

NEWSLETTER

CONTENTS:

Dandy	Page 3
SOSC, Suzi & Servals	Page 4
Action Alert	Page 6
History of Major Feline Viral Diseases	Page 7
Breeder Directory	Page 8
Transylvanian Trek	Page 10
Gum Disease	Page 11
For Cat's Sake	Page 13
Pelt trade Shifts to Smaller Species	Page 14
Help Needed	Page 15

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

Volume 29-Number 1
January - February 1985

LONG ISLAND OCELOT CLUB



MEMORIES OF CHRISTMAS PAST - CHOLO, clouded leopard, shown here at 11 months in December 1983, receives a Christmas present from Helena Shelley. Cholo belongs to Bill Boyle of Tacoma Washington. At 14 months Cholo weighed about 60 pounds, and was still growing. Bill writes "He is the sweetest and tamest cat that I have ever run across. Unfortunately, Camille who is approximately 45 pounds is not as docile. However, she has had so many health problems that whenever a stranger gets near she thinks that they are going to stick her with a needle"



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

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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



DANDY

Seeing the Newsletter without a picture on the cover made me realize it was time to send some information about our boy Dandy. These pictures were taken when he was about 5 months old.

Dandy came to us in October, 1983, from Montana as a 6-week old, 4 1/2 pound kitten. He was not yet weaned and almost right away he chose my wife Sue, to be his "mother". He only wanted her to feed him, and he got upset if he didn't know where she was. Now at six months, he is a 40 pound baby. He loves for Sue to hold him and rub him while he sucks on his arm. He comes to me when he wants to play and rough-house but it's always Sue he looks to when he wants to be cuddled.

Dandy eats mostly chicken necks and hearts, supplemented with beef, beef heart, tongue or kidney and of course vitamins. He now eats about 15 necks plus a pound of red meat a day.

Dandy is an indoor cat and he has his own room which he stays in when we're not home. As soon as we come home he starts chirping to be let out. While we are home he is allowed in the kitchen, livingroom, diningroom in addition to his room. All these rooms have been "cougar-proofed" as much as possible but he still gets into trouble. He loves to chew on the recliner and we've had to repair it 3 times so far. He also gets in moods where he likes to tear clothes off - while they're being worn.

We have 4 domestic cats and Dandy loves to torment them. He really picks on Cruiser. Every time Dandy sees Cruiser he chases him and when caught pins him to the floor. About that time Cruiser starts screaming his lungs out and we come to the rescue. Dandy really doesn't hurt him, it just infuriates him to be helpless.

Since there are rooms where the other cats are allowed but Dandy is not, we came up with a way for them to avoid him. I cut a hole near the bottom of the doors which is big enough for the housecats but Dandy can only get his head in. Now if they are out and see Dandy they run for a door, usually with Dandy in hot pursuit. They jump through the hole in a flash and when Dandy puts his head in they turn around and swat him. They know he can't get to them, so they lay down just beyond his reach. It's funny to see how they come out and look to see where Dandy is before they go too far from the safety of a door. Sometimes Dandy outsmarts them by hiding until they are well away from the hole then jumps them. Needless to say we have to come to the rescue in these situations. Dandy has never hurt any of the cats, but they hate for him to get them.

That's a little bit of what life with Dandy is like. I'll update the story later on. We would like to talk to other cougar owners, so please contact us. Also, if anyone knows of books on cougars please let us know. The only two we've found so far are "Ghost Walker" and "Love Affair with a Cougar".

Mike & Sue Boston
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Altoona, PA 16602
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CONVENTION! Minneapolis August 16, 17, & 18

SOSC SUZI & SERVALS

Recent inquiries and widening interest in S.O.S.C., Inc., have prompted me to briefly explain the functions and purposes of our work and services.

Society of Scientific Care, Inc. founded and directed by Pat Quillen, is a non-profit, tax-exempt zoological institution which conducts research studies on wild cats, with an emphasis on the smaller exotic species. Corporate functions include the propagation of existing captive gene pools, nutritional and behavioral studies, consultation services and public education in many forms. For example, the London Zoological Society requested data from Pat Quillen concerning her valuable nutritional research on the handrearing of oncillas, which was published in the International Zoo Yearbook, Vol. 21.

Another concept was my recent capacity as consultant to a zoo planning a North and South American cat exhibit. All research is conducted under strictly humane and optimal conditions. The highest priority is always the health and welfare of every animal. Functioning as a vehicle, we provide help, service and documented cumulative information to individuals or institutions that will increase the understanding of the total animal. Our Board of Scientific Advisors include Willard Centerwall, M.D., geneticist; S.W. Seager, DVM, Texas A & M reproductive authority; Dr. Erich Klinghammer, Purdue University Dept. of Psychology, behaviorist; and William Medway, VMD, PhD, Dept. of Pathology, University of Pennsylvania.

My recent experience hand raising serval cubs from birth provided material for yet another study phase, which I have been asked to share through this newsletter. The following article reflects my experiences and concepts as well as methods from several zoos, veterinarians, and the successful private breeders who generously offered the benefits of their experience and knowledge.

Due to an educational background in the field of psychology, and behavioral training involving marine mammals and canines, my primary corporate responsibility has been behavioral research. The unexpected presentation of two male serval cubs from my young adult pair brought an abrupt new dimension to my work.

On February 14th, 1984, I noticed that my 22 month old female "Sole" looked as though she had gained weight. Examination of the breast area revealed enlarged nipples. She also appeared to be in breeding season and was readily accepting her mate "Shaman", who was only 12 months old at the time. This is far below the average fertile breeding age. The breeding activity continued for the next 2½ weeks, and I began to assume Sole's physical changes were due to hormonal maturity and false pregnancy symptoms. Her body size did not increase, however on March 5th while working with her, I felt life moving. Although the pair was still actively breeding at this time, which defied "pregnancy behavioral norms", I prepared a nesting site on March 6th. The environmental changes upset Sole. She stayed even closer to her mate. At times my presence was unwanted. Other times during that day she wanted me to stay. That evening I separated Shaman into an adjacent run. By 6AM March 7th, Sole seemed more calm. She was settled into the nest box and talked quietly to me as I would check on her. An hour and a half later, I heard the chirping of the newborns. She cleaned them, severed the umbilical cords and nursed them for two hours when she spontaneously committed the cubs to me for hand raising. One cub, slightly dehydrated, was found in the nest, the other cub, located on the floor was quite dehydrated and suffering from hypothermia. Ironically, this was the infant that would survive.



I brusquely massaged them and wrapped them in blankets placed partially on a medium set heating pad. (Later I situated them into a carrier using newspaper on the bottom for insulation, and towels on top. The carrier was placed half on the heating pad so that the cubs could move toward or away from the heat source as needed) I then secured bottles, Esbilac, hydration fluids and syringes from my vet, and sterilized all utensils. Although my records contained information on juvenile serval nutrition from four weeks of age, the newborn formula was filed at the home office in California, and therefore not immediately available. I progressed by preparing an initial formula of 1 part Esbilac to 3 parts purified, distilled water. Two feedings later I increased the formula strength to a ration of 1:2 which I offered by eye dropper until they accepted the bottle, every 1½ hours. They were also given 10ccs of hydration fluids subcutaneously every 4 hours. (5 ccs in the shoulder area, and 5ccs in the rear) until the electrolyte balance and hydration appeared normal. While many breeders use a formula strength of 1:2 successfully, my cubs became constipated and after 2 days with much difficulty produced a hard, dry stool. I returned then to the initial strength of 1:3. The weaker dilution helped with bowel elimination, however within several days it became apparent that the cubs required increased nutrition. This new dilemma was solved when on the advice of a veterinarian, I enriched the formula by adding 1 hard-boiled egg yolk to every 3 cups of prepared formula, plus ½ dropper of Vi-Daylin vitamin supplement to every 2 oz. of formula, and a drop of Karo light syrup to each feeding. Since Karo can facilitate the growth of undesirable bacteria, it can be fed in a ratio of 1cc Karo:2ccs formula twice a day, or add it fresh per feeding. Avoid adding vitamins or Karo all at once to a large batch of formula that may sit in the refrigerator for a day or two. Since formula adjustments have to be made frequently, I found it easiest and less wasteful to mix only one day's worth at a time and would recommend that prepared formula not be kept past 48 hours. Some sources recommend honey as a substitute for Karo. Although it basically serves the same purpose, there is concern that honey may contain a strain of botulism to which human and animal infants are susceptible, so the Karo may prove a safer choice.

One cub thrived from that point on. Once defecation problems subsided and the cub stabilized, I progressively strengthened the formula each day with the addition of 1 teaspoon Esbilac to the existing 1/3 cup: 1 cup distilled water, and ½ teaspoon strained turkey baby food until I reached a maximum formula of ½ cup Esbilac:1cup water, 1 whole egg yolk and 1 jar turkey, with vitamins and Karo added once a day. Poultry is preferred as the initial introduction to meat as it is easier to digest than red meat. In addition to the bottle formula, I introduced further solids at 3½ weeks of age, using a mixture of lean beef ground 3 times, formula, and baby rice cereal, starting with a liquid consistency and gradually adding more meat and cereal to thicken. Although bottle feedings decreased with the added nutrition, I made no attempt whatsoever to wean him completely from nursing, for it is generally believed those born in the wild nurse for extended periods. My adult male enjoyed an occasional bottle even at 4 months of age. Between 4 and 5 weeks, commercial products such as Western Plateau #1 diet can be safely introduced slowly to the existing solids until a changeover is complete. If chicken necks are to become the main staple, one breeder introduces her cubs to the food by allowing them to lick or suck the meat which prepares the intestinal flora slowly for digestion.

One cub survived only to his 22nd day. Health problems manifested within the first 48 hours of life. The autopsy revealed an underdeveloped digestive tract. He had been treated for hypoglycemia also. Immune deficiency was apparent by a lesion acquired at birth which never healed properly, puffiness behind the eyes and the length of time before the umbilical stub dried and fell off. The end result was pneumonia. Due to a probable premature birth compounded by the fact that the cubs received little if any antibodies from the mother, we feel very grateful that one cub survived against such odds.

During these weeks I contacted my veterinary specialists, zoos, wildlife parks, and private breeders. While discussions centered primarily on matters pertinent to my particular cubs, the conversations eventually expanded to other case histories and stories, surfacing interesting and useful information. The following is a synopsis of those facts, and some of my behavioral recommendations:

DIARRHEA-Treatment possibilities

1. Immediately strengthen the formula
2. Kaopectate - ½ ML every 4-6 hours until it stops.
3. Lactobacillus (Lactinex) 80 mgs per kg of body weight, once a day.
4. Lime water-dose by veterinarian recommendation.
5. Cholormycetin - in one form dosed only once or twice has proven very successful. The drug is potentially dangerous and should be administered only by dosages and medium recommended by a veterinarian.
6. Frequently diarrhea accompanying teething can be controlled by formula strength and Kaopectate.
7. Diarrhea should be brought under control as quickly as possible as it will compromise a cub's health almost immediately.

CONSTIPATION - Treatment possibilities

1. Reduce the formula strength and compensate nutritionally with more frequent feedings. Constipation can cause dehydration and the extra fluids are beneficial.
2. Kaopectate-although most widely used for diarrhea, the pectin can be a soothing agent to the gut, especially if the constipation is causing discomfort or symptoms of cholic distress. One capful per oz of formula given at every feeding could help.
3. Kao - useful as a stool softener. Dosages and administration appear earlier in this article.
4. Thorough manual stimulation with a warm, moist terry wash cloth, particularly to the sides of the anal area.
5. Infant glycerine suppositories - insert gently just to the point of resistance and hold in place until muscle stimulation is activated (5-10 min.)
6. A thermometer coated with vasoline inserted my stimulate bowel.
7. Milk of Magnesia - although not considered a dangerous substance, can inhibit the absorption of calcium, because the magnesium binds to the calcium element.
8. Mineral oil may be safely applied rectally by syringe and perform well as an area lubricant. Oral use is discouraged due to the high risk of aspiration and the oil prevents vitamin A absorption while passing through the tract.

NUTRITION

1. Megadoses of vitamins can be lifesaving to a compromised animal, but should be given only on the advice of a veterinarian experienced in this area. Vi-Daylin and Abdec vitamins provide the same vitamin ratios, however Abdec is twice the concentration. Both are recommended.
2. There is strong evidence that exotic cats are not exclusive carnivores. If feeding 100% protein-calcium diet, plant material should be added, in some form, when weaned.
3. Discard unused formula and opened jars of babyfood after 48 hours, it is preferable not to warm formula more than twice.
4. Add each new ingredient to an infant's diet separately and slowly, so that an irritant could be isolated if a digestive upset should occur.
5. Nutrical - a small, pea-sized piece placed in the mouth before feeding time can stimulate the appetite. It is also beneficial to keep an animal going that has stopped eating altogether. It should not be used in large amounts on a healthy cub for it can create a false sense of being full and decrease his appetite for formula nutrition vital at his age.

VACCINATION - A healthy infant, handraised from birth may receive 1cc of killed virus distemper serum (Norden brand) at one week of age and once a week thereafter until 16 weeks of age.

HAIR LOSS Particularly the head and neck area, is not caused by over-handling a handraised animal, as the mother's rough tongue and transporting the babies does not create this condition under normal circumstances. If the infant is handraised from birth, and the mother did not completely groom the cub initially, it is important to bathe the infant's fur with a damp sponge to remove the birth acids. Thorough stimulation of the skin 2 or 3 times a day simulated the mother cat's care and can avert this problem. A two minute, all-over gentle massage at feeding time fulfills this requirement. Other causes of hair loss is an environment that is too warm; recommended is 85° for a healthy animal.(90°-95° for an infant with subnormal temperature.) Inadequate nutrition or a generally unhealthy state will also frequently precipitate hair loss. The condition is normally temporary.



BEHAVIOR

The field of psychology focuses not only on therapeutic measures to correct established dysfunctions, but the prevention of problem behavior as well. On the neuron or nerve cell, there is an insulation surrounding the axon or transmitting cable called the myelin sheath. The thicker the sheath or insulation, the faster the travel of the electro-chemical impulse. Studies on rats showed that the animals who were cuddled and nurtured developed thicker insulation along the axon than non-nurtured rats. The nurtured rats developed faster in areas of social behavior and sensory-motor stimulation. In turn, this development is related to intelligence growth. In the wild, babies receive this necessary nurturing and I suggest that it is important in handraising infants also, beginning at day one.

Concerning domestic dogs and cats, one theory suggests that the 21st day of life is the "day of awakening"; the day that the animal begins to collate all the information from his separate senses. Through speaking with others, and observing my own animals, this theory could possibly apply also to the wild cats. Should this be the case, it is important that the 20th, 21st and 22nd day be free of negative stress and socially positive. (i.e. no routine shots, no inexperienced handling, excessive noise, etc.) Although attempts should always be made to avoid negative situations, these days may be especially critical to the lifelong attitudes of the animal.

For several years, Pat Quillen has pottied her infants on pampers and later transferred the association to a Pamper in a litter box. Success with the oncallas and leopard cats was joined by success with my serval cub. By 4½ weeks of age, he would seek out the Pamper to perform his potty duties quite reliably. From pottying the newborn on a Pamper, I then placed one at one end of the carrier, then when older to just outside the carrier, and slowly moved it further away, a foot at a time. Proceed cautiously with this method as some animals might be inclined to ingest the Pamper.

Primary inborn disorders such as malfunctioning lungs, heart and liver may show themselves in the first week of life; digest abnormalities at 2-3 weeks and immune deficiencies may not manifest until 8-10 weeks. For this reason, it is recommended that cubs not be placed too early. For an animal that has been well socialized, this should pose no problem in readjusting to the new home.

Should you find your vet concerned over the "exotic" factor of your animal, you can assure him that under most circumstances he can safely proceed with the same treatment used for a domestic cat.

At this writing Sole is again pregnant and through this we hope to learn more. While guidelines are helpful it is important to remember that each litter is different, and each cub within a given litter may have different requirements. Hard and fast nutritional polarization can be counterproductive. Flexibility is essential.

IMPORTANT

The noted dosages were those suggested for my particular cubs and their specific conditions and may not apply on a general basis to other animals. SOSC emphasizes that no drugs or substances be administered to any animal without prior direct recommendation from a qualified veterinarian, based on the age, size, condition and species of the specific animal. The various products and methods offered here were not intended as limiting parameters, but rather as a sampling of possibilities under current attention.

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Jean Hatfield reports in with an ocelot kitten, and expects another as well as a litter of cougars soon

Kim & Geri Henry of Burbank Ohio report in with 2 male cougar cubs, two separate litters, both born in November.



Odds are....

Two police officers in Las Vegas, Nevada were surprised to see a black panther peering at them through their windshield. The officers gazed back at the black cat, which had leaped atop the car and immediately called the animal control center-but the call went unanswered.

Another patrolman in the vicinity heard the radio calls for help and sighted a car bearing the personalized license plate CATS, put two and two together and had the license traced. He discovered the auto belonged to Keith Evans, who lived nearby. Evans was summoned, gathered up the panther like the pussycat it was and took it home.

Contributed by Jean Townes

ACTION ALERT



Under existing law, the current moratorium on the trophy hunting of mountain lions will expire on January 1st, 1986. At that time, mountain lions unless new protective legislation is enacted will again be classified as a "game animal" in the state of California. Trophy hunting could be allowed and mountain lions could also be killed under an archaic, lax depredation provision. Fortunately, State Senator Robert B. Presley has introduced excellent legislation to protect mountain lions. His bill S.B. 76, would make permanent the ban on mountain lion trophy hunting and continue the restrictions on taking depredating lions. SB 76 will first be heard by the Senate Committee on Natural Resources and Wildlife. No hearing date has been set yet, but the earliest possible date is February 12th, 1985.

PLEASE WRITE IMMEDIATELY TO SENATOR ROBERT B. PRESLEY CHAIRMAN, SENATE COMMITTEE ON NATURAL RESOURCES AND WILDLIFE, STATE YOUR SUPPORT FOR S.B.76. REQUEST YOUR LETTER BE INCLUDED IN THE COMMITTEE FILE.

Also write your local Senator and Assemblymember if you don't know who these are, check with the Voter Registrar listed in your phone book.

ALSO WRITE Governor George Deukmejian.

The address for all state Senators, Assemblymen and the Governor is:

State Capitol
Sacramento, CA 95814.

PLEASE TAKE CARE OF THIS SOONEST - IT'S IMPORTANT!

↓ Legislation ↑

Last year, at times in response to accidents involving "attacks" by exotic pets, many more local authorities have banned their ownership.

Two North Carolina counties adopted ordinances banning or restricting the ownership of exotics. The state of Tennessee issued a regulation forbidding the importation of exotics for private ownership. The town of West Des Moines Iowa outlawed certain exotic animals, and a neighboring town is sponsoring similar legislation.

On the other hand, a number of jurisdictions approach the problem with more reason. In St. Louis County, rules were adopted which allow ownership by those who can show proper facilities and knowledge, under permit.

Why the difference? Organization!

When the folks in St. Louis found out about the proposed law they pooled their knowledge, and got experts in legislative matters to help and then organized a campaign to make themselves heard in a rational manner.

Recently formed, the Wildlife Coalition International (WCI) was formed to keep abreast of state and local laws. WCI is staffed by a Washington D.C. Law firm with experience in wildlife law and administrative and legislative procedures.

They are unable of course to cover the USA entirely and need any input as to upcoming legislation as we may be able to provide. For more information contact:

WILDLIFE COALITION INTERNATIONAL
1050 17TH St. N.W.
Washington, D.C. 20036

(202)466-8270

The natural history of the major feline viral diseases

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III - FELINE VIRAL RHINOTRACHEITIS (FVR) AND FELINE CALICIVIRAL DISEASE (FCD)

These two diseases constitute the major causes of respiratory disease in the cat. Because they have many similarities with respect to their epidemiology they will be considered together.

AGENT FVR is caused by a herpesvirus, feline herpesvirus 1. As far as is known there is only one serotype of this virus and it of reasonably uniform pathogenicity in a susceptible cat. Although there is only one main feline calicivirus (FCV) serotype there are a number of different strains which vary slightly antigenically and which are of varying pathogenicity.

INFECTIVITY Both viruses are highly infectious to the susceptible cat. Respiratory disease tends to appear wherever cats are congregated together, infection often being introduced by the clinically normal carrier. Once present in a colony, the disease rapidly becomes endemic its presence being noted by the existence of chronically affected animals with recurrent or persistent signs. Outbreaks of acute disease may also occur, particularly in young kittens.

There is experimental evidence for FVR that the level of the infecting dose of virus may play a role in determining the length of the incubation period and the severity of the resultant syndrome. Duration of contact has also been shown to be important in the transmission of the disease, particularly with shedding carriers where the discharges were not so copious. Similar suggestions have been made for FCD.

SOURCE OF VIRUS In infected cats, both viruses are present in large amounts in the secretions of the upper respiratory tract; in the copious ocular, nasal and oral discharges. FCV is also shed occasionally in urine and faeces, but it is probable that this is not of major significance.

MODE OF TRANSMISSION: The major mode of transmission is the intranasal, intra-oral and conjunctival routes. Limited experimental evidence suggests that transplacental infection of FVR virus probably does not occur following natural routes of infections, although it can be induced following intravenous inoculation of virus. For FCD however, where generalization of the virus is more common, it is possible that the virus may on occasion cross the placenta; occasionally, FCV has been isolated in an aborted fetus.

Unlike FP, where because of the stability of the virus outside the host, a contaminated environment constitutes a major source of virus to the cat, the feline respiratory viruses are relatively fragile outside the cat (FVR virus surviving for 18 hours, FCV 8-10 days, depending on temperature and relative humidity) and are susceptible to heat, drying and the most common disinfectants. They must therefore rely heavily for their continued survival on their ability to survive in the cat. They do this in two ways (Fig.2) First, by spreading from acutely infected clinical cases to susceptible cats as outlined for FP. Secondly, they both have the ability to induce an immune carrier state in recovered animals. Such animals are of great epidemiological importance, not only because they are undoubtedly infectious to in-contact cats but because the carrier state in both these diseases is very widespread. Studies have shown that at least 80 per cent of FVR recovered cats remain as viral carriers. In colonies where FCV is endemic, up to 40 per cent of the animals have been shown to be viral carriers.

The nature of these persistent infections is different in the two diseases. In FVR, the carrier state is characterized by a latent phase, with only intermittent episodes of virus shedding, often preceded by a natural 'stress', such as re-housing, or possibly kitting and lactation, or artificially, by corticosteroid treatment. The carrier state for FCV, however, is characterized by more-or-less continuous virus shedding and except for 'low-level' virus excretors, infections virus can nearly always be detected.

NATURAL HISTORY OF FELINE VIRAL DISEASES

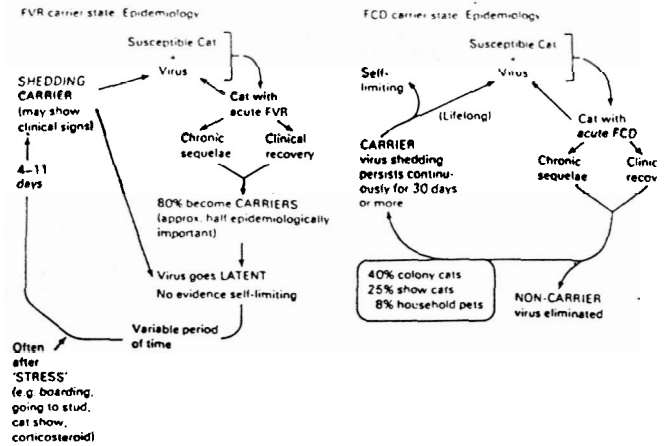


Fig. 2. Persistence of the feline respiratory viruses in the cat population

IMMUNITY: The levels and duration of immunity to the two diseases are not well documented, though some data have been published to show that following vaccination, immunity to FVR and FCD may last up to a year. In both diseases, although the level of immunity is reasonable in the majority of cats during this time, protection may not be entirely complete in all animals.

There is only limited information on the duration of passive immunity in kittens born to recovered queens; in FVR it has been shown to persist from 2-10 weeks, with mean levels falling below detectable levels by 6-9 weeks of age; there is very little information about FCD, but it is suggested to be more persistent than FVR, up to, or beyond 11 weeks.

VACCINATION: Vaccines have been moderately successful in controlling feline respiratory disease in the majority of healthy previously unexposed animals. Both modified live and inactivated systemic vaccines are available and also modified live vaccines given by the intranasal route. However, there may be some problems associated with trying to control feline respiratory disease through vaccination alone. This has been reviewed in more detail by Gaskell, (1981) but basically problems arise because the viruses are highly infectious and widespread in the population, and they persist for a long time in infected cats as a high proportion of animals remain carriers. Despite vaccination it is probable that such animals can still be a source of infectious virus. Furthermore, for both FVR and FCD there is evidence that a previously unexposed cat vaccinated intramuscularly may subsequently become a virulent field virus carrier following challenge, without ever having shown clinical signs. Such animals are clearly of epidemiological importance and could initiate outbreaks in young kittens, at the stage at which they lose their passive immunity, in colonies where the disease is endemic. Thus vaccination should be regarded as protection against disease for the individual rather than protection against infection. There is some evidence that the intranasal vaccination of previously unexposed animals may protect against the establishment of a field virus carrier state, at least in the short term, though it is not clear from these studies if such animals could withstand repeated challenge from field virus after longer periods of time.



THE RESULTS OF THE RECENT ELECTIONS ARE NOTED ON PAGE 2.

THERE WAS AN INCREASE FROM THE PREVIOUS ELECTION IN THE NUMBER OF BALLOTS RECEIVED - 70 OF YOU VOTED. HOWEVER, SEVERAL BALLOTS HAD TO BE DISCARDED BECAUSE THEY WERE NOT PROPERLY FILLED OUT.

TO THOSE PAST OFFICERS, AND THOSE WHO ACCEPTED NOMINATIONS BUT WERE NOT ELECTED, WE THANK YOU

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

Ferry, 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

Regep, 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

Scientific Name COMMON NAME	DATE LISTED	CONTROLLED RANGE
<u>LEOPARD CAT*</u> (<u>F.bengalensis</u>)		
Andrews, Penny Hatfield, Jean Hauser, Ethel Killman, Murray Krebs, Jo Anne Porges, Albert Regep, Damian Schaecker, Gayle		
<u>LYNX</u> ◦ (<u>F.lynx</u>)		
Andrews, Penny Siberian & Canadian Killman, Murray Canadian Krebs, Jo Anne Siberian & Canadian		
<u>CARACAL</u> (<u>F.caracal</u>)		
Andrews, Penny Krebs, Jo Anne		
<u>CLOUDED LEOPARD*</u> (<u>F.nebulosa</u>)		
Vanderwall, Jackie		
<u>COUGAR</u> ◦ (<u>F.concolor</u>)		
Andrews, Penny Garadino, Natalie Hatfield, Jean Killman, Murray Krebs, Jo Anne Schaecker, Gayle		
<u>GEOFFROY'S CAT</u> (<u>F.geoffroyi</u>)		
Hatfield, Jean Hauser, Ethel Krebs, Jo Anne Mutascio, Michael Payton, John Quillen, Pat		
<u>JAGUAR*</u> <u>P.onca</u>		
Killman, Murray		
<u>Leopard*</u> (<u>P.pardus</u>)		
Regep, Damian Asian		
<u>HYBRIDS</u>		
<u>BENGAL</u> (<u>Leopard cat/domestic</u>)		
Hauser, Ethel		
<u>SAFARI</u> (<u>Geoffroy's/Domestic</u>)		
Hauser, Ethel Mutascio, Michael Payton, Millie		
Acinonyx jubatus CHEETAH	2/70	Anywhere found
Felis bengalensis LEOPARD CAT	6/76	Anywhere found
Felis concolor coryi FLORIDA COUGAR	3/67	Anywhere found
Felis concolor costaricensis COSTA RICAN COUGAR	6/76	Anywhere found
Felis concolor cougar EASTERN COUGAR	4/73	East of Miss. River
Felis iriomotensis IRIOMOTE CAT	6/79	Anywhere found
Felis jacobita ANDEAN CAT	6/76	Anywhere found
Felis lynx pardina SPANISH LYNX	6/70	Anywhere found
Felis marmorata MARBLED CAT	6/76	Anywhere found
Felis nigripes BLACKFOOTED CAT	6/76	Anywhere found
Felis pardalis BRAZILIAN OCELOT	3/72	Anywhere found
Felis pardalis mearnsi OCELOT	3/72	Mexico South
Felis planiceps FLAT-HEADED CAT	6/76	Anywhere found
Felis rufus escuinapae MEXICAN BOBCAT	6/76	Anywhere found
Felis serval constantina BARBARY SERVAL	6/70	Anywhere found
Felis temmincki TEMMINCK'S CAT ASIAN GOLDEN CAT	6/76	Anywhere found
Felis tigrina oncilla TIGER CAT ONCILLA	3/72	Anywhere found
Felis wiedii MARGAY	3/72	Anywhere found
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
Panthera tigris TIGER	6/70	Anywhere found
Panthera uncia SIBERIAN LEOPARD	3/72	Anywhere found

Extinct is Forever...

Protect

Preserve

Propagate

Panthera tigris
TIGER 6/70 Anywhere found

Panthera uncia
SIBERIAN LEOPARD 3/72 Anywhere found

Meeting Indira

By Gayle Schaecher

I met Indira last year in Late November or early December. She was 4 months old, a beautiful, sparkling little tiger.

Indira, a cub from Wildlife Safari in Winson, Oregon was on display having her picture taken with people to raise funds for a very important matter. You see, Indira was going blind. She needed cataract surgery. She had a lot of money to raise so she could have surgery and her sight back.

Modern science is just great. Little Indira had her surgery on December 23rd-what a Christmas present. She had a team of four doctors spending three hours in surgery at Roseburg Mercy Medical Center to remove the cataracts from both eyes. Ophthalmologists Dr. Jon Burpee and Dr. William Calhoun performed the surgery with the help of Dr. Baradis and Dr. Hendy, both veterinarians.

It must be wonderful for little Indira not knowing how or why, to be able to see again, to run, jump, play, without bumping into things and best of all, to be able to look into peoples faces that had true love for her and REALLY cared.

Be Selective

With so many animal welfare groups clamoring for money, please take the time to carefully ascertain their position on exotic ownership - or the money you donate may be used against you.

The American Humane Society and other "animal welfare" groups are again launching a campaign to make the ownership of exotics illegal. They want only zoos to be able to keep them. Even circuses are on their "hit list". The American Humane Society has stated on Public Television that this is their goal by 1986.

In a full-page ad, Friends of Animals state:

"It doesn't make any difference how much it is. It doesn't belong in the window and it doesn't belong in your home"

Monkeys, coatimundis, skunks, raccoons, ocelots and the like are all referred to by animal dealers as "exotic animals. What that means is that they are wild. And it is in the wild that they should spend their lives."

The ad goes on to say that "they tend to make to their wild state", and encourages you not to buy one, so that then "the animals that would have been captured for sale will be able to live out their normal life-span"

OUR BEST WISHES FOR A SPEEDY RECOVERY TO MILLY PAYTON, NEW ENGLAND BRANCH SECRETARY.

MILLY IS RECOVERING FROM MAJOR SURGERY.

GET WELL SOON MILLY!



The Straight Scoop.

Transylvanian Trek

OR

SOMETHING STRANGE ABOUT AT THE SIBIU ZOO

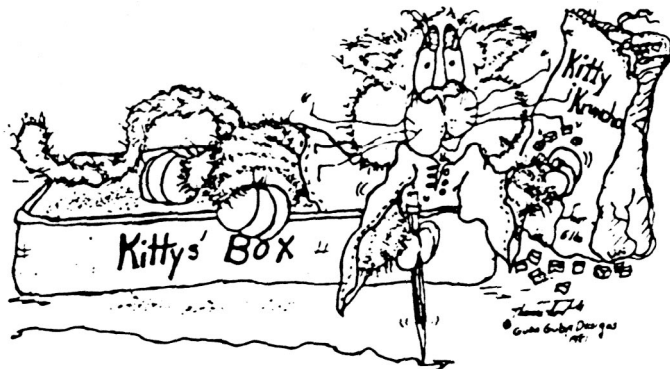
Early this year ('84) I embarked on an adventure that took me and seven other "strange" people the length and breadth of Romania. I say strange fondly...first, because anyone who has owned exotic cats, me, is usually considered by "normal" people to be strange and second because the tour was to be with members of the Quincy P. Morris Dracula Society-actually a great group of Vampire aficionados - and we were to spend two weeks ferreting out the essence of Dracula. This essence came in the form of the 15th century Wallachian prince Vlad Tepes, also known as "the impaler" because of his habit of impaling his enemies' upon sharp stakes around his castle. The name Dracula means "son of the dragon" or "son of the devil" and is interchangeable in some languages with the word vampire. We were also on the trail of the fictional Dracula written about by Bram Stoker and eloquently played by Bela Lugosi and Christopher Lee and more recently Frank Langella.

Our merry little band went from Bucharest to Dracula's palace at Targoviste and on to Poienari fortress, perched on a virtually inaccessible mountain pass, where we climbed 1448 steps to the top...I arrived winded with legs about to give way, but I had made it and the view was exhilarating! We crossed the Wallachian Plain to Hunedoara and its impressive castle tracing back to 1260, then on to Sibiu in Transylvania. Now since this was the infamous Transylvania, I wanted to see some Transylvanian wolves

I check out the local cat population at the Sibiu Zoo. The zoo was in a lovely setting with a lake and picnic grounds. It was filled with families enjoying themselves in the perfect 70° weather and all seemed to be consuming large quantities of beer and the local ice cream...which was delicious. As I wandered about the grounds, I came across a tiger, a cougar and two lions...all housed in adequate cages similar to the small zoos in the U.S.. The wolves were not so fortunate-small dog runs that looked like they hadn't been cleaned in days was all they had and their fur was matted. It made a sad picture of these otherwise beautiful creatures. Turning the corner to the next set of cages...I stood there like an idiot with my mouth open, as I surveyed the occupants...an Irish Setter, a cocker spaniel and a siamese cat. All in heavy duty chain link with name plates dutifully attached.

More adventures were to come-Gypsy violins, wine comradery.

Fangs for the memories
Jean Townes



L. I. O. C. NEEDS YOU!

Printing By **PRINTRIGHT** Mail 205



MEETING REPORT
October 27, 1984

A mild autumn day brought the members of the Mid-Atlantic States Chapter together in the mountains of New York state. The meeting was hosted by Nora and Tom Hartford at their lovely Foxfire Farm. Present were Suzi Wood, Steve Marino, their guest Suzanne Hatton who had flown in from Lexington, Kentucky, as a new LIOCC member, Judee Frank with her friend Susan, Ralph Ferrer, Reg Reidel, Karen Jusseaume, Shirley and Dale Jackson, Mr. & Mrs. Milt Demarest, Elsa Gernstedt, Denise & Nuridin Belal with Nuridin Jr., and Father James Sadowney. Four-footed members present included a cougar, four servals of differing ages, a bobcat baby and two oncilla babies, two Safari hybridss and a Bengal hybrid. The Hartfords provided a delicious food spread and the members added a dish to share.

The 1984 Convention was discussed including Mid-Atlantic's \$100 donation toward a new typewriter as well as an explanation of the new Breeder Directory available in the Newsletter. A 50/50 raffle was held. The winner, Jim Mangino, generously donated his winnings back to the club.

Concerning Convention '86, it was decided that Philadelphia had the best possibilities, with a side trip to Atlantic City in the works. Suzi Wood nominated Nora Hartford and Nuridin Bilal to co-research the project. Hopefully Mid-Atlantic will bid to host Convention '86.

Individuals from Mid-Atlantic will attempt a collection of material from back Newsletter issues of pertinent information on exotics. Board approval has been granted. Shirley Jackson and Ralph Ferrer will be providing the sequences.

If we can obtain copyright permission, Reg Reidel has volunteered to translate portions of Heidi-Marie Fahrenholtz's book *Mein Wildkatzen*. Suzi Wood will be working with him paraphrasing the material in english.

A special thanks from the Jacksons to Pat Quillen for saving two very special oncilla babies.

The formal meeting was adjourned at 4:30 pm, however most of us stayed into the evening enjoying our visit.

Mid-Atlantic wishes all of you and yours Health and Peace for a Happy New Year.

Submitted by
Suzi Wood, President
Mid-Atlantic States

Whatever Works

by Ten Daehnke, Keeper, Sacramento, California Zoo
Reprinted from World Pet Society Newsletter

For the last three years, we have been adding garlic to our antelope and gazelle feed. This is done in an effort to reduce the long-standing problem with flies. The most obvious symptom of our fly problem occurred with Eland. Every summer they developed black tracks below their eyes due to drainage caused by fly irritation. Although we could use "Wipe" and other repellents on the animal's legs and bodies, we could not use these chemicals around eyes and mouth.

Garlic powder is sprinkled over feed every day during fly season. At the beginning of each season it seems to take 4-5 days to build up enough in the animals' system to be effective, and lapses after three days when not used.

It must stress that garlic is used only as a supplement. We were introduced to this treatment by Pat Sammarco of the Lincoln Park Zoo. It would probably work with any group of animals that will accept it in their diet. Pat had used it on a bear strapping

An Ostrich Egg Roll

Reprinted from *Natural History*
Contributed by Jean Townes

by Richard D. Estes

When I found a spotted hyena lying beside two tooth-marked but intact ostrich eggs, I began to wonder which predators could and did eat ostrich eggs. The possibility that the hyena—the animal with the most powerful jaws in the animal kingdom—couldn't crack an egg had never occurred to me. So I expropriated the eggs and offered one to a dozen different hyenas. Their jaws, I discovered, are too short to get a grip on the egg. Could this be mere coincidence? It seems quite possible that the evolution of the size, shape and thickness of ostrich eggs has been influenced by hyena predation. Still, big and thick as they are, the eggs are not immune to this predator; hyenas sometimes destroy entire clutches by rolling them together with their forefeet.

Then I became curious: I wanted to determine whether lions could eat ostrich eggs, and so I placed an egg near a group of four females. An elderly lioness carried it off in her mouth and, settling down with the contented look of a fat lady opening a box of chocolates, proceeded to pip it with one canine and lap up the contents. The next six lions and lionesses I tried completely ignored my second egg, seemingly disinterested or else unaware that ostrich eggs are food. But one lioness decided an egg made an appealing toy. She spent more than ten minutes mouthing, rolling, and batting at it before going on about her business, leaving the egg miraculously intact.

Common Causes, Treatment, and Prevention of Feline Gum Disease

Linda Jorgensen, D.V.M.

Reprinted from "Perspective on Cats"
Publication of the Cornell Feline Health Center

Feline gingivitis (inflammation of the gums) is a frequently encountered and very often frustrating problem both for the cat owner and the veterinarian. It has many causes. Some causes such as bad teeth, are easily treated; other causes however require extensive diagnostic and therapeutic measures just to reduce the severity of the problem.

Mild gingivitis is well tolerated by the cat, and only the most observant owner will be aware of its presence. The signs of extreme gingivitis are readily apparent and include ptyalism (drooling), halitosis, and pain or difficulty eating. Examination of the mouth reveals reddened, swollen and sometimes ulcerated gums which may be painful or bleed when touched.

CAUSES:

Dental Disease: a common and easily treated form of gingivitis results from the accumulation of plaque and tartar. Dental plaque is the layer of proliferating bacteria entrapped in food debris and saliva that coats the tooth. Dental tartar or calculus develops when the plaque mineralizes. Extension of plaque and tartar beneath the gums causes inflammation, resulting in redness and swelling. Professional teeth cleaning and the removal of any loose teeth are necessary to restore health to the gums.

Dental cavities can be a significant problem to the cat. Unlike humans, cats most often develop tooth decay just beneath the gum margins, thus causing gingivitis as well as holes in the teeth. Unfortunately, the process of decay is usually so far advanced when the condition is recognized that tooth extraction is necessary. Some cats seem particularly prone to the development of cavities and require good oral hygiene to help prevent tooth loss.

Broken teeth with exposed pulp cavities may develop tooth root abscesses. Swelling of the gums surrounding the tooth and abscessation of the cheek area overlying the tooth root may result. A swelling or abscess just under the eye often indicates a root abscess. Extraction and treatment with antibiotics is usually curative. If neglected, the infection may extend to the bones of the jaw. Bone infections (osteomyelitis) are difficult to treat and are dangerous to the cat's overall health. →

Viruses: Several viruses can cause gingivitis and ulcers in the cat's mouth. The most important of these are feline herpes virus (rhinotracheitis), calicivirus, and feline leukemia virus. Associated with upper-respiratory disease, calicivirus and herpes virus can also cause severe oral ulcerations. These viruses may persist in the cat's body, causing recurrent gingivitis and upper respiratory disease. Feline leukemia suppresses the body's natural defense mechanisms rendering the cat susceptible to numerous infections, including gingivitis. This form is especially resistant to treatment.

Medical cure of viral diseases is still not possible. Therefore, treatment generally involves the use of antibiotics to prevent secondary bacterial infections. Some cats require antibiotic treatment indefinitely. These cats have contagious diseases and exposure to other cats should be avoided.

Squamous cell carcinoma: Squamous cell carcinoma is a malignant tumor which may affect the gums or oral mucous membranes. Affected tissues may look more like ulcers than the lumps caused by most tumors. Pain when eating and halitosis are frequent consequences of the tumor. Biopsy is necessary for accurate diagnosis. Surgical removal and/or radiation therapy are the current methods of treatment. Left untreated SCC will slowly progress where no treatment is effective.

Pemphigus: is a disorder of the immune system affecting the skin and mucous membranes. Ulceration of the skin, anal and genital mucous membranes, as well as ulcers of the gums and mouth may be seen. At one time many forms were invariably fatal. Now, although the disease is still serious, its effects can be well controlled with the use of steroids or gold-containing drugs, both of which decrease inflammation. Biopsy and special staining techniques are used to diagnose.

Eosinophilic granuloma complex causes raised and sometimes ulcerated red or orange-colored areas of the skin, gums and oral cavity. The cause is unknown, but it does appear that it is not contagious. Diagnosis is made by biopsy. Treatment with steroids or progesterone hormones is often effective in some forms. Radiation therapy may be effective in others but only in those cases when a solitary lesion is present.

Plasm cell gingivitis-pharyngitis: is a disease causing accumulations of plasma cells, a component of the immune system, in the gums and oral cavity of the cat. Like EEG, the cause is unknown. Affected areas are glistening and ulcerated, and have an irregular cobblestone surface. Response to treatment is variable. Antibiotics, antiprotozoal drugs, steroids, progesterones and immune system modulators have been used with limited success. Recently, gold-containing drugs have shown promise in treatment.

Systemic diseases: Severe kidney disease and diabetes mellitus are sometimes associated with gingivitis and oral ulcerations. Cats suffering from these diseases are often obviously very ill and need prompt treatment. If the underlying disease can be controlled the gingivitis usually resolves.

This is not a complete list of the causes of feline gingivitis but it does include the most common causes. The cat owner who is aware of these diseases is more likely to recognize a problem when it arises and seek help.

DIAGNOSIS AND PREVENTION

Like any disease process, gingivitis is easiest to treat when diagnosed early. Examining your cat's mouth is helpful in this regard. If the cause of the problem is not immediately obvious, (bad teeth) diagnostic testing may include blood counts, blood chemistry evaluation, FeLV testing, bacterial cultures and biopsies. Viral isolation cultures for calicivirus and herpesvirus are costly but may be valuable to breeders.

Professional cleaning by your veterinary reduces the contribution of dental disease to gingivitis. Of course proper diet will also be a great help.

LIOC IS ON THE MOVE! New members are joining us daily. Very few members are cat owners (comparitively) but all have a deep and sincere interest in cats - especially exotics. The problem? Personal contact! Would you like to have a branch in your area where you can meet other members? The present Branches are listed on Page 2 of the Newsletter. If there is no branch near you, you may contact me for information for your area. The requirements are simple. Five members may apply to the Board of Directors for a branch status and have a minimum of 3 meetings a year, with a meeting report sent to the Editor for publication in the Newsletter.

Come on Gang. Let's get organized. It is to our benefit to share information and be aware of Federal laws which pertain to us.

Barbara Wilton
LIOC Membership Secretary
P.O. Box 66040
Portland, Ore. 97266

HAPPY NEW YEAR



May Happiness,

Like the Beauty of Nature,

Surround You in the Coming Year



Cornell Feline Health Center
Cornell University
College of Veterinary Medicine
Ithaca, New York 14853

For Cats' Sake

By Dr. Peter Crowcroft
Director, Salisbury Zoo

Printed from Animals Canada

When the editor invited me to contribute to Animals Canada it was a pleasant surprise, as the relationship between humane societies and zoological parks has never been close or cordial. But the tone of material in your journal, while being just as caring as in others, expresses a more objective attitude than I have found in other countries in which I have worked. In the United States, especially, people who care about animals have tended to align with the anti-zoo conservationists.

It is tragic when the battle lines are drawn between the wrong tribes. Only a minority of people are concerned about animals in any way. Within our thin ranks we have suffered from the same divisiveness as religious people who fall out about details of doctrine, instead of working together to convert the heathen majority to a basic belief common to all believers.

Zoological parks are now taking their responsibilities for functioning as modern Noah's Arks very seriously. Conservation is now the avowed top priority objective of the American Association of Zoological Parks & Aquariums, which is the most influential "trade" association of zoos in the world. Endangered Species Survival Committees are being set up to manage and expand zoo stocks of animals such as the gorilla, rhino, snow leopard, and others. But the numbers of zoos and their capacities are far too low to do the job. Already, we are discussing 'triage' decisions - which species shall be admitted to the Arks, while most are abandoned to their fate.

I am going to put forward a heretical view, therefore, and propose that some species presently doomed to extinction could be saved by becoming pets. This is not a viewpoint held by my employers or my colleagues, although I hope to convert some of them to it. I hope we will be able to discuss the possibility objectively and in a constructive way, and to focus on the best interests of the animals, rather than on the interests of various kinds of people.

There is no natural law that says human law will develop in a logical and co-ordinated fashion. A free society tends to work on the "squeaky wheel" principle; legislators tend to react to the protests of vociferous groups. Some governments try to see to it that their departments do not get at cross purposes, or cancel out one another's efforts through lack of communication. Most governments have not yet attained this degree of sophistication. We have to watch out, therefore, that we do not write the wrong letters and voice the wrong protests to the wrong departments. It is a sad fact that much legislation aimed at benefiting an endangered species ends up having the opposite effect.

When the U.S. Congress resolved hastily to protect the Bengal tiger by forbidding all commercial transactions involving them, the effect was that those of us running the U.S. zoos at the time had to stop our tigers from breeding. We could not move tigers from one place to another or dispose of the offspring. So the zoo population of tigers began to age and decline. Eventually, good sense prevailed, as the zoo wheel squeaked, and two distinct tiger populations were recognized; the wild population in need of rigid protection, and the captive one which was better off without it. The more tigers there are in captivity, whatever the interests of their owners, the better it will be for tigers in the long run.

Now there are several thousand different kinds of mammals, and mankind has domesticated only about a score. These domesticated species, and several others who are successful pets, are the only ones safe in a world inhabited by billions of people. Efforts to domesticate a few others, such as the Banteng in Indonesia, and the Eland in Africa have been locally successful, but have not shown enough potential for profit to cause people to substitute them for some of the billions of cows in existence.

Judging by the colorful articles and films which have been fashionable in the past decade, you would think that extinction is being brought about by unprincipled poachers, furriers, and collectors for the pet trade. Zoos have come in for their share of the blame too. But there are very few species seriously affected by the actions of individuals for whatever

purposes. The real danger to the world's wildlife is habitat destruction. There are two main causes of the widespread destruction which is going on; conversion of natural grazing for wildlife into farmland, and greed for the lumber "locked up" in tropical forests.

In Africa especially, it is the need for growing food for growing numbers of people that is wiping out the wildlife. Even the National Parks are being nibbled away. In South America, it is the devastation of the tropical rain forest, for cheap beef production and for the cheap lumber. In order to focus on something specific in this huge mess, let us consider the lovely cats that inhabit the forests in Latin America.

There are no statistics to show the numbers destroyed by clearing because the population densities are not known. One does not need figures, however, to show that the proportion of animals destroyed is governed by the amount of forest habitat destroyed. If the entire forest goes, nothing that depended on it for life can survive. The forest may have supported 10,000 cats or 100,000 cats. Habitat destruction kills them all, while other forms of exploitation, more often than not, remove a crop and may actually reduce natural mortality.

These cats are officially protected if you want to catch one. But the destruction of their habitat is a matter for another department!

This kind of legislative folly is not just to be found in South America. My native land, Australia, is famous for it. There, it is very difficult to get permission to export a pair of kangaroos, unless it is to an approved public zoo. But in another government office, it is a matter of routine to get permission to shoot 1,000. You would be breaking the law if you shot only 998 out of the 1,000 and sent the other two overseas.

Two thirds of the tropical rain forests in Latin America have already gone, and the rest is going fast. The lovely cats, such as the margay, cannot be taken for any purpose, so they are doomed. I don't think anyone has written to the appropriate government with a serious proposal for rescue. If "operation Noah" could be so successful in raising funds to relocate animals during the flooding of the Kariba Dam on the Zambesi, why not an equally successful campaign to rescue cats from the Amazon basin? Nowhere to accommodate them is the ready answer. I suggest we ought to seriously consider domesticating more species than our ancestors chose to do and that these lovely little cats and others from different habitats undergoing destruction, would make highly eligible candidates.

Purists will argue that domestication modifies the behavior so much that the animals would never be capable of returning to the wild. This leads to the negative "better dead and hand-fed" philosophy. But anyone who has had to deal with feral cats, dogs, pigs or goats, knows how readily domesticated forms revert to their instinctive behavior. I have a vivid memory of an attack by two white cats, when I picked up a kitten in an abandoned farm house in the outback. One landed on my thigh, and the other on my chest. (we all later became good friends.) Even highly inbred strains of laboratory mice, when placed in an appropriate habitat quickly demonstrate the survival of 'Old Adam.'

Even if such misgivings about domestication should have some validity, the bottom line in this situation is what matters. I have said for many years that I would rather have tigers with spots than no tigers at all. I feel just as willing to settle for ocelots and margays with stripes.

Legislation is piling up to prevent people from keeping endangered species. As long as we ensure good standards of accommodation and husbandry, shouldn't we be working to reverse the situation?



Necrology

The white tiger recently worked by Guther Gebel-Williams on the Ringling Brothers Circus Red Unit was found dead in its cage. It had been reported ill earlier and apparently was unable to recover. An autopsy has been ordered.

Pelt Trade Shifts to Smaller Species

Printed from World Pet Society Newsletter

The lucrative market for cat skins to fashion into fur coats has shifted from the larger species to smaller ones, according to a new TRAFFIC(USA) study of the Convention on International Trade in Endangered Species (CITES) annual report. The largest consumer is Europe, which imports over two-thirds of the pelts in trade. In the U.S., fashion preference and strict regulations against the import of endangered cats limit the catskin trade to species native to North America, the bobcat and Canadian lynx. Unfortunately, it takes up to three times the number of pelts from the smaller cats as it does from the larger cats no longer found in trade.

The cay skin trade, like the reptile leather trade, illustrates a phenomenon common to trade in all wildlife; when one species is no longer available, the trade shifts to another similar species to supply continued consumer demand.

Trade in the skins of the large cats, heaviest between the late 19th century and 1960, was a major threat to the survival of some species. By the early 1970's, the plight of the tiger, jaguar, cheetah, snow leopard and others prompted efforts worldwide to control the trade. Many of the large cat species were listed on CITES Appendix I in 1975, resulting in restricted commercial trade in their fur. All other felidae species were then listed on Appendix II (Threatened).

After 1975, the cat fur market decreased dramatically in the U.S. International and U.S. protective legislation combined with voluntary efforts of the U.S. Fur industry to halt trade in endangered species and a nationwide campaign to popularize fake fur, effectively curtailed the U.S. market for cat fur coats.

The European market, however, remained strong. As the larger species became rare and finally prohibited from trade, the European fur industry simply started using pelts of smaller spotted cats. TRAFFIC (USA) estimates that in 1980, 685,000 cat pelts were traded internationally to supply European demands. Most of these originated

South America and Asia and were fashioned into garments in West Germany. Many were then exported for sale in other European countries. Approximately two thirds of these pelts were of small to medium-sized cats. Some of this trade was illegal and has since been controlled.

This shift from the larger to the smaller cats has not changed the appearance of the garments currently marketed in Europe from those of the early 1970's. Fur coats made from cat pelts retain the "leopard look" but are now made from the smaller spotted species, usually Geoffroy cats, jungle cat, little spotted cat(oncilla) and wild cat. There is an important distinction to be made though; 8 to 10 leopard pelts are needed to make one coat, but 20 to 30 pelts are needed of these smaller species to make a coat of the same size.

"Leopard look" coats have a limited market in the U.S., but there is some demand for coats made from two North American species the bobcat and lynx. Bobcat and lynx coats are also exported to Europe and Japan where the demand for them is strong; approximately 205,000 skins moved in international trade in 1980.

The U.S. and Canada annually conduct studies to determine the number of animals killed and to estimate population sizes, providing at least some information on the effects of trade on their native species. Only limited information is available on the effect of trade on the small South American species.

Despite international conservation, many of the large cat species still have not recovered from the demand for their skins. Presumably, excessive trade could be similarly devastating for the smaller species as well.

By Linda McMahan, Director
TRAFFIC USA



APPROXIMATE NUMBER OF PELTS REPORTED IN COMMERCIAL TRADE*

SPECIES	1979	1980
Geoffroy's Cat	115,000	145,000
Bobcat	126,000	140,000
Jungle Cat (Chaus)	90,000	79,000
Little Spotted Cat (oncilla)	46,000	70,000
Canadian Lynx	42,000	64,000
European Wildcat	7,000	60,000
Ocelot	22,000	45,000
Margay	20,000	30,000
Pampas Cat	10,000	27,000
Leopard Cat	13,000	9,000
Caracal	1,000	6,000
European Lynx	9,000	5,000
Others	5,000	5,000

* Includes re-exports and exports from countries where the animals are not native. Also includes a conversion of number of pelts per garment where the number of garments traded was reported.



UPDATE

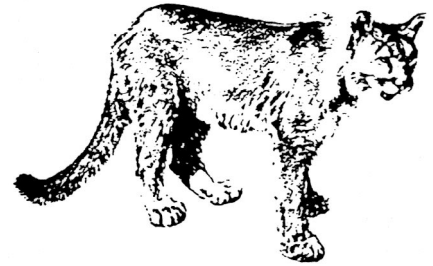


Murray Killman writes: we have decided to fence in over an acre of woods complete with a large pond stocked with fish for the adult pair of jaguars (see article in Nov/Dec 84 Newsletter) to romp around in. It will be interesting to see what they do with mature trees - some of which are 70 feet high. If they use them for scratching posts, we may have to find a way to protect them.

* * *

Actual photo of the "King Cheetah" now there are 2 known "Kings" and 4 more "regular" cheetahs who are known to carry the recessive King gene at a sanctuary in South Africa





Dear LIOC Members:

When my husband and I married we decided that the only kids we wanted to have were animals. At that time we had an African lioness and several dogs. Since then our family has grown to about 60 animals, including three African lions, 5 bengal tigers, 2 black leopards, 2 cougars, 2 wolves, 7 bobcats, 4 servals, 1 caracal, 1 ocelot, 1 coyote and our favorite and most hopeful breeders, a pair of young cheetahs. We also still have several dogs. We have successfully bred and handraised offspring from all of these species, except the cheetahs so far. Our female, KC will be old enough to breed next

and if she does, we plan to hand raise her babies to make them handleable. We feel that all cats in captivity are better off if they can be handled. In most cases, leaving the young with a mother too long prevents "taming". In our experience, we have had many instances where a cat was sick or hurt, and probably wouldn't have made it if it were not handleable.

My husband works as superintendent on a golf course here in Pahrump, Nevada. I stay home and care for the "kids", and do a little boarding and training for extra money. I also try to sell my artwork. Right now we would like to make some more improvements on our facilities for the animals plus catch up on our feed bill which for uncontrollable reasons we have let slip behind.

We ask for your help. If I could sell more artwork it could make a big difference, as you can imagine feeding that many animals costs quite a bit.

We aren't into "making the animals work for their keep". They don't deserve such nonsense. I charge \$150. for a portrait like those shown. They are 24" x 36" or smaller. I guarantee all of my work, if not satisfied you aren't obligated to buy. If you would like a painting done, send me a good photo of the animal (no people please) and a brief description of how you want it. Enclose your phone number and address. I will do the painting and send you a polaroid of it. If you like it, send the money and I will UPS your painting and your original photo. The paintings are done on stretched canvas in acrylic paint and will be ready for framing. It takes about two weeks from the time I receive your photo.

If you want breeders to stay in business, help out. These animals do not support themselves.

We are a licensed zoo but are not really open to the public. We do welcome guests who may have a specific interest in the cats and if any members are in Las Vegas, or close by, give us a call and we would be more than happy to give you a tour and answer any questions about our family.

JEANIE and ALAN HINMAN
Box 7562, Homestead Road
Pahrump, Nevada 89041
717 727-6456



Memo to the mountain lion

by Wallace Stegner

Once, in every corner of this continent, your passing could prick the stillness and bring every living thing to the alert. But even then you were more felt than seen. You were an immanence, a presence, a crying in the night, pug marks in the dust of a trail. Solitary and shy, you lived beyond, always beyond. Your comings and goings defined the boundaries of the unpeopled. If seen at all, you were only a tawny glimpse flowering toward disappearance among the trees or along the ridges and ledges of your wilderness.

But hunters, with their dogs and guns, knew how to find you. Folklore made you dangerous, your occasional killing of a calf put a price on your head. Never mind that you preferred deer, that your killings of livestock were trivial by comparison with those by our own dogs. You were wild, and thus an enemy; you were rare, and elusive, and elegant, and thus a trophy to be prized. Under many names, as panther, catamount, puma, cougar, mountain lion, you were hunted to death through all the East and Midwest. The last catamount in Vermont was shot more than a hundred years ago. You persist in the Everglades only because a National Park official quietly released a pair of you to restore the balance of that fecund swamp.

In the mountain and plateau West a remnant population of you persists, in the pockets of wild country off the edges of settlement and too rough for off-road vehicles. If you kill a calf or a sheep, the permit hunters still exact a more-than-eye-for-an-eye vengeance, but in California, at least, a moratorium on ordinary hunting has let your number stabilize. The Fish & Game people say there are 2,400 of you in California. A better guess might be a 1,000. But a remnant. There is a chance you may survive.

You had better. If we lift the moratorium that has helped save you, we are insand. Visiting Africa, 20th century Americans are struck by how poor we have become, how poor we have made ourselves, how much pleasure and instruction we have deprived ourselves of, by our furious destruction of other species.

Controls we may need, what is called game management we may need, for we have engrossed the earth and must now play God to the other species, especially a species of such evolved beauty and precise function, diminishes, endangers, and brutalizes us. If we cannot live in harmony with other forms of life, if we cannot control our hostility toward the earth and its creatures, how shall we ever learn to control our hostility towards each other?

Contributed by Jean Townes



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 coats 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	EXPOSURE		
	45 Min.	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	E
Methyl Isobutyl Ketone	E	E	G*
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	E
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-Gard to ascertain if a more chemical resistant formulation is available.
 *Resistance to attack by the chemical can be improved by using Dur-A-Gard #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	LI0E 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
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 1-800-251-5800