



# NEWSLETTER

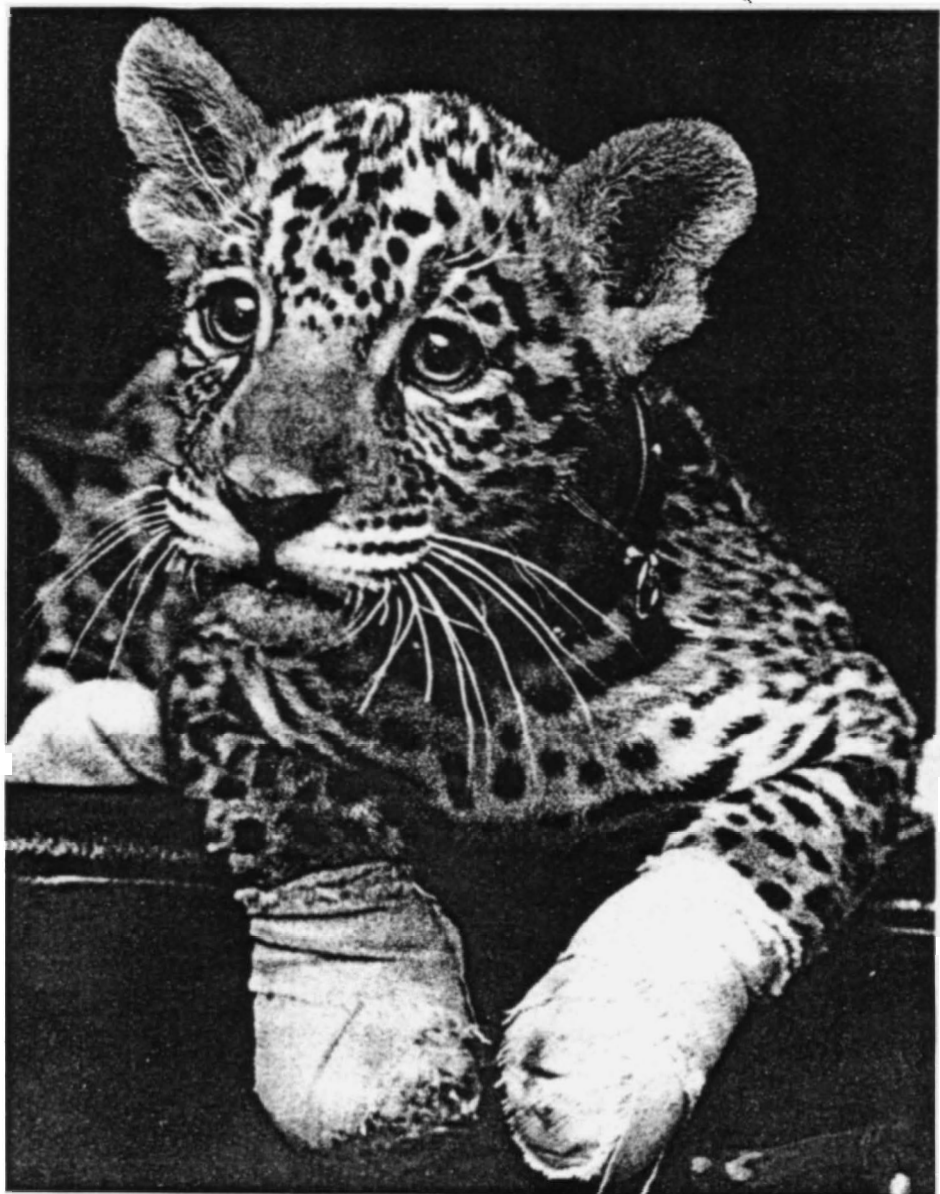
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LONG ISLAND OCELOT CLUB  
 Route 4, Box 377  
 Mobile, Alabama 36609

Volume 30 - Number 3  
 May/June 1986

## LONG ISLAND OCELOT CLUB



CHIQUITA, just after declawing at 3 months, lives with J.B. & Reba Anderson. This is an entry in the Photo Contest, winner will be announced at convention



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## Officers

**KEN HATFIELD, PRESIDENT** 1991 S.W. 136 Ave. Davie, FL. 33325 (305) 472,7276  
**JOHN PERRY, VICE PRESIDENT:** 6684 Central Ave. NE. Fridley Minn. 55432 (612) 571-7918/481-2673  
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**SHIRLEY WAGNER,** Rt. 4, Box 377, Belle Isle Lane, Mobile, Al. 36609 (205) 661-1342 s  
 Emergencies 8-5 433-5418

## Staff

**EDITOR:** Shirley Wagner, Rt 4, Box 377, Belle Isle Lane, Mobile, Al. 36609 (205) 661-1342  
**ASSISTING:** 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

## Branches

**FLORIDA:** Danny Treanor, 5151 Glasgow, Orlando, Fl. 32819, (305) 351-3058  
**OREGON EDUCATIONAL EXOTIC FELINE CLUB:** Ethel Hauser, 14622 N.E. 99th St., Vancouver, WA 98662 (206) 892-9994  
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## 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  
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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

## 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 on YOU.

# The Status of Two Endangered Carnivores Occurring in The Cape Province, South Africa, *Felis serval* and *Lutra maculicollis*

C. T. Stuart\*

Albany Museum, Somerset Street, Grahamstown 6140.  
Republic of South Africa

Condensed from an article in *BIOLOGICAL CONSERVATION*

\* (Ed. note: we have deleted the portion relating to the spotted necked otter. The author's conclusion was that because of the "lack of suitable water quality in the rivers, there could be little done to improve the conservation position of this otter".

## INTRODUCTION

As part of an ongoing survey of the carnivores of the Cape Province, a need was identified to undertake more detailed studies of certain species, either because of their scarcity or their position as competitors with human activity.

Two species were singled out because of their apparent rarity, namely the serval *Felis serval*, and the spotted-necked otter *Lutra maculicollis*. Smithers (1978, 1983) has documented the overall African distribution of these two species but gives little information for the Cape Province. The purpose of this project was to establish the current status of both *F. serval* and *L. maculicollis* within Cape Province and to try and determine the reasons for this decline.

## METHODS

Museum and literature records for these carnivores were extracted.

As part of the active survey, areas with previous records of one or both of the species were visited, farmers questioned, and answers graded subjectively according to accuracy and knowledge. In addition a questionnaire survey for serval was undertaken, with 765 being despatched to farmers in areas of previous or possible occurrence. The questionnaire was accompanied by a brochure with colour photographs of *F. serval* as well as *Felis caracal*, *F. libyca*, *F. nigripes* and *Genetta tigrina* with which the latter is frequently confused.

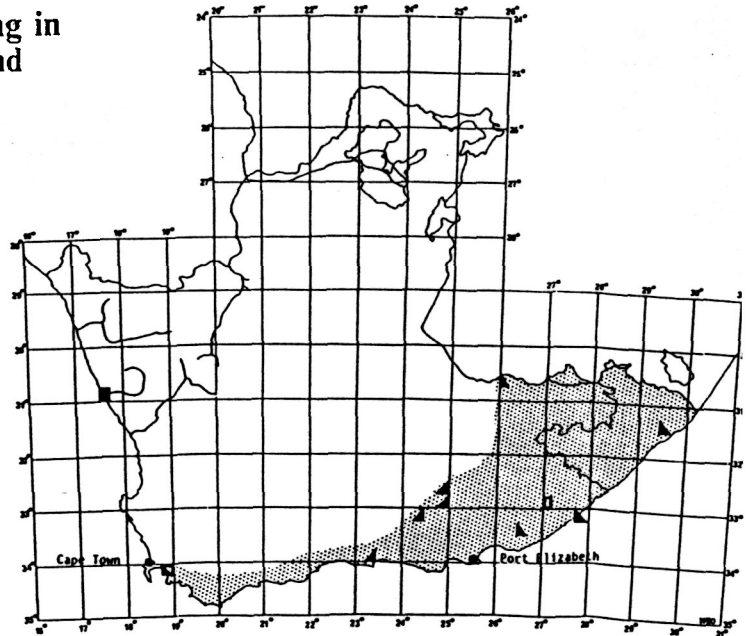
## RESULTS

The serval probably occurred along the coastal belt from near Cape Town to Transkei, and then northwards into Natal. It is also possible that this cat occurred in the extreme northeastern corner of the Cape Province. The most recent proven record was of a specimen collected on the farm "Klipdam" (Groen River, Namaqualand) in August, 1975.

The only museum specimens known from the Cape Province were collected in Somerset West in 1898; in 1975 in coastal Namaqualand and one recorded as having been collected near King William's Town (no date, but not recent). The five accepted visual farmer records are indicated in Fig. 1, as well as the historical distribution.

The specimen from Namaqualand, shot by a farmer in 1976, is difficult to explain. Farmers questioned in the area had never encountered this cat before. It is atypical habitat, being arid succulent coastal sandveld with *Acacia* scrub along the Groen River. It is possible that the animal followed one of the river courses southwards, but the nearest known locality for *F. serval* is at least 1000 km away. It is unlikely it was an escaped pet, as this would have come to the attention of the local population.

One of the principal problems encountered was the regular confusion of *Felis serval* with the *Genetta* spp., *F. libyca*, *F. nigripes* and even *F. caracal*.



Past & Present distribution of *Felis serval* in the Cape Province. ■ = Recent specimen □ = old specimen ▲ = confirmed farmer records, △ = literature records. Stippled overlay indicates probable former distribution

Of the 765 questionnaires despatched, 615 were returned, giving a percentage return of 80.39%. Of these 376 (61.14%) were negative returns, 66 (10.73%) said that the serval used to occur, 70 (11.38%) said that it did not occur on their farm but they thought it was present in the district. Only 103 (16.75%) farmers said that serval occurred on their properties. Of these, 62 (60.2%) were eliminated by follow-up correspondence and telephone conversations. The vast majority were clearly mistaken identity. The remaining 41 (39.8%) were considered to be possible occurrence. However, on follow up work in the field, only 5 were considered to be valid records, and of these only one was recent (1978). A previous recorded occurrence (Visser, 1976) in the Tsitsikama National Park has since been shown to have been *Genetta*.

In the case of the five acceptable farmer records, three of the localities were associated with open, relatively dry country, and dry, *Acacia* fringed river beds. The remaining two records were associated with pockets of indigenous forest, and open grassland on hill slopes.

From time to time, apparent records of *F. serval* are obtained from the extreme northeastern area of the Cape Province. However, to date, there have been no substantiated records. The area consists of open bush/savanna and therefore is suitable to *F. serval*.

## DISCUSSION

Historically, *Felis serval* was almost certainly restricted to the southern Cape coastal belt and only extended inland to the east of 24° East. One of the major difficulties in examining past distribution of this species is that most literature records present some doubt as to the species involved.

It is a relatively easy animal to hunt, and if chased by hounds usually 'trees', and as the southern coastal belt holds the bulk of the Cape's human population they came under constant pressure. In tandem with hunting, there was also habitat destruction, although there are still a number of areas that are suitable for serval populations. An additional reason cited by a number of farmers is the influx of *Felis caracal* into the coastal belt, with which *F. serval* was unable to compete. Unfortunately, it is not possible to substantiate this claim.

Test introductions could be undertaken in suitable reserves within the past distribution of *F. serval*. Unfortunately, at present, there are only two suitable sized reserves within the past distribution, namely the De Hoop Nature Reserve in the Western Cape and the Andries Vosloo Kudu Reserve in the Eastern Cape. From the conservation viewpoint *Felis serval* can be consid-

erved at best unviable, and at worst extinct, in the

Cape Province. Natural re-population seems unlikely and therefore reintroduction would appear the only option.

Contributed by  
John Perry



Gayle Schaecker reports that bobcat Moxie presented them with 5 (count them - five) kittens. Critter bobcat is the proud papa. All kittens are equal in size to previous kittens produced by this pair. Previously Moxie has had "average" litters of two and three kits. A good mom, Moxie is taking good care of her babies.

John Perry does it again with a little boy Geoffroy's born the first week in June. Mother & baby doing fine.

The Exotic Feline Breeding Compound proudly announces the birth of Chen-chi (Chinese for Great protector). He arrived March 4, the only cub of Lotus & Cheung chi. A special kitten Chen-chi is only #15 of his sub-species in the US and #98 world wide—a North Chinese Leopard (*Panthera pardus japonensis*). Mom "Lotus" is a first timer and tried to rush the birth by pulling him, resulting in pulling off his right, front leg. 1 1/4 pounds at birth, at seven weeks he's now a hefty 7 pounds and is eating London broil finely chopped covered with his baby formula. He gets around as any "normal" cub would totally disregarding his handicap. Chen-chi will hopefully be the mate of now 11 month old Su Lin who came to EFBC missing her right front leg!

Baby Chen-chi is having a good time tasting all things he things might be good to his palate. His attitude is exceptionally good, and he still sleeps with us at night. He has never been caged and I sure don't want to be the one who might have to introduce him to a closed gate. His agility has never been hampered by the missing leg. He is now 3 1/2 months old, 15 pounds and an active, adorable leopard, who has learned that hissing will scare outsiders and boy is that fun!

Jean Hatfield reports 2 little girl ocelots and 2 female bobcats - "cute as a button-all of them" she reports, "Naturally, right?"

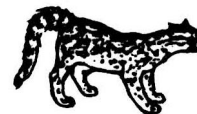


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Purcilla oncilla presented Pat Quillen with two tiny & probably premature boys. One, just too small didn't make it. However the other one is now doing fine & growing.



It was with surprise and great pleasure we watched old time LIOC member GEORGE ROSE accept a Tony award as best actor in a musical. George is starring in the Murder of Edwin Drood. Although he has lost his caracal, George's marqay Mishca is still with him at age 17. Your Editor remembers George's performance in Slueth when he was with the road tour and had a chance to visit in Mobile. We hope George enjoys many more hits, and acclaims. As we witnessed in Sleuth-he is a multi-talented man.



#### FELINE LEUKEMIA (FeLV) TESTS IN EXOTICS

The folks at Exotic Feline Breeding Compound write: "Over the last few months, Norden Laboratories and EFBC have been conducting field tests on their FeLV Vaccine. Although there is controversy over the actual protection delivered through the use of this vaccine, we are establishing titer increases (immune responses) in exotic cats, plus monitoring any adverse reaction if any, and documenting it.

Dr. Gillespie and Joe have just completed the last of the series of three inoculation, none of which initiated any adverse reactions. Preliminary blood tests do indicate a raised titer level.

# Readers Write



Dear LIOC,

Before I tell my special tale I would first like to say a few words to you. The efforts that you put into this organization are heart-warming and appreciated more than you can imagine. I think I speak for all of LIOC members as well as those who are unaware of your organization. I have just recieved information from a friend who came across your advertisement in *Cat Fancy Magazine*. It is good to know that care is being taken to insure proper care for these wondrous and special creatures. You certainly have a new member here-my check is happily enclosed.

And now my tale. I was only ten years old when my father came home with a small cougar. After a long day of hiking in the Florida Everglades, he had come across this baby wedged vertically inside a slight wedge and an uprooted tree. The cougar had a few small cuts on its backside and a deep gash over its eye. We treated the wounds and gav e him a bowl of dogfood (we had a Rottwiler at the time). After about two weeks of rehabilitation, my father decided he was ready to return to the wild. I was heartbroken after spending both night and day with the cub....he had become a true friend.

After a long walk into the forest we let him go and walked away. But that little sweetheart followed us all the way back to the Jeep-he was mine.

"Hal", Short for Hallelujah was my best friend for over ten years. My heartbreak at his death was indescribable. When I was all my childhood and early adulthood, all I think about is Hal and his love.

Time goes on. I am graduating from college in May and plan to be married soon thereafter. My fiance's and my love for the cougar will never end and we would like to share our home with another. Although we realize we cannot do this immediately, we will soon be looking.

Therefore, we need information from breeders so we can make an intelligent choice. I can imagine how hard it is to part with such a baby, and I'm sure they would like to come to know us as well. We will be residing in Southern Florida. Amy and I do not expect another "Hal", but we do want to rekindle a loving relationship with another cougar.

Once again, thanks for being there, we are proud to be a part of your organization and help in any way we can.

Sincerely,  
Troy Stratton  
9432 Talisman Dr  
Vienna, VA 22180

When I was small boy and living in Clearwater, Florida my best memories were all the times my parents would take me to the Tarpon Zoo. It was the neatest place I had ever seen. They had exotic animals from everywhere, but mainly from South America. Just about all the South American animals you could think of including ocelots, margays and jaguars. I always said that when I grew up I'd have an ocelot of my very own.

Well, in 1970, when I was home on vacation I went first to see my parents and then to the Tarpon Zoo. They had a large cage with approximately 20 very young ocelots that Art Jones had brought back from South America.

I told the woman that I was interested in buying a kitten. To my surprise, she said go ahead in the cage and pick one out. When I got in, they all moved to the far corner, snarling and hissing. Then, all of a sudden, I was jumped from behind. A kitten had its paws around my neck and was nipping me on the ear. Of course she was the one I took home. This kitten had been sold previously and returned by a couple who couldn't manage her.

We returned to Ohio and had the kitten flown up Air express. I named it Ginger after the Hurricane. At that time we had a German shepherd and he and the kitten became good friends in a remarkable short period of time. In the 14 years that we lived with Ginger she was never confined to a cage. She had free run of our old farm house except at night. Then she was confined to to her own room which I had converted for her. It contained a house on stilts with branches leading up to it, tunnels, you name it she had it. She was never declawed or defanged. The only time she was ever ill was remedied by spaying her.

She weighed 45 pounds. We had her for so many special and memorable years that it is hard not to see her everywhere we turn and it has been two years since she passed away.

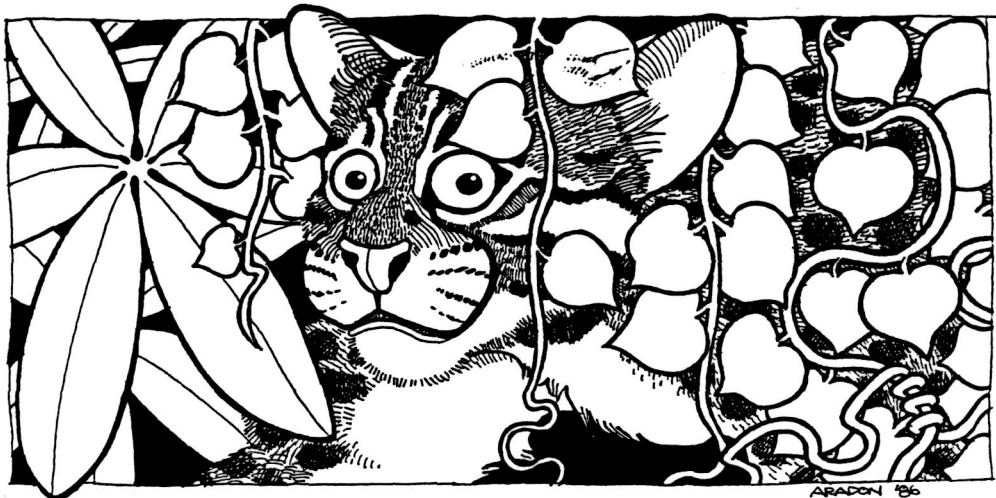
Our vet used to be with the Toledo Zoo and we were fortunate to have him. When she quit eating and he put her on IV trying to get her strength up, he felt it was "just old age". She passed away quietly at home.

We have just purchased a cougar kitten. She reminds me a lot of Ginger and has her own place as Ginger did. However my wife reminds me nothing could take Ginger's place. The cougar's name is Misty and she is so much bigger and stronger. Misty at 7 months weighs about 45 pounds, and I'm sure we'll have to declaw her. She loves to play with my 10 year old daughter, sometimes getting a little rough.

I'd love to hear from other ocelot and cougar owners,

Yours,  
Kenneth Hetrick  
5359 Fremont Pike  
Perrysburg, OH 43551

**Sharing  
is caring!**



# Legislation

The final meeting of the California Fish & Game Commission was held in April. After a heated discussion of the proposal to open hunting in the North Kings area a motion was made to allow the taking of 20 cougars. No one seconded the motion and it was effectively dropped for the time being.

However a pilot project is in effect in Placer County which has a history of damage by cougar to the sheep populations. The plan calls for up to five cougars to be taken just prior to the grazing season each year for the next five years. This number is ] subject to annual review however.

Cougar can still be taken on a Depredation Permit in California and no changes were made to these regulations.

\* \* \* \* \*

Joe Maynard of the Exotic Feline Breeding Compound attended the above meeting, and in their recent newsletter put forth the following comments which your Editor feels deserves to be passed on.

The California Fish & Game Department is NOT to blame for the problems of deer population loss or the necessity of having to control cougar populations. They are stuck in the middle of Ranchers and Conservationists. They are saddled with trying to please both sides and still be effective in wildlife management.

The real issue appears to be not Mountain Lion OR Deer; conservation cannot be species specific, it must include the whole ecological system.

Mr. Richard Kahn, President of the California Fish & Game Department commented that if everyone on both sides of the Mountain lion issue concentrated their efforts with the same amount of passion on curtailing habitat loss within each of their counties (in other words, force your County Supervisors to stopping indiscriminate building in mountain areas) the problem of mountain lion and herd loss would not continually occur. Habitat loss is the main reason for herd depletion and the cause for more frequent confrontation between man and cat.

ALL new construction permits are printed in your local newspaper under "Public Notice". Monitor the actions of your Board of Supervisors and VOICE YOUR CONCERN. You can make a large impact. We can determine the environment (or lack of it) that we live in. Everyone's quality of life is affected by the type of environment we elect to have surround us.



piece of "model state legislation" was recently proposed by the Humane Society, which it plans to introduce to various state legislators for consideration in preparing state laws to regulate ownership and protection of captive wild animals.

The "Captive Wild Animal Protection Bill" says most individuals do not have the finances or experience to

properly care for a wild animal. Many wild animals, the statement claims, cause injuries and when released into the environment can cause costly damage to the ecosystem.

The fact sheet says: "Wild animals should only be kept in captivity by professional zoological facilities. The only individuals who should be allowed to have wild animals are licensed wildlife rehabilitators and certain breeders. In both cases, they should demonstrate a thorough knowledge of their field and an ability to care for the animal humanely". Continuing, the fact sheet says: "animals involved in travelling acts also present considerable danger to the public".

In it's section-by-section summary are the following statements:

- PROHIBITIONS: No one may possess a wild animal without first obtaining a permit to do so. All activities in which animals are harassed or are made to act in an uncharacteristic way are prohibited.

"Unnatural Behavior" is called behavior which is not part of a wild animal's natural habits or behavioral pattern, or in which it would not engage in its natural habitat.

- WILDLIFE REHABILITATOR - means any person who has possessed for a period of not less than two years, a valid state or federal permit for the capture and possession of injured, infirm, orphaned wild animals for purposes of treatment or sanctuary, provided the wild animals under the persons care are not used for any public display off the premises, whether for a fee or not.

No person may sponsor, promote or train wild animals to participate in, contribute to the involvement of a wild animal in, or attend as a spectator any activity or event in which any wild animal engages in such a way that the animal is abused or stressed mentally or physically harassed. The prohibition applies to event and activities taking place in either public and applies regardless of the purpose of the event and irrespective of whether or not a fee is charged.

Exempt from the permit requirement would be a person possessing or having custody of a sick or injured animal solely for the purpose of transporting the animal to a veterinarian, permitted wildlife rehabilitator or to an incorporated Humane Society, or animal shelter or an accredited member of the American Assoc. of Zoological Parks & Aquariums, or to State, Federal or Local government official with authority to handle the animal.

Wild animals cannot be kept as personal pets. Permits must specify the number, species and exact identification of animals authorized to be owned, possessed or held by permit. No person may bring an animal into a state or travel through a state without first obtaining a permit. To obtain such permits would require advance notice describing the animal(s), anticipated itinerary, scheduled stops and the purpose for bringing such an animal through the state.

Permits can be revoked in an effort to make permits conform to regulations in cases where terms and conditions of a permit are violated where an animal is found in the custody of a person who has no permit and where minimum care standards are not met.

\* \* \* \* \*

PLEASE KEEP AN EYE OUT FOR SUCH LEGISLATION - LET US KNOW AT ONCE SHOULD IT APPEAR SO THAT WE CAN TAKE IMMEDIATE ACTION! AS STATED PREVIOUSLY THE HUMANE SOCIETY'S GOAL IS THE TOTAL ELIMINATION OF THE RIGHT TO KEEP AN EXOTIC PET!

In LOUISIANA a similar piece of legislation was introduced. It was only accidentally that Damien Regge learned of it through a short story on the nightly news. Fortunately, through an intensive 11th hour effort. The legislation has been postponed for a time being.

In TEXAS laws proposing a total ban on "Dangerous Animals" was proposed. Again this proposed legislation has, for the time being, been tabled.



# Intraocular Inflammation in Cats as a Manifestation of Systemic Diseases

Thomas J. Kern, D.V.M., D.A.C.V.O.

The normal gleam in a healthy cat's eyes may betray its devious personality, its predatory cunning, or its mischievous intent. Alterations in this appearance may foretell affliction with one of the feline systemic diseases long before changes in the cat's apparent health are obvious. To the observant cat owner and veterinary practitioner even subtle changes in appearance of a cat's eyes should prompt diagnostic pursuit.

The types of altered ocular appearance commonly noted by cat owners include:

1. Acquired, progressive change in iris color-especially if only in one eye.
2. Progressive clouding in or on the eye
3. Gradual loss of vision associated with either of the above.
4. Gradual increase in eye size.

In order to understand these changes and some of the diseases which may cause them, a brief anatomy lesson should be useful. The eye is very much akin to a biological camera in structure and function. It consists of three concentric coats. The outermost coat-analogous to a camera body with its case-is formed of fibrous tissue. Anteriorly this fibrous tissue is optically clear (the cornea) and acts like a camera lens to transmit light to the interior. Posteriorly this fibrous tissue is dense, opaque white (the sclera).

The middle coat of the eye consists mainly of blood vessels to nourish the other two layers and pigment cells to shield the light-sensitive inner coat from light-related damage. Anteriorly the iris is visible as the "red" part of the eye and forms an aperture called the pupil through which light is focused. Posteriorly the ciliary body produces clear circulating fluid flowing throughout the eye. The choroid, the third part of the middle coat, nourishes the innermost (third) ocular coat - the retina. The retina photochemically transforms light into an electrical impulse ultimately interpreted by the brain as vision.

## INTEROCULAR INFLAMMATION

Several pathological processes may insult the eye to produce any of the four changes listed earlier. In cats, however, it seems that just two processes cause the majority of such problems: chronic inflammation and neoplasia (cancer).

### Chronic Inflammation

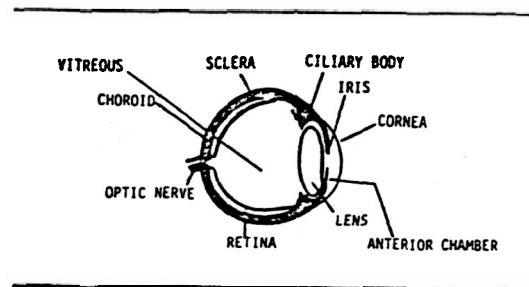
Classically, inflammation results in redness, swelling, heat and pain at the affected site. Ocular inflammation can begin with and involve any combination of the three ocular coats. For this discussion, that inflammation which begins in the middle vascular coat of the eye (uveitis) is most important. When agents incite inflammation in the iris and ciliary body (anterior uveitis), the blood vessels there dilate and exude proteins and inflammatory cells into the tissues themselves as well as into the anterior chamber, the fluid-filled space between the iris and the cornea.

As these pathologic changes occur the appearance of the eye gradually changes. As the iris becomes thickened and infiltrated by inflammatory cells, the normal, vertically oval feline pupil may become distorted in shape, may become adherent to other internal tissues (e.g., the lens or cornea), or may lose functional mobility so that pupil size and shape appear frozen in one position. As inflammation becomes more severe and chronic, all these changes frequently occur, in addition to others. Protein and cells that leak into the anterior chamber (between cornea and iris) give the eye a general cloudy appearance, very subtle at first but more noticeable with time. Alteration in intraocular metabolism may cause lens opacity (cataract) or blockage of normal fluid exit from the eye, resulting in increased intraocular pressure, gradual vision loss, and eye

enlargement (glaucoma).

All of the aforementioned changes are potentially visible to the naked eye. Surprisingly, cats usually show minimal behavioral evidence of ocular discomfort, save for occasional subtle behavioral alterations associated with diminishing vision. Usually, even a minor watery discharge from the eye is absent.

While inflammation in the anterior parts of the eye is often readily visible, similar post-inflammatory changes in the posterior portion may progress unnoticed. Leakage of protein and cells into the vitreous gel (the clear, semifluid substance between the retina and lens) can bar light access to the retina (the innermost layer of the posterior eye which converts light energy into visual stimuli). Inflammation of the choroid underlying the retina can produce retinal degeneration or detachment and irreversible blindness. Finally, inflammation of the optic nerve, which transmits the retina's visual stimuli to the higher centers of the brain, can cause devastating, often permanent vision loss.



### Neoplasia

The second pathologic process most often responsible for externally visible ocular alterations in cats is neoplasia or cancer. Neoplasms can be primary, i.e., arising from previously normal intraocular tissues, or metastatic, i.e., seeded in the eye (usually the iris, ciliary body, or choroid) via the blood circulation from a distant, primary tumor. Sometimes intraocular tumors, either primary or metastatic, grow as solitary nodules; when they do, their recognition is relatively easy and accurate. Often, however, intraocular neoplasia affects many areas within an eye simultaneously. When this occurs, the tumor causes vascular changes identical to and indistinguishable from those described for intraocular inflammation. Thus, careful veterinary diagnostic work is usually required to: (1) distinguish intraocular inflammation from neoplasia, and (2) discriminate within each category the most frequent causes.

### Causes of Inflammation

If we limit discussion momentarily to inflammation, we can reasonably ask: What are frequent causes of feline intraocular inflammation which lasts for weeks or months? Most often, documented diseases are infectious, i.e., due to a transmissible agent. These agents fall into three categories: viral, parasitic and fungal.

**VIRAL AGENTS:** The commonly diagnosed virus infection associated with chronic uveitis in cats is that with the feline infectious peritonitis (FIP) agent. This virus is held responsible for such disorders as infertility, chronic pulmonary and thoracic disease, chronic gastrointestinal and abdominal disorders, and nervous system dysfunction. Much remains to be learned about the FIP virus including the epidemiology and the factors which determine clinical immunity to FIP-related diseases. The mechanism by which ocular inflammation results is unclear, but may be due to nonspecific virus-induced inflammation within and around blood vessels themselves. FIP seems to affect anterior and posterior portions of the cat's eye indiscriminately. FIP diagnosis is presumpt-

ively based upon the finding of a high and/or significantly rising serum titer in association with the suggestive ocular or systemic signs. Treatment of the systemic disease is mainly supportive.

Only one other known feline virus is occasionally associated with chronic intraocular inflammation, the feline herpesvirus. This agent primarily causes ulceration of the cornea. Intraocular inflammation, when present, is always secondary to the corneal disease. Most corneal disease is mild and not associated with extensive intraocular destruction of other infectious agents. FIP does not cause corneal ulceration.

**PARASITIC AGENTS:** Toxoplasmosis, due to infection with the protozoan *Toxoplasma gondii*, is the only presently described parasitic disease associated with feline chronic uveitis. In areas of the United States where this parasite is prevalent in rodent and feline populations, it is a very significant cause of blinding ocular disease in cats. Like the FIP virus, *T. gondii*-associated ocular inflammation spares no portion of the eye. A presumptive diagnosis is made by serial toxoplasma serum titers performed several weeks apart which either begin and remain high or else begin low and increase dramatically within a few weeks. Treatment guidelines for toxoplasmosis, as well as a description of its potential public health significance, are available in veterinary texts and literature.

**FUNGAL AGENTS:** Numerous fungal agents may cause mild to severe chronic uveitis. These fungi are normal soil and environmental saprophytes which probably infect very large populations of humans and animals in geographic areas where they are common. Happily, most animals and people mount an immune response which eliminates subsequent infections. Examples of such fungi are histoplasmosis in the midwestern U.S.; blastomycosis in the Midwest and Southwest; and cryptococcosis throughout most of the country. Diagnosis of all these infections is difficult but can be done presumptively using serum titer and biopsy results. Treatment to eliminate infection is likewise difficult but newer antifungal agents such as ketoconazole and others offer promise.

**NEOPLASTIC CAUSES OF EYE DAMAGE:** of the neoplastic diseases affecting cats' eyes, lymphosarcoma, usually associated with the feline leukemia virus (FLV) is quite commonly diagnosed. Ocular involvement is almost always by metastasis from generalized disease. Diagnosis is generally confirmed only by biopsy of affected tissues. Primary intraocular tumors of cats are usually rare and most often appear as solitary nodules in the iris and ciliary body. Diagnosis is confirmed after surgical removal of the affected eye.

**THERAPY:** As intimated above, specific therapy to eliminate causative agents of feline uveitis is strictly limited. On the other hand, symptomatic therapy for ocular signs and changes can be quite rewarding, especially for inflammatory disorders. Three classes of drugs to be applied directly to the affected eye - corticosteroids, dilating agents, and antiglaucoma medications - are readily available in veterinary practice. Frequent, often long-term use of these drugs may prevent or forestall major vision loss, even when the underlying cause itself is unresponsive to therapy.

In summary, alterations in the appearance of a cat's eyes may prompt owners to seek veterinary attention. Often these chronic ocular changes are associated with potentially serious systemic diseases. Early recognition of these ocular alterations may facilitate prompt diagnosis and prevent or delay major vision loss.

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## BOBCAT



By George Seymour  
Conservation Education Consultant  
California Dept. of Fish & Game

There is only one species of bobcat. In California geographic variations have some effect on the color of bobcats. Those found in timber and heavy brush fields are quite spotted, while those found in the deserts of northeastern California are more of a pale, tawny gray, with a complete absence of spots on the back and all markings are less bold. The bobcat has long legs and large paws. Large specimens can weigh up to 30 lb.

### FOOD HABITS

Despite its pussycat appearance when seen in repose, the bobcat is quite fierce and is equipped to kill animals as large as deer. When living near a ranch it may take lambs, poultry, and even young pigs. However, food habit studies have shown the major part of its diet is made up of rabbits, ground squirrels, mice, pocket gophers, and wood rats. Quail have been found in bobcat stomachs but predation by bobcats does not harm healthy game populations.

The bobcat roams freely at night, early in the morning and in the evening; and occasionally travels abroad during the daytime. It does not dig its own den. If a crevice or cave is not available, it will den in a dense thicket of brush or sometimes choose a hollow log or a tree. Each bobcat occupies a fairly small area in the forest and seldom hunts more than a mile from its home range.

The bobcat's growls and snarls are so deep and fearsome, particularly when hidden from view, that one gets the impression it must be a mountain lion. Its mating behavior is similar to a housecat's. The young are born any time in the spring or summer with the most litters arriving in April and May. Litters average three kittens. The kittens are born blind and are completely dependent on their mother for several months. With skill and patience a bobcat kitten can be tamed and makes an interesting pet, but is inclined to be a "one man" animal. As bobcats reach two years of age they are apt to get grouchy and dangerous and then should be kept away from strangers.

### RANGE

The bobcat has the widest and most continuous range of any carnivore in California and, except for metropolitan areas, is found in all mountain areas. Where it is found it shows a decided preference for rocky bushy hillsides in which to live and hunt.

Thoughtless people still shoot bobcat on sight, considering it a heartless killer of game and livestock, despite food habit studies that have shown that a major portion of its diet is made up of destructive rodents. Wehn an individual animal preys on poultry and the young of livestock it should be destroyed to protect the rancher.

The bobcat's winter coat is desirable fur. The popularity of bobcat fur runs in cycles of 10-15 years. It is fashionable at present and in demand. Because of the mixed feelings about its predatory habits, it is unprotected and may be taken at any time. However, in



# Solving Housesoiling Problems

Dale D. Olm, D.V.M.

*Fluffy's owner is very distraught. It seems that after moving into a new home, Fluffy has forgotten the purpose of a litterbox. The new shag carpet in the livingroom has become Fluffy's new "litterbox".*

This case illustrates one of the most common forms of feline misbehavior--housesoiling. In a recent survey of cat owners, 24% reported that their cats did not use the litter box. This is further substantiated by 59 cases presented at Cornell University's Small Animal Clinic from 1979-1985. Of these cases, 38 involved spraying or inappropriate urination, 10 involved defecation, and 11 involved both urination and defecation. Interestingly, both sexes were equally represented. However, there were distinct differences in the sexual representation of the problems presented (Figure 1) Under normal circumstances the cat is fastidiously clean in their elimination manners, therefore, an underlying cause(s) for such misbehavior must exist.

## Causes of Housesoiling

Feline urologic syndrome (cystitis, urethritis, urethral blockage), commonly referred to as FUS, accounted for a significant number of the cases (Figure 2). Symptoms associated with FUS include inappropriate urination and bloody urine. The aversion to the litterbox results from an association with painful urination or as an urgency to urinate.

Territorial marking by spraying (depositing urine on vertical surfaces) is common for intact male and female cats. The frequency increases with hormonal changes during the breeding season. However, spraying can also occur with neutered male and female cats. Usually a sprayed cat's spraying is associated with conditions of overcrowding and/or aggressive behavior toward other cats.

Moving to a new home, a change in the owner's schedule, or the addition of a new cat, dog, or person to the household can cause sufficient change in a cat's normal habits to initiate the problem. Although these environmental factors often cannot be altered by the owner, recognizing them can lead to a solution which can compensate for the change. Other factors include placing the litter box too close to a cat's food and

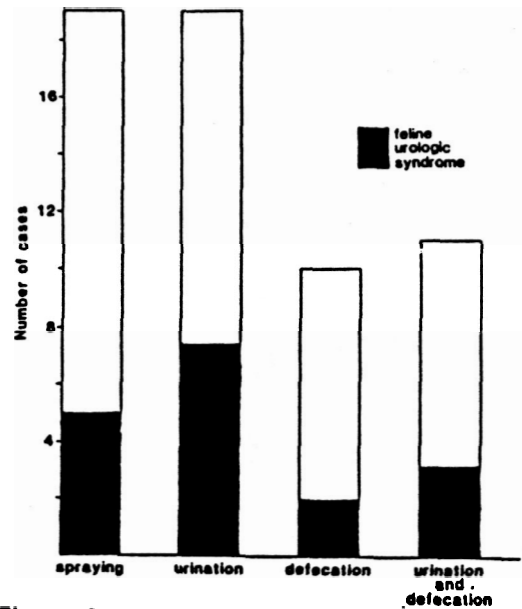


Figure 2. Incidence of FUS in housesoiling problems.

water, since cats do not like to eat in the same area in which they eliminate. Placement of the litterbox in a busy kitchen or in a laundry room may be convenient for the owner, but may encourage a sensitive cat to seek a quieter, less trafficked area. One owner moved her cats' litterbox from the floor to a dresser to prevent her dog from getting into the litter--subsequently the cat quit using it.

To re-establish consistent use of a litterbox, it should be made as attractive to the cat as possible. Cleanliness and accessibility are essential. The litter box should be cleaned daily with fresh litter added to replace the soiled litter. The entire contents should be replaced at least once or twice a week. When rinsing the litterbox use vinegar or lemon juice to neutralize any remaining urine odor which is offensive to cats as well as owners. Never use cleaning products which contain ammonia as this will only intensify the urine odor. Also, strong perfumed products may deter the cat from using the litterbox.

## Litterbox and Litter

The number of litterboxes should be increased to at least one per cat, preferably more. This can be of particular benefit in multi-cat households where a cat may be prevented from using the community litterbox by another cat, or where the cat simply prefers not to eliminate in the area of another cat. Some owners have observed that their cats will use one box exclusively for defecation and another for urination. Some cats just prefer larger boxes. Others prefer to perch on the edge of the box; a box with a platform built around the outside can make these cats more comfortable when using the box. Therefore, providing different shapes and sizes (covered and uncovered) in multiple locations can help immensely to eliminate bad habits.

If a change in litter has occurred recently, the owner is encouraged to use the former material. Also, offering several types of material in the different litterboxes such as sand or soil, alfalfa pellet type, clay type (scented and unscented) sawdust, paper, or corncobs can help bypass the aversion to a specific material. If the cat has been eliminating on rugs, placing a small section of carpet in the litterbox or attached to the rim has been successful for those cats that prefer a material other than the plastic bottom of the box to scratch while making burying movements. Remember, cats are creatures of habit and even minor changes can create confusion. Sight, smell, shape and to some degree, color are daily stimuli which elicit either a positive or negative response.

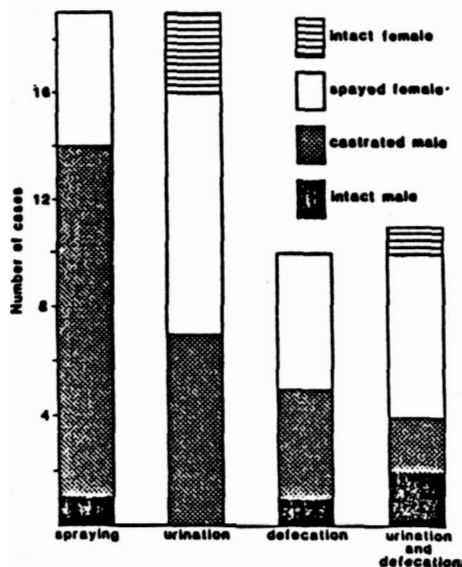
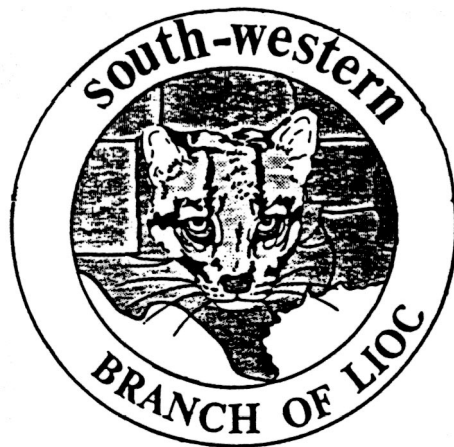


Figure 1. Sex distribution of housesoiling problems presented at the Cornell Small Animal Clinic, 1979-1985.



**MEETING REPORT**

The few that attended, approximately 9 members, had a great time at the Rumford Zoo in Maine. We are so sorry more members didn't attend, you missed a wonderful, informative, fun afternoon.

The McKennas, Everett and Ruth, the proud owners, hosted the meeting and thanks also go along to their son Mark. These people should be met by all LIOC members. They made the day not only fun, but very interesting.

They own a beautiful complex in Rumford, Maine. From the outside it looked quite small, but as you walk around, you realize how deceiving those looks are. It is absolutely beautiful and anyone from this area who hasn't been there or anyone for that matter, should make it a point to stop in and say Hi when in the area.

We had a beautiful day, about 80°, sunny with a slight breeze so it wasn't uncomfortable. All the animal areas were in perfect condition. Camping is also allowed within the compound. We recommend this as a great place to stay.

We did not hold a formal meeting, just enjoyed the sphere, animals, people and weather.

We would all like to thank Mr. & Mrs McKenna for having us and their son Mark for being so patient with us. We hope we can make it again next year.

Submitted by  
Mildred Payton  
Secretary/Treasurer



remote areas where there is no conflict with livestock bobcats should be taken only in the inter months when the dense fur is at its best. Commercial trappers trap and sell from 300-500 each year in California. Some of the pelts are used as rugs or wall hangings but most of them are used in coats.

Prepared by George Seymour, California Department of Fish and Game. This article is one of a series printed by the Department of Fish and Game. Single-sheet reprints may be obtained from the department, 1416 Ninth Street, Sacramento 95814. Bulk quantities may be purchased from Documents Section, P.O. Box 20191, Sacramento 95820, for the following prices: 100 or more, \$2 per hundred; 1,000 or more, \$1.90 per hundred; 5,000 or more, \$1.75 per hundred (California residents add 6 percent sales tax).



The June meeting of the SouthWestern branch was held in the lovely setting of Elfriede and John Vickery's home on the lake. John & Elfriede have been adding on to their home and remodeling, doing it mostly by themselves. We've been privileged to share their progress.

As usual, Elfriede outdid herself with a sumptuous buffet, coldcuts, vegetable trays, deviled eggs, sumptuous salads of many descriptions, pastries and more. Unfortunately the turnout was small, but we each did our best to clean off the table—we weren't successful, despite moans of "I can't eat another bite"

Lois Marshall, who was elected Secretary/Treasurer at the last meeting, sent word that due to ill health, she couldn't assume those duties at this time. We wish her better and Harriet Leake will take up those duties as well as those of Vice President with ex-secretary Shirley Wagner, helping as needed.

The upcoming convention was discussed, with a decision to make a contribution to the auction, President Jean Hamil was authorized to make a purchase and send it to Suzi Wood.

We further discussed how much involvement (governing) we felt the National organization was entitled to. Feeling that after all SW Branch was an appendage of National we feel that any governing they see fit to do is alright by us. Especially if it affects the reputation or "flavor" of LIOC as a whole.

Our usual raffle was held and added \$46 to the treasury. Attending were: Roger, Faye & Kay Harmon, Jean & Carl Hamil, John Stokes with baby jaquar, Harriett Leake, Jerry Neal, hosts John & Elfriede Vickery, and guests, plus yours truly,

Shirley Wagner



### Retraining

In cases of overcrowding, owners are encouraged to spend some time alone with the cat. This can include holding the cat or permitting it to sleep on the owner's lap. This tender loving care or stroking has helped cats which appear to be reacting to too much competition from other cats in the household. Another solution is to decrease the number of pets by finding homes for some or by providing greater access to other parts of the house.

Even after the above steps are taken, some cats require retraining to the litterbox. Confinement to a small room or a cage with a litterbox can assist in this process. Cats are strongly inhibited from elimination in confined areas because they do not like to foul their sleeping quarters. When the cat begins to consistently use the litterbox again, it can have access to larger areas of the house.

Placing the litter box on top of a favorite elimination site and then slowly moving it to a more desirable location has also been used. A different approach has recently been established in which the owner retrained her two cats to use the litter box, similar to housebreaking dogs. After feeding, the cats were brought to the litterbox and praised for using it.

The owner is dissuaded from punishing the cat for housesoiling because punishment can evoke a negative response. Furthermore, physical and harsh vocal punishment can result in the cat's avoidance of the owner. Occasionally, spraying the cat with water or making a loud noise when a cat is caught in the act of house-soiling has helped discourage it from using a specific spot. However this usually results in the cat inappropriately eliminating when the owner is not present. Therefore other methods are usually more effective.

If the cat is spraying, it is particularly important to try to resolve the initiating causes, such as exposure to unaltered tomcats or to overcrowding. Since a cat first sniffs an area before actually spraying, using a odiferous repellent on the location may avert the cat from spraying that area. However, this may result in the cat finding a new location. Owners are encouraged to castrate tomcats or spay queens that may thus reducing their natural inclination to mark their territory. As a final resort, a tranquilizer or a synthetic progestin can be prescribed. Unfortunately, progestins have potentially serious systemic side effects.

### Summary

The first step to solving inappropriate elimination behavior is careful observation by the owner of the offending cat. Bloody urine usually indicated FUS which requires immediate veterinary attention. Environmental factors (e.g., overcrowding) can result in housesoiling.

Dale Olm is a 1986 graduate of the New York State College of Veterinary Medicine. He is currently staff veterinarian at the Henry Bergh Memorial Hospital of the ASPCA in Manhattan, N.Y. and an animal behavior consultant at Cornell.

ED.NOTE: The above is obviously written about domestics. LIOC does not endorse spaying or neutering as a solution for housesoiling problems - Remember: EXTINCT IS FOREVER



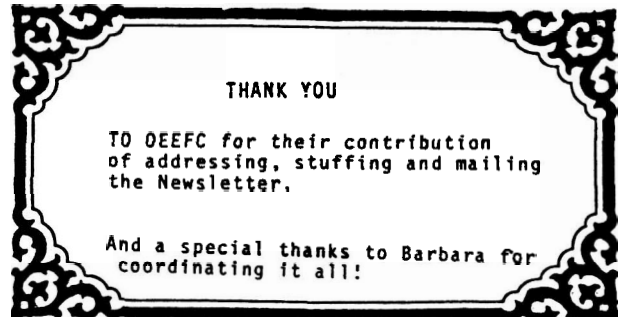
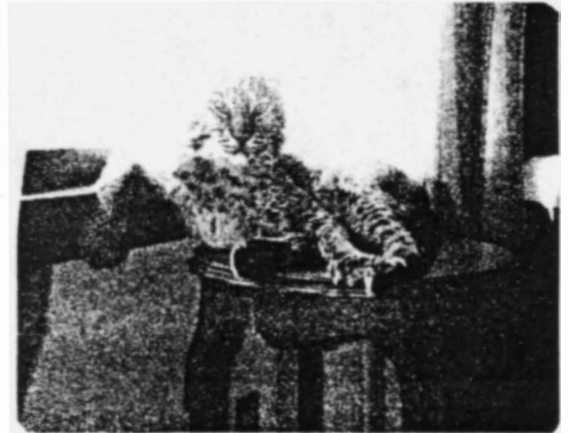
Cornell Feline Health Center  
Cornell University  
College of Veterinary Medicine  
Ithaca, New York 14853



FRITZ THE CAT will be 3 years old in August, He loves to look out the big window, take naps with Wayne and wash Wayne's face for him ( you how messy humans are!)

Fritz loves to rub his face in anything that has tomatoes in it. He sleeps with us and boy can he snore!

Phyllis Hicks





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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
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