exhibitor licenses into a "wild animal License" and set fee at \$200.
- Increase required liability insurance from \$20,000 for each inherently dangerous animal to \$40,000 per animal - with maximum coverage required still \$500,000.
 - eliminates the requirement for licensees to obtain permits before buying, settling, transporting or possessing wild animals.
 - Requires all license holders to record transactions within 48 hours after it takes place including date, place manner, names of addresses of all parties involved.
 - Reduces the wild animals requiring a license or permit to
 - a) those animals deemed inherently dangerous in OCGA 27-5-4
 - b) all carnivores; c) elephants; d. Fish - no change.

THE BIRTHS



Sole' serval, belonging to Suzi Wood, presents three little ones, two girls and a boy. Removed from mom at about a week of age, all are doing well.

Damian Regep reports another litter of bobcat:-that's three in his compound this year! Good work kid,.

John Perry reports in with a litter of Geoffroy's-unsexed as of this report. Seemingly, mom's taking care of the little ones and we have expectations of seeing them at convention.



SUGGESTED VACCINATION PROTOCOL FOR EXOTIC FELIDS

DISEASE	IMMUNE STATUS	INITIAL VACCINATION	VACCINE TYPE	BOOSTER
Panleukopenia (parvovirus)	1. Neonates (less than 8 wks) colostrum deprived or dam unvaccinated or unknown vaccination history	1st Vaccine at 2 wks. then every 2-3 weeks until 16 weeks of age	Inactivated, IM or SQ	Annual
	2. Kittens, cubs, vaccination of dam current within 6-12 months.	1st vaccine at 8-10 wks. then every 3-4 weeks until 16 weeks of age	Inactivated IM or SQ	Annual
	3. Adults—previously vaccinated	vaccinate at first examination of newly acquired animal.	Inactivated or MLV* IM or SQ	Annual
	4. Adults—history unknown	Vaccinate on first exam. revaccinate in 3-4 weeks	Inactivated IM or SQ	Annual
Rhinotracheitis (herpesvirus) Calicivirus, feline pneumonitis (Chlamydia spp)	1. Kittens, cubs	1st vaccine at 6-8 week then every 3-4 weeks until 16 weeks of age	Inactivated IM or SQ	annual
	2. Adults—previously vaccinated	1st examination of newly acquired animal	Inactivated or MLV*	Annual
	3. Adult—history unknown	1st examination revaccinate in 3-4 weeks	Inactivated IM or SQ	Annual
Rabies	See text			

*Modified Live virus °no inactivated feline pneumonitis vaccine commercially available

from Infectious Diseases of Nondomestic Cats, by Katherine E. Quesenberry, D.V.M. Reprinted from Small Animal Practice

A well planned vaccination program is very important in disease prevention in nondomestic cats. Several points must be considered when developing a vaccination schedule. Commercial vaccines currently available are not developed for use in exotic felids; their efficacy may be highly variable. The kinetics of antibody formation and catabolism in both young and adult animals are unknown in most nondomestic species. In a limited study involving lion cubs from the same litter, hand-reared cubs had lower serum immunoglobulin levels during the first 375 days of life than did littermates allowed to nurse naturally. This study suggests that antibodies transferred via the dams milk may be an important form of passive immunity. Further investigation with a wide variety of nondomestic felids is needed.

Both modified live and inactivated (killed) vaccines have been used clinically in exotic felids. The efficacy of vaccination procedures and the persistence of antibody titers have recently been investigated in both juvenile and adult animals. Vaccination with both modified live virus (panleukopenia) and inactivated combined (panleukopenia, rhinotracheitis, calicivirus) vaccines will produce seroconversion of previously negative individuals, and a significant rise in existing serum neutralizing antibody titers. Titers following immunization of adult cats with combined inactivated vaccines will persist for at least seven months, with the optimum response obtained by vaccinating twice, 4 weeks apart. Doubling the vaccination dosage in large felids, or giving the three serial vaccines to adults, will not significantly increase serum neutralizing antibody titers. Problems associated with the use of modified live panleukopenia, rhinotracheitis, and calicivirus vaccines have been reported in some species, including vaccine-induced infection and postvaccinal myelitis. Pregnant females should not be vaccinated with MLV because of the potential teratogenesis in the developing fetus. Suggested vaccination protocols are shown below.

Rabies is recognized as an important disease in both captive and wild felids. Three cases of rabies in lions were associated with the development of violent behavior, roaring and paralysis. Nonsupportive meningitis and perivascular cuffing were present histologically in the brains of all cases. Eosinophilic inclusions similar to Negri bodies were found on histologic evaluation of brain smears of one animal. A Carpathian lynx developed symptoms of rabies after 24 hours in captivity. Rabies was confirmed in this case by fluorescent microscopy and animal inoculation. It was suggested the lynx may serve as a wildlife

reservoir host. Vaccination of nondomestic animals against rabies is not recommended by the National Association of State Public Health Veterinarians. Still, annual rabies prophylaxis is utilized by some zoos in edemic areas. Inactivated vaccines are used at first examination of newly acquired animals and boosters are given at yearly intervals. Kittens or cubs are first vaccinated at 4-6 months of age.

Contributed by John Perry

Hounds scout Colorado hills for clan of pet-eating pumas

Hoping for new snow and fresh tracks, two trackers begin a hunt in the rugged foothills west of Castle Rock Colorado, for a family of mountain lions that has been preying on dogs and cats in an isolated subdivision the Associated Press reports.

"The lions have lost their fear of man and are frequently found on people's back porches, looking for pets to feed on," said James Young of the Department of Wildlife. The mountain lions began feeding on pets after a resident of the Perry Park area who had had them moved away, young said.

The two trackers, predator-control agents of the U.S. Fish & Wildlife Service, were using four hounds to sniff out the mountain lions and were prepared to stay in the high country for several days.

Their quarry, an adult female and two or three nearly grown cubs, have been reported to have killed at least 10 pet dogs and several cats in the past two months. Young said the feeding pattern is a learned behavior the cubs never will break.

"It's very likely that being fed with the female around as they were growing up, it has been implanted on them to look for food around houses," Young said. "That's probably the reason they keep coming back to feed on the dogs. These cats have found that it's much easier to take dogs on porches instead of hunting deer." Young said he hopes the lions can be tranquilized and given to the zoos. In spite of Young's hopes to take the animals alive, Raley one of the trackers, cautioned that "if they attack the dogs, we'll have to kill them."

Young said that between 1,000 and 1,200 mountain lions live in Colorado's high country, but are rarely seen by humans. They are "elusive, secretive animals that are primarily nocturnal feeders," he said. "They live well with humans. They don't want to be around them so they just get out of their way."

Condensed from an Associated Press release
Contributed by Jean Townes

L.F.O.C. GALLERY

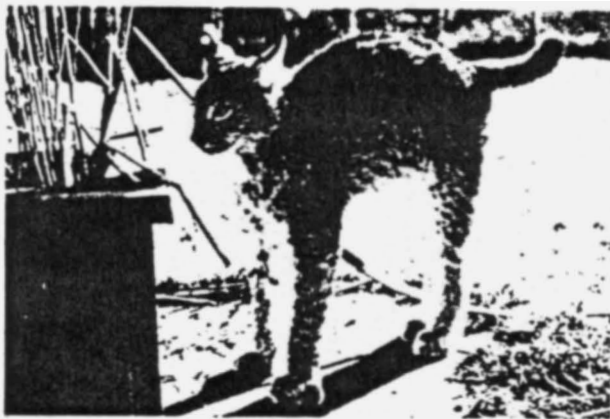
— PHOTO CONTEST WINNER WILL BE
ANNOUNCED AT CONVENTION '85 —



HI; MY NAME IS THOR



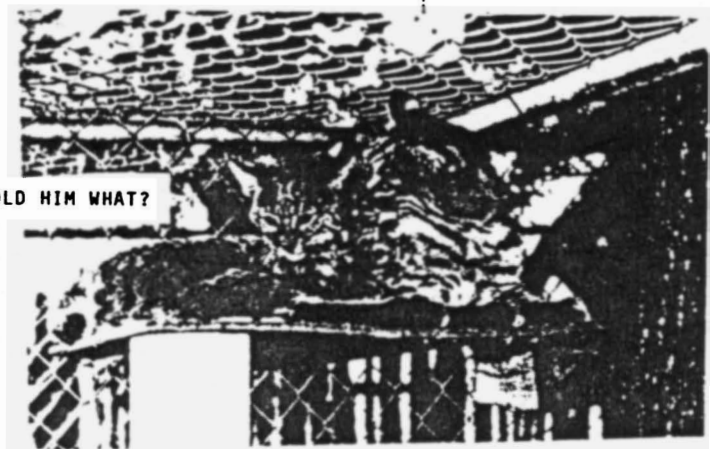
YOU CAN PEEL MY CHICKIE ANYTIME
...BIG BOY™.



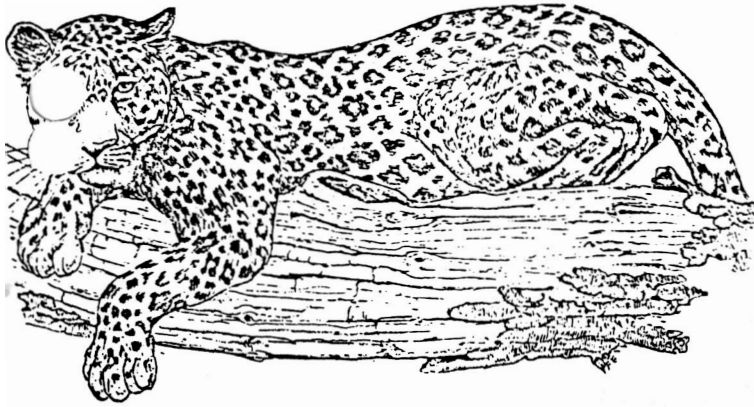
E EK: A MOUSE:



BAGGED BOBCAT



YOU TOLD HIM WHAT?



LOVING LEOPARDS

By William Baker

Little is known about leopard behavior in the wild, but it is fairly certain that both males and females live solitary lives within more or less defined home ranges. Both sexes mark frequently with urine and can locate each other by smell or by calling. Breeding may occur throughout the year, estrus lasting for 1-2 weeks. The interval between estrus being irregular (20-50 days). The gestation period is 92-105 days and the 1-6 cubs are weaned at about 3 months. They may become independent of the mother at between one and two years and become sexually mature after about 2½ years.

In late April last year, I was privileged to observe a mating pair of leopards in the Aberdares.

I spotted a leopard at the edge of a small clearing right near the track. Then I noticed another, and my first reaction was one of happy surprise at having found a mother and large cub. However, a second look at the larger of the two cats convinced me that this was a pair in consort, and a few seconds later their mating confirmed the fact. It was a sunny morning, and the pair obliged me by emerging now and then from the shadows so that I was able to take photographs in good light.

The Aberdares rose clear in the background as I watched. The male, twice the size of his mate, and carrying a considerable "dewlap", approached her and mounted at once. Copulation, lasting only a few seconds, was enlivened by a tremendous crescendo of noise, a sort of loud rumbling growl, accompanied by howls and snarls that reverberated through the forest. It was difficult to tell who was making what noise. The male bit the nape of the female's neck and then immediately leapt clear of her while she remained motionless on the ground. In the course of half an hour, they mated four times, the female apparently initiating the act by getting up and positioning herself where she wanted. On each occasion she lay low on the ground after he had jumped off her, a curious, satisfied grin on her face and her eyes sometimes closed, or at least narrowed.

Only after the fourth mating did the female roll over on her back and stretch her paws lazily towards the male, who was already walking off.

The lack of aggression in the female, together with the distinctive sounds, were the most obvious marks distinguishing the leopards' mating from that of lions I have seen. A lioness often swipes fiercely at her mate as he dismounts, but the female leopard did not do this. In any case, she was not given much chance to do so as the male usually leapt right over her head, only once going off to the side.

The pair were remarkable unshy, but after the fourth mating, the male walked unhurriedly into thick bush. The female soon followed. I listened to the terrific noises emanating at intervals from the bush, but only once caught a glimpse of a tail. The pair mated all day, and I left them at dark. If I was lucky enough to see the male again, I would recognize him once, for apart from his great size, his tail had a curious semipermanent half-twist which caused the pure white of its underside to show most of the time.

The following day I returned to the same area and listened hard for the now familiar mating sounds.

Although I was sure I heard them close-by, I never found the leopards again. I had been privileged to see a rarely observed part of their private lives, and their elusiveness was once again preserved.

Reprinted from World Pet Society Newsletter

How Long Do They Live?

By Bill Hastie

Adapted from "Nature's Ways" by Lawrence S. Earley, WILDLIFE IN NORTH CAROLINA, North Carolina Wildlife Resources Commission

Animals and old age...the two rarely meet.

A pampered and protected laboratory mouse may reach the ripe old age of four years before its biological clock runs down. But, in the wild a mouse can only count on about two months of life. It is rare to find an animal that dies of "old age" in the wild. Animals generally die young, long before the last tick on their biological clocks.

Wild animals die young because they are subject to natural controls that are missing in captivity. One example of a natural control is weather. Ice, snow, heat, drought, floods-severe weather conditions of all kinds cause heavy wildlife losses.

Disease is another cause of early death in wildlife. In the human world, diseases are mostly under control but in wildlife populations disease is common-disease from viruses, bacteria, fungi and disease passed by parasites. In fact, just about every animal in the world is host to a number of parasites.

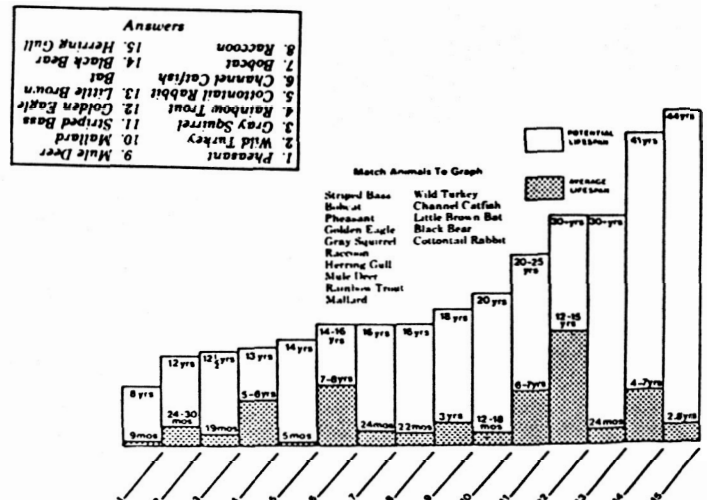
Predators also take large numbers of wildlife. In fact, predation is one of the most important causes of animal death in the wild.

These and other controls join to reduce the size of wildlife populations. And the density (number of animals per unit of space) of the animal populations usually determines how effective the control is. Put another way, the chances of a deer reaching its second birthday are greater if there are relatively few deer in the area than if the area is overrun with them. And parasites will find it easier to move from rabbit to rabbit if there are more rabbits in the population. Hence more rabbits die of disease. Even predators tend to concentrate on prey that is over-abundant in an area.

The bar graph shows the "average lifespan" (how long an animal may expect to survive in the wild) and potential lifespan (how long an animal may expect to survive under the best conditions, usually captivity) for fifteen animals. See if you can guess which animal from the list belongs to each bar.

Computing lifespans is difficult and figures are approximate, based on several published sources and field biologists' observations and experience.

Contributed by Ethel Hauser
Reprinted from Oregon Fish & Wildlife.





The End of Eden

Reprinted from Newsweek

Most Americans think of the environment-if they think of it at all-as whatever affects their own backyard. Oil spills, toxic-waste dumps, the Disneying of the national parks; all draw impassioned debate and criticism. In a broader context however, such parochial concerns amount to not seeing the forest for the trees. The worst ecological disaster now facing mankind, as four timely new books attest, is the relentless eradication of the world's rain forests-those magnificent green expanses that are, as conservationist Norman Myers writes in *THE PRIMARY SOURCE*, (399 pages, Norton, \$17.95) "the finest celebration of nature ever known on the planet"

Until recently, no one really thought much about saving rain forests. Millions upon millions of acres of them girded the equator, many unseen by human eye. In the last two decades, however, that seemingly infinite resource has dwindled at a terrifying speed. Every minute of every day, writes journalist Catherine Caufield in *THE RAINFOREST* (304 pages, Knopf, \$16.95) an exhaustively researched report from the front line, almost 30 acres vanish forever. Each year an area the size of England, Scotland and Wales is razed. By the turn of the century, if this rate of destruction continues, most major rain forests (they exist primarily in Central and South America, the Congo basin and such eastern islands as Sumatra, Borneo and Papua New Guinea) may well be reduced to degraded patches. The war is on, waged by loggers eager for valuable timber, poor farmers hungry for land to call their own, Latin American ranchers who, often for the prestige of being a weekend caballero clear vast tracts to run cattle.

It is hard for most people to envision what is being lost; few Americans will ever see a rain forest. Hence the value of books like Adrian Forsyth and Ken Miyata's *TROPICAL NATURE* (248 pages, Scribners \$16.95) which seeks to provoke curiosity about the forests-not just provide facts about them and succeeds splendidly. Written by two biologists-one of whom, Miyata, was tragically killed on a fishing expedition before its publication-"Tropical Nature" evokes the magic and wonder of a world completely contained within itself.

On first seeing a rain forest, write the authors, the overwhelming impression is of green stillness and luxuriant life. Far above the ground is the forest canopy, through which little sunlight penetrates to the forest floor. Everywhere one looks are huge lianas or vines snaking toward the light. Tree trunks drip masses of epiphytes-ferns, mosses and orchids. There are thousands upon thousands of plant, animal and insect species, most half of the planet's species in only 2 percent of its area. Nothing is as it seems: in the high stakes game of survival, many plants and insects have assumed the appearance or coloration of similar species that ate inedible or even deadly. Some really are deadly, including the sinister pit vipers that use infrared sensors, located between their eyes to track their victims through the darkness. At night, contrary to the tarzan myth of a jungle echoing with screams and roars, the forest interior takes on a slightly foreboding stillness.

It is difficult to believe that such richness cannot be converted into prime farmland. The fact is however, that most rain-forest soil is among the worlds oldest and poorest. What's more, the forest acts like a great sponge. If it is cut down, the result is not only flooding in the rainy season but drought in the dry; studies have shown that forests retain and recycle as much moisture into the air as comes from the clouds.

Destroy a rain forest and you wind up at best, with a few years of crops gleaned from the temporary nutrients that come from burning trees. Then the soil is exhausted and since each species is interdependent with so many others in the great chain of being the forest cannot

easily regenerate itself. Where once there was exuberant life there is barren wasteland.

And still the misguided schemes to make the rain forest "productive" continue. In the forthcoming *DREAMS OF AMAZONIA* (192 pages, Viking Press \$17.95) Roger Stone, a former Time-Life bureau chief in Brazil and now vice president of the World Wildlife Fund, chronicles one mistaken effort after another to turn Amazonia into El Dorado. The most famous venture of the 1970s was American billionaire Daniel K. Ludwig's ill-fated Jari, for which enormous paper mills were floated up the Amazon. Few people now remember Henry Ford's equally ambitious Fordlandia, which preceded Jari by four decades. This was a huge rubber plantation that limped along for years until Ford finally sold the land back to the Brazilian government in 1945. The most recent schemes, to resettle small farmers and clear vast tracts for cattle, have foundered on the poverty of the soil. Now the Brazilian government has launched a vast mining project, Grande Carajas, that dwarfs all of its predecessors. It will cover a sixth of the Amazon the biggest rain forest area left in the world with huge dams and mines. The first, Tucuruí Dam, which is already under construction, will alone flood 800 square miles of virgin forest. It is far too big an area to clear; the trees will simply be left to rot. As for the Indians who settled there, they'll be up-rooted yet again and forced ever nearer to extinction as will be the animal life.

What's distressing about such destruction is not simply the lost of the world's most beautiful forests; it is the possibly disastrous side effects. At worst, the carbon released from the burning and decaying forest could have a "greenhouse effect" on the earth, melting part of the polar ice caps and causing floods worldwide. The world's gene pool will dwindle as species become extinct; wild plants are regularly interbred with domestic crops to strengthen them against blight and pests. Most tragic of all, perhaps, is the annihilation of species as yet undiscovered, which might well have proven invaluable to mankind. Of the plants known to have anticancerous properties, for example, more than 70 percent are rain-forest species. "Few environmental disorders cause irreversible damage to our biosphere" writes Myers in *The Primary Source* "But the extinction of species is a different ball game. When a species is gone, it is gone forever."

Is there any way to save the forests, or at least significant chunks of them? Of the four books, *The Primary Source* is the most optimistic. Its proposals range from tree plantations with fast-growing species to limiting timber cutting to selected secondary or previously logged forest to a U.S. boycott of Central American beef. In the end, it is just as unlikely that Americans will deprive themselves of the cheap beef used by convenience food chains as that rain-forest countries will welcome foreign intervention. In many countries, the destruction of the forest is a direct result of national poverty. In others, it is a matter of machismo or pride-our moon shot-as one Brazilian proudly proclaimed to Stone. What chance does the forest stand against that? As an official of Elettronorte the builders of the Tucuruí Dam, told Caufield, "Any dam is economic, most of all if you consider that the land is free. The only price is the environmental one" That pride, sadly, will be paid by us all.

By Annalyn Swan

EDITOR'S NOTE: Tragically, this is the "wild" that self-proclaimed "conservationists" and "humane organizations" want us to leave the exotic to; where it belongs-safe from mankind. Now, more than ever the breeding program for the small spotted, South American cats takes on more importance, is more urgent than ever. After all Extinct is Forever.



Problem

Scientists at the Etosha National Park, a southern game reserve, have been giving contraceptives to lionesses in an experiment to correct an imbalance in the wildlife populations. Hu Berry, chief biologist at the park, said he noticed that the Etosha lions were multiplying in excess numbers.

But there was a sharp drop in the numbers of wildebeest, a member of the antelope family, and a chief source of food for the lion, which used to roam the area. The scientists found a variety of factors that were giving the park's predators an advantage in the struggle for survival.

Berry is trying to correct the problem by putting lionesses of cub-bearing age on contraceptives.

He implanted three-inch rubber capsules in their neck muscles that release a constant flow of birth control hormones into their system.

The decision to experiment with contraceptives followed a detailed study to find out what was causing the unusual situation at Etosha.



The Etosha Game Park, one of the largest game reserves in the world, is about the size of Massachusetts. At its center is the Etosha salt pan, the vestige of a prehistoric salt lake that dried up centuries ago.

The pan, 80 miles across at its widest point is a completely flat expanse of whitish, salty clay that becomes wet during the rainy season at the beginning of the year.

Berry said there were too many lions at Etosha because the delicate predator-prey balance had been significantly upset by man's intervention. His team of scientists identified three main reasons:

Etosha is totally fenced, which precludes the age-old seasonal migrations of hoofed animals for water. Secondly, numerous bore holes have been drilled to provide a permanent source of water for the animals which cannot follow the rains.

In addition, a tourist road has been built through the reserve and in this case, Berry said, the backlash of disturbed nature took a subtle and unexpected deadly turn.

The numerous gravel pits used to build the road have had an ideal alkaline breeding area for anthrax, a disease which can decimate hoofed stock but to which the lion is immune.

Without the fencing, the lion prides had to join the annual migrations of the wildebeest and many of the cubs died in the long, arduous treks. Nowadays, they have only to stake out the man-made waterholes to feed. There are also the carcasses of anthrax casualties to feast on.

At present, Berry's team is studying a group of 55 lions from the park's estimated 500. Ten lionesses have had implants and their behavior is being compared to 15 lionesses in the group who are continuing to bear cubs.

The hormone stimulates post-pregnancy lactation in the animals, preventing conception. So far, the lionesses given the drug are notably healthier than the others. Female lions live about 10-12 years, males a bit longer in the wild.

Two Gold Crowns for Jack

Reprinted from the San Francisco Zoo's Newsletter

Jack, the San Francisco Zoo's 16 year old Bengal tiger, now has two gold crowns. The dental work became necessary after Jack fractured his upper and lower right canine teeth.

According to zoo veterinarian Dr. Craig Machado, the pulp cavities were exposed and one tooth was abscessed. "In a situation like this, with the pulp cavities exposed, infection is likely. The infection can ultimately go to the grain and cause the animal's death," explained Dr. Machado. The decision was to do root canals on Jack.

Dr. Paul Brown, a Palo Alto endodontist, performed the two root canals. Although his work on Jack was his first at the zoo, he is no novice to large animal endodontics. He has done root canals on four of Marine World's lions and tigers and has outfitted a portable dental office with an x-ray unit, high and low speed hand pieces, a vacuum and air. He also had oversize instruments made to facilitate working on large animals.

"It was a thrill; one does not ordinarily have an opportunity for such close contact with as spectacular an animal as Jack" said Dr. Brown.

Jack was anesthetized at the Lion House and brought to the hospital on a stretcher in a pickup truck. Afterwards he recuperated in an off-view "recovery room" in the Lion House. While he was in the hospital, the veterinary staff took the opportunity to conduct a thorough examination. "It was very impressive to see the mechanism of how animals are looked after at the zoo" commented Dr. Brown.

Dr. Bob Turner, a general dentist from Palo Alto, made the crowns. He found working on a tiger "a lot of fun" and somewhat easier than working on people. "Access into the mouth is easier. Everything was on such a grand scale," noted Dr. Turner. Both dentists agreed that Jack was a model patient; of course, assistants helped hold his head still and kept his tongue out of the way when necessary.

Contributed by Jean Townes



Tiger-sized dentistry: Jack, a 16-year-old Bengal tiger, has two root canals.



Dur-A-Gard Physical Properties

HARDNESS (Shore D).....	ASTM D-1706	70-80
WATER ABSORPTION.....	ASTM D-543	0.37% after 7 days immersion
LINEAR SHRINKAGE.....	ERF 12-64	.002" per inch
TENSILE STRENGTH.....	ASTM D-638	3,000 psi minimum
FLEXURAL STRENGTH.....	ASTM D-790	4,000 psi minimum
COMPRESSIVE STRENGTH.....	ASTM D-695	16,000 psi
IZOD IMPACT (ft. lb./in. notch).....	ASTM D-256	0.50
BOND STRENGTH TO CONCRETE.....	ACI-403	Concrete fails before loss of bond
ULTIMATE ELONGATION.....	ASTM D-638	20%
HEAT DEFLECTION TEMPERATURE.....	ASTM D-790	No slip or flow at 242°F.
FUNGUS & BACTERIA RESISTANCE.....	MIL-F-52505	Will not support growth of fungus & bacteria
SALT SPRAY RESISTANCE, 25% solution		
@ 90°F.....	MIL-F-52505	No effect after 100 hrs.
THERMAL SHOCK	MIL-F-52505	No cracking or loss of adhesion
ABRASION RESISTANCE, CS-17 Wheels(2)		
Wgt. Loss, 1000 gr. load, 1000 cycles.....		.035 Gm Loss
U.V. RESISTANCE	MIL-F-52505	No chalking or loss of adhesion
TOXICITY		Non-toxic
POT LIFE		23 min. or 45 min.

Dur-A-Gard may be applied with roller or brush, but it's no paint! Dur-A-Gard's epoxy finish is lustrous and long lasting. In fact one coat of Dur-A-Gard will last longer than ten coats of latex paint! Dur-A-Gard not only wears well, it resists chemicals, acids, solvents, oils, and harsh detergents... retains its waterproof, easy-to-clean, glossy finish in any one of 16

appealing colors. Dur-A-Gard adheres to wood and metal, and it's a "natural" for concrete floors.

It's easy to apply... merely combine Dur-A-Gard's two components and spread with roller or brush. A non-slip texture may be obtained by adding a suitable grit during application. Simple instructions are included in every order.

FOR BEST RESULTS:

The surface to be covered must be bondable, dry, and clean. The temperature during application, and for several hours thereafter, must be over 50°F. One coat may be satisfactory for many areas, but two are recommended for more uniform color and

greater durability. On average concrete apply the first coat at the rate of about 250 square feet per gallon and the second coat at 300 square feet per gallon. Dur-A-Gard may be applied as thickly as desired and can be used to fill and level a rough surface.

DUR-A-GARD RESISTANCE TO CHEMICALS

REAGENT	45 Min.	EXPOSURE 24 Hrs.	7 Days
Acetone	E	NR	NR
Acetic Acid (10%)	E	E	G
Acetic Acid Glacial (100%)	E	NR	NR
Ammonium Hydroxide (28%)	E	G*	NR*
Benzene	E	E	E
Chloroform	E	G*	NR*
Calcium Chloride (30%)	E	E	E
Clorox (Full Strength)	E	G*	NR*
Coca Cola	E	E	G*
Cottage Cheese	E	E	E
Chromic Acid (10%)	E	G	NR
Citric Acid (30%)	E	G*	NR*
Ethyl Alcohol (95%)	E	G*	NR
Ethylene Glycol	E	G	NR
Ethylene Dichloride (10%)	E	G	G
Ferric Chloride (10%)	E	E	G*
Gasoline	E	E	E
Glycerine	E	E	E
Hydrogen Peroxide (8%)	E	G	NR
Hydrochloric Acid (20%)	E	E	G
Hydrofluoric Acid (10%)	E	NR	NR
Hydraulic Fluid	E	E	E
Isopropyl Alcohol	E	E	E
Lactic Acid (20%)	E	E	G*
Methyl Isobutyl Ketone	E	E	E
Methylene Chloride	E	NR	NR
Mineral Spirits	E	E	E
Motor Oil	E	E	E
Mustard	E	G*	G
Nitric Acid (10%)	E	G*	NR*
Phosphoric Acid (85%)	E	E	E
Salt Water	E	E	E
Spic and Span (30%)	E	E	E
Syrup	E	E	E
Sulfuric Acid (30%)	E	E	E
Sodium Hydroxide (30%)	E	G*	G
Silver Nitrate (10%)	E	G*	G
Tide Detergent	E	E	E
Trichloroethylene	E	G	NR
Tri-sodium-phosphate	E	E	NR
Toluene	E	E	E
Urine (Synthetic-6.6% urea)	E	E	G

Legend: E - Excellent, no chemical deterioration
 G - Good, sample discolored but no chemical deterioration
 NR - Not Recommended, sample deteriorated. Contact Dur-A-Flex to ascertain if a more chemical resistant formulation is available.
 *Resistance to attack by the chemical can be improved by using Dur-A-Glaze #1 or #2 as a topcoat(s).

CAT PROOF !!

Great for walls too!

DUR-A-GUARD EPOXY COATING is available in 15 colors: White, Black, Medium Gray, Dark Green, Light Green, Dark Blue, Light Blue, Dark Brown, Cocoa Brown, Tile Red, Canyon red, Yellow Ochra, Bright Yellow and Light Yellow.

Order sufficient amount of a color to finish the entire job. Slight batch-to-batch color variations may occur.

AVAILABLE TO LIOC MEMBERS AT DEALER COST
 THAT'S A 40% DISCOUNT!

UNIT SIZE	SHIPPING WEIGHT	LIQ. PRICE
3 quart	10 lbs	\$ 39.52
1 1/2 gallon	18 lbs	79.06
3 gallon	34 lbs	149.33
15 gallon	164 lbs	701.81

Normal coverage - floors- 250 square feet per gallon per coat. Walls- 350 square feet per gallon per coat.

Thicker coatings may be appropriate for heavy traffic areas.

DUR-A-GUARD is USDA and OSHA approved.

ORDER FROM: Great Eastern Distributors
 3071 Peachtree Rd. N.E. Suite 11
 Atlanta, Georgia 30305
 1-800-251-5800