

# NEWSLETTER

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1995 Convention goes at America's only mountain zoo



# LIOC

## Endangered Species Conservation Federation, Inc.

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

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

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

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

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## 1995 L.I.O.C. Endangered Species Conservation Federation 25th Annual Conference - August 17-20

The LIOC Convention was held at the Embassy Suites Hotel located in Colorado Springs Colorado. The tropical atrium provided our group with a refreshing outdoor feeling.

On Thursday, August 17, we kicked-off the convention with a general membership meeting followed by guest speakers. Our first speaker was Bruce Goforth, Senior Wildlife Biologist, with the Colorado Division of Wildlife. His presentation reflected land management activities in the Colorado wilderness as well as in the local rural area. He provided pamphlets with instructions on what to do if you encounter a cougar and/or many other species of wildlife. We enjoyed Bruce's presentation.

Our second speaker was Dr. Scott Gustafson DVM with his assistant Sergei Vanbelunghen from the Animal Surgical Specialty Clinic in Colorado Springs. They presented state of the art operational equipment such as an Endoscope and a

Labroscope. These machines are used to view the insides of patients to diagnose an illness. Following a brief animal anatomy lesson, Dr. Gustafson showed us how the Endoscope is used. We then viewed a video of an Endoscope in use on animals with various illnesses. Their presentation was very educational.

Our evening started with a Western Buffet dinner and a surprise square dancing party. Each person was given a western "cat" scarf to wear and our guests Lenny & Shirley Grandy called the dances. The Grandy's invited some of their square dancing friends to fill in our squares. Occasionally, a partner would be skipped and someone else's partner would be spun around by mistake, but overall we kicked-up our heels and did a fine job of dos a dos, right & left grand and allemande left.

Friday morning we started our day with a trip to the Cheyenne Mountain Zoo, rated one of the best ten animal parks in the nation and America's only mountain zoo. Dale Leeds, General Curator, spoke of the plans to build the "Asian Highlands" enclosure which will house the zoo's cats.

After leaving the zoo, we set out for Helen Hunt Falls in a 50 seat bus traveling on a curvy, narrow, dirt mountain road for an hour. The trip to the falls was magnificent, with heavily treed deep canyons. We passed through two narrow tunnels which were bored through the mountains. The magnificence of the drive to the falls paled to insignificance compared to the beauty and tranquillity of the falls. We enjoyed our lunch by the creek and hiked around the falls. On the return trip to the hotel, we went sightseeing in the Broadmoor area and viewed many million dollar homes.

Saturday was free time for everyone to check out other local areas of interest. Some of our members visited the town of Cripple Creek, an 1800s town with casinos. Others went to the Manitoba Cliff Dwellings, old Indian ruins, and some (myself included) traveled to the top of Pike's Peak, 14,110 elevation. There's not much air up there!

Following Saturday's Banquet dinner, the awards were presented. The Engler-Douglas Breeder Award was given to Ken Hatfield. This award was created by the old Florida Chapter which has been disbanded. The existing treasury was earmarked as an annual award for breeders who contribute to the perpetuation of the species. Jeff & Scarlett Bellingham were the recipients of the 1995 Lotty award for outstanding service to the cats and LIOC. Katie Knight-Montiero was presented a plaque in appreciation for her service as President of LIOC. Jackie Sinnott won the Newsletter photo contest. Jackie Vanderwall, Carin Sousa, and John Roe each won the table decoration raffle prize of a ceramic black leopard. These cats were made and donated by Ethel Hauser. John Perry's son Jay won the raffle prize of reimbursement for his convention fee of \$85.00 donated by the EFES branch. We celebrated Jay's 14th Birthday with a candlelit cake and song. It's so nice to have Jay in attendance at

conventions. He loves to bid on those auction items.

As usual, the auction was the evening's highlight! The auction grab bags were hot! We didn't give the auctioneer a chance to do his job. John and Sharon Roe were upbidding against each other, again this year. You'd think they would've learned from last year. Beautiful Priscilla, the large stuffed bird, made a Queen's entrance. This year she was adorned with 14k gold and lots of jewels. The bidding went higher and higher, but of course, JB Anderson HAD to bring the decorated Priscilla home for Reva. You may not know it...Priscilla originally was donated by Reva, so we all know how happy she must be to have her back.

We wrapped up the convention with an announcement for next year's convention to be held in the state of Maine, hosted by George Stowers. We are looking forward to seeing our friends from the North Eastern United States at the 1996 LIOC Convention.

Submitted by, Kelly Jean Buckley aka "The Phantom Host"



Our hostess, Kelly Jean Buckley with Dale Leeds,  
Curator of the Cheyenne Mountain Zoo.



Dr. Scott Gustafson

## *Kids & Cat Conventions*

Even if you're a kid you can still enjoy going to a cat convention. For the past three years, and one other year, I have been going to them. This year it was Colorado Springs. If you're having a boring summer and want to see a new part of the country, come to Convention.

National Parks are great for any kid or adult to see. In Colorado Springs my family and I went to the Sand Dunes National Monument and Rocky Mountain National Park. If you love the beach, the Sand Dunes would be heaven for you. Rocky Mountain National Park had the most beautiful scenery. Last year, in Tucson, a great park we saw was Saguaro National Monument.

There is almost always something the whole family can enjoy. Horseback riding you can find near almost all the sites for convention. In Colorado my mom and I did a great adventure. We went white-water rafting. Even if you don't like rides at amusement parks (like my mom), you probably would enjoy this.

At convention there is always a planned trip to go on. A lot of the time the group visits zoos, but other things include waterfalls, caves and other interesting sites. This year at Colorado Springs, the zoo we visited was on a mountain (luckily there was a tram to take you up and down it).

One of my favorite parts about convention is the auction. Not only is it a great place to get wonderful cat things (well, mostly cat things), it has great humor thanks to people like Jon Roe, J.B. Anderson, Jeff Bellingham and others. This year I won a raffle for the return of the registration fee from the Exotic Feline Educational Society, for eighty-five dollars! But, I gave it right back by bidding on some very nice art work. As J.B. said, "Next year we'll put everything in a bag," for the most sought after items were the grab bags.

If this will convince you to come down to convention next year in Maine, then great. I hope to see more kids there!

Jay Perry, age 14



Linedancing



A birthday kiss from Barbara Wilton & Ethel Hauser

## The Iriomote Cat & Leopard Cat are Different

DNA studies by Japanese scientists suggest that the Iriomote cat (*Prionailurus bengalensis iriomotensis*), whose taxonomic place has long been disputed, is related to the leopard cat but has evolved unique features.

The Iriomote cat, which is confined to the Japanese island of that name 200 km east of Taiwan, was first described in 1967 by Professor Y. Imaizumi, who placed it in a new genus, *Mayailurus*, on the grounds that it was distinct from other wild cat species. However, several taxonomists have suggested a possible relationship with the leopard cat. Wozencraft (1993) classified it as a subspecies of the leopard cat, *Prionailurus bengalensis iriomotensis*, but his classifications were not the result of primary research.

The Japanese papers, published in 1994, state that DNA studies confirm a relationship with the leopard cat. Suzuki *et al.* analyzed the restriction fragment length polymorphism in the spacer regions of ribosomal DNA (rDNA), using 12 restriction enzymes. Their conclusion was: "The Iriomote cat and the leopard cat share a common replete, but this replete is different from that of the domestic cat (*Felis catus*) with an estimated sequence divergence of 1.5% and from that of the ocelot (*F. pardalis*) with an estimated sequence divergence of 1.5%. These results indicate that, phylogenetically, the Iriomote cat is closely related to the leopard cat and that the ancestral population moved from the continent to Iriomote island...It appears that, even though migration...occurred relatively recently, the population has diverged to some extent from its continental counterpart,

perhaps via a fixation of pre-existent intraspecific variations rather than by generation of new variations"

Masuda *et al.* investigated partial sequences of the mitochondrial 12S rRNA gene (373 bases) and the cytochrome b gene (402 bases) in comparison with those of seven other felid species.

"Six Iriomote cats examined in this study showed no intraspecific variation for both genes. The sequence comparisons and the molecular phylogenetic trees indicated that the Iriomote cat is very closely related to the leopard cat ...and that it is reasonable for these two felines to be classified in the same genus. Based on sequence data, the Iriomote cat was estimated to have diverged from the leopard cat around or less than 0.2 million years ago, and this concurs with the previously reported geological isolation date of the Ryukyu Arc from the Chinese continent. Our results suggest that the geographic barrier has led to the fixation of some unique morphological characters into the Iriomote cat population, while both the Iriomote cat and the leopard cat still retain very close genetic characters."

Commenting on these findings, Professor Paul Leyhausen, who has closely studied the Iriomote cat, said they were in agreement with his own findings that *bengalensis* and *iriomotensis* were different species, although closest within the genus *Prionailurus*. But he said that his belief was that the Iriomote cat derived from an ancient stock of which the leopard cat, along with others, had branched. This will be the subject of a forthcoming paper.

## 1995 Lotty Presented to the Bellinghams

The 1995 Lotty, LIOC's award for service to the organization and cats was awarded to Canadian members Jeff & Scarlett Bellingham. The Lotty is a sculpted bust of an ocelot's head, designed by Brenda Duprey in 1966 and modeled after her ocelot Zapata.

Nominations are solicited from previous winners of the Lotty and then a vote taken from those previously so honored. Should there be no candidates there is no Lotty presented - each year there is the option given of "No Lotty this year". This is Lotty number 29.

The Bellinghams have been members since 1985. Since that time both have served on LIOC's Board of Directors. They own and breed caracals, servals, and Geoffroys, and own many others. Their active, ongoing participation in LIOC and willingness to assist others makes them worthy recipients of LIOC's most coveted award.

Jeff Bellingham writes:

I would like to take this opportunity to address two separate issues which I feel are both important.

Firstly, I want to thank the previous Lotty winners for honoring both Scarlett and myself at this year's convention, by presenting us with the 1995 Lotty. This was totally unexpected and words cannot express the gratitude we both felt. To be included in the company of the previous winners of this award is, for myself, something I could never visualize. I would add however, that in the case of Scarlett, as biased as this may sound, I feel that the committee could not have made a better choice. I can attest to the hundreds of hours that Scarlett has dedicated to the welfare of exotic cats, and the emotional roller coaster rides she has endured as a result. I speak not of our own family of felines, who honor us by allowing us to share their lives, but the time she has spent in

helping others who regularly call our home for assistance. To say I am amazed at the knowledge she has acquired over the previous ten years would be an understatement. What makes her exceptional however, is her realization that you can never learn it all, and must always leave the door open for new ideas and procedures. It is not an exaggeration to say Scarlett has personally helped countless people over the years with their sick or injured cats, making diagnosis over the phone which are truly amazing and which are later validated through veterinarian examinations. She has given freely of her time (and our money via phone bills), and has never turned away on a cat in need of help. I could go on, but I shall not, as anyone who knows Scarlett knows what I am trying to say.

I would however like to thank one other very special lady, who changed the lives of both Scarlett and myself; and without whom, we would never have won this award. That lady is Jean Hatfield, who unfortunately could not make it to convention this year, and therefore did not make herself available for me to thank in person. Jean is a very modest person, who has been both an inspiration and a wealth of knowledge and experience from which we have drawn. She was responsible for our obtaining our first exotic. Let me tell you that in itself was a miracle. It took us three very forceful visits before it was accomplished. Finally and thankfully, Kato came into our home. I was warned by Jean all about the things I should not do with an exotic, which I promptly dismissed immediately on getting home. The result of my arrogance was a brand new, plastic knuckle to replace the one my loving Kato decided to chew on while playing one sunny afternoon after he reached maturity. To be honest Jean, as much as I raised him wrong, and now am the only one who can deal with him, he remains the true love of my life, and I wouldn't change a thing about him. He's a Hatfield cat, dammit, he's supposed



### **Bellingham - continued**

to suck thumbs and have character. That's not to say I made the same mistakes with any subsequent additions to the family. For those who know Jean, I need say nothing more. For those who do not, you'll have to take my word for the fact that to even partially commit and sacrifice for the sake of the animals, to the extent that Jean Hatfield has, is a great accomplishment. To equal her contributions is something that in my estimation is almost impossible. Thank you Jean, for all the love and heartache you have brought into my life. You cannot experience one without the other, and in raising and sharing your life with exotics, these emotions seem to go hand in hand all too often. To endure and carry on for the sake of the animals, that is the true gift you have given me.

Again, thanks to all involved in the selection process, with emphasis on JB Anderson. To receive the award is a great honor, to have it presented by such a close friend gave the ceremony a personal touch which I will not forget. My only regret is that Reva Anderson could not make it to convention to share the moment with us. Next year Reva, no excuses!

The second issue I would like to talk about is Convention. At this year's convention in Colorado Springs, Kelly-Jean and Tom Buckley did an outstanding job in hosting the event. As usual, there was your basic general membership meeting which lasted a couple of hours. The remainder was spent touring the local area, getting re-acquainted with old friends, meeting new ones, listening to interesting and educational speakers and basically eating and drinking ourselves to death. I am not going to critique the convention, as that is normally handled by the Newsletter. My reference to convention is intended to hopefully wake some of you people up. It just seems that in recent years there has been a core of people attending, with perhaps the odd new conventioner coming to test the waters. My point is, "You people don't realize what you're missing!" I know a lot of you are concerned that you won't fit in, or that you won't know anybody. Well in considering the

latter, you must know someone, at least by phone, or you probably wouldn't be a member. As for fitting in, this is such a diverse group of people, that you'd have to be from another planet not to fit in. Keep in mind that all of us started as strangers in this organization and unfortunately, by not coming to convention, the majority of us will remain that way. I mean exotic cat owners are a pretty exotic group of people in their own right, so at the very least it's an incredibly intriguing event. I'm sure the cost is another factor for many of you and let me assure you that the author of this is a long way from independent wealth. With some minor planning, the costs can remain truly minimal.

You must keep one thing in mind, although LIOC does make contributions to certain groups and helps out with members whenever we can, you are really only offered two things in exchange for your dues. The first being the Newsletter which can be both informative and entertaining, and the second being the annual Convention.

To be frank, most of you are screwing yourselves out of a great time by only receiving half of what you are entitled to. The newsletter is definitely a worthwhile expense, but hey, you pay your dues and you are just as entitled and will be just as welcome at convention as all the people who have attended year after year. I know for Scarlett and myself convention has given us two things that we would not have gotten any other way. The most important being a network of contacts. People from all over the U.S. that we could call on for advice or suggestions regarding not only the animals, but inquiries about their state or city law, or points of interest. I would say that by going to Convention, we now have friends in the vast majority of states which is very reassuring on road trips or in considering relocation.

The second thing convention has given us is experiences. The majority of cities in which Convention has been held over the past decade that we have attended, are cities we probably never would have visited under normal circumstances. Well I'm here to tell you that we have yet to regret a trip. Even though some

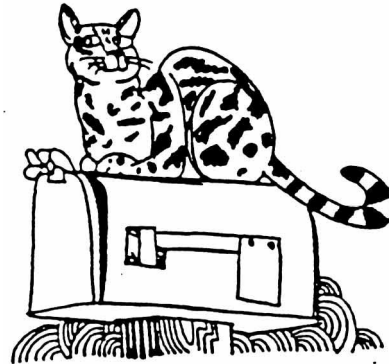
**Bellingham - continued**

of them did not seem overly appealing initially, we consistently have had a great time in each location, observing the local wildlife (humans included.)

So take it from a couple of Canadians, (and you think you have a hard time stretching a dollar), take that big step and plan on attending next year. You won't regret it. I mean, gee, the auction alone is worth the expense. J.B. Anderson can't be believed until he's seen in action moving those goods and his assistant, well, what can I say? An absolute raving beauty.

So no excuses and we'll see you next year in Maine.

Respectfully (but don't test me)  
Jeff "Vanna" Bellingham



***Readers Write***

Dear LIOC,

I am just writing to thank everyone who responded to my letter of a few months ago. I received quite a few calls and letters from various helpful people. I do hope to visit some of them soon. So far, in my hunt for a Feline-Friendly state, Oregon and Washington are winning. Colorado doesn't look promising and there aren't many other states that have the climate and terrain I like. Hopefully, I will get out to Washington in the near future to check on possible properties. At the same time I would like to be able to attend a local branch meeting. (I need to look up the EFES and Pacific Northwest groups I think).

I find the LIOC Newsletter quite informative and helpful. I do wish that we would see more followup letters telling of the success or failure of various things that are mentioned (legal, medical, etc.) I am often left wondering what happened.....

Thank you all,

*John G. Lussmyer*

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Our May meeting was held at the home of Debbie & Tom Misotti on the 20th. We had a fantastic turnout - 32 people and 6 cats! Also, let's not forget the resident, Kitaro, Debbie & Tom's capuchin monkey. He held a private show just for me in his room (I'll never forget it Deb & Tom) Pam Riley brought her cougar, Sierre and a bengal kitten; Mike & Carol Preston brought two of their jungle cat hybrids; Dan Kozlow and Vanessa brought their baby cougar and a guest brought his F1 bengal cat.

We had not one, but two guest speakers: Bob Van Fleet (from Putting People First) and Lt. John West of the Florida Game & Freshwater Fish Commission.

Bob Van Fleet informed us of the proposed county regulations for breeders of cats (domestic & exotic); spoke of a new organization in the making for animal welfare and updated us on Uncle Lennie the Monkey Man's court battle with the city of Hollywood regarding their law on exhibiting animals with vertebrae.

Lt. West first filled everyone in on the job of the Florida Game & Fresh Water Fish Commission. He told us the requirements of officers, who all they regulate and that there are a total of nine officers covering the whole state of Florida. After his speech he opened the floor to questions, of which there were many. Here is a brief summary of what was discussed: first and foremost was the rumors about new regulations - he informed us that the requirements for

ownership will stay the same, but they are working on a more specific classing of species/genus. There is a Captive Wildlife Review Board that is made up of breeders, exhibitors, personal pet owners, a veterinarian, lawyers dealing in exotics (The Ringling Bros. attorney), Fish & Game officials and the HSUS. There are seven people on this board and they are reviewing the regulations now. When they have proposals there will be a meeting which will be open to the public.

The questions were never-ending and covered everything from transporting in your vehicle, taking animals out in public, vaccinating yourself and keeping records, if your cat scratches somebody and how to quarantine. He also spoke of the rewards of tattooing or microchipping our animals.

I don't think there was anything that wasn't covered and we would like to extend our extreme appreciation to Lt. West for giving up his Saturday to be bombarded by all of us!

After this it was getting late so we did not conduct a business meeting. I did relay however, that it will soon be time for elections so members should start thinking about nominations now. We will discuss this in more depth at the July meeting.

It turned out to be one of our best meetings yet - I'm just sorry more people couldn't attend. It was very informative to say the least.

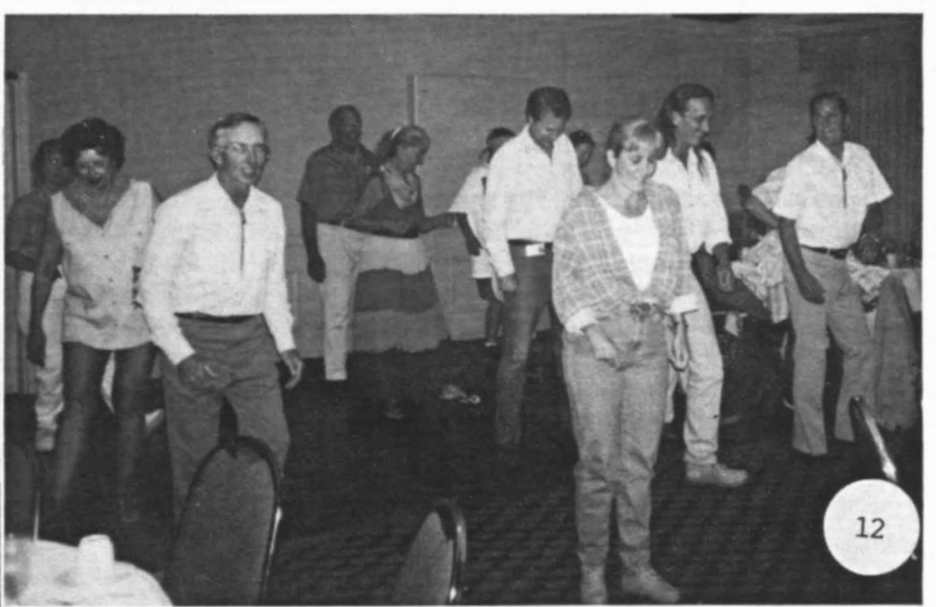
An update on our club - we now have 31 paid memberships, consisting of 41 members! More applications are still out.

Respectfully submitted

Sandra L. Cassalia  
Secretary



See page 19 for key to photos



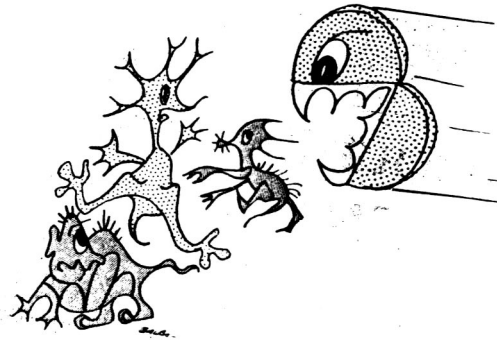
# The Emerging *Menace* of Feline Bordetellosis

By Kitty Angell

Just when breeders thought they had most infectious feline diseases under control, a new monstrous illness has begun to invade catteries. For years, *Bordetella bronchiseptica* was thought to only affect dogs, causing infectious tracheobronchitis, commonly known as "kennel cough". Now, however, it has been found to cause pneumonia in cats. A related organism, *Bordetella pertussis*, causes whooping cough in humans.

Although clinical signs of *Bordetella* infection are fairly obvious in dogs and humans, adult cats rarely exhibit the common symptoms of coughing or labored breathing, even when severely infected. Kittens may only show nonspecific signs such as listlessness, anorexia, dehydration and emaciation. This makes diagnosis very difficult, to the point that some kittens may be mistakenly diagnosed as having cardiomyopathy. Because labs do not routinely check for this organism when bacterial smears are sent in from a sick feline, by the time the pneumonia is discovered it is often too late. Autopsies show classic signs of bronchopneumonia, which are reddish areas filled with pus and occasional gray nodules. Chest x-rays, if done beforehand, would also reveal a typical bronchopneumonia pattern.

The incidence of *Bordetella* in cats is probably even greater than is currently thought. Two previous studies give great credence to this belief. The first involved a cattery in Great Britain that housed 23 queens and five males. Although their feline immunodeficiency virus (FIV) status was not determined, all cats were negative for feline leukemia (FeLV). An inactivated or "killed" vaccine for feline herpes virus (FHV) and feline calicivirus (FCV) was given to all queens two to three weeks before they delivered, and all kittens were vaccinated at 9 and 12 weeks of age. At the time of infection there were six litters of kittens between 5 and 10 weeks of age that developed signs of respiratory disease over a three-



week period. Five kittens suddenly began breathing laboriously, turned blue from lack of oxygen and died in respiratory distress. Seven kittens showed signs of either chronic upper or lower respiratory disease; one of this group died. Eight other kittens were clinically healthy. Some of the queens had a history of conjunctivitis and oral ulceration resembling FCV, but when two kittens from different litters were submitted for post-mortem exam - one was 9 weeks old and the other was 6 weeks old - neither FCV nor FHV was isolated. Both cultures however showed severe, pus-inducing bronchopneumonia.

In 1993, research done in the Netherlands dealt with the challenge of vaccinating cats for *Bordetella*. Four 8-week old kittens that were not infected with FHV, FCV or chlamydia were subjected to an atomized form of *Bordetella bronchiseptica* to trigger an immunologic response. Within 5 days, signs of respiratory disease developed. These included nasal discharge, sneezing and coughing. The sounds of secretions and fluid in the bronchial tubes could be heard by stethoscope. Symptoms lasted 10 days before the cats recovered.

A second test was done to measure the effectiveness of an inactivated vaccine. In this study, 10 kittens were vaccinated twice with a two-week interval. Five kittens were left unvaccinated to serve as a control group. Two weeks after the second vaccination, all kittens were exposed to atomized *Bordetella*. All control kittens developed signs of respiratory disease, whereas the vaccinated kittens were almost completely protected. Degrees of protection ranged from 95 to 100 percent against rhinitis, sneezing, coughing and congestion in the bronchial tubes. Also, the vaccinated cats fought off the bacteria more quickly than the control cats, resulting in a reduction of 80 percent of the bacteria after 15 days, to 99 percent after 22 days.

During the study researchers rarely found cats that did not have *Bordetella bronchiseptica* in their blood. This indicates how common the organism

### **Bordetella** - continued

is in the feline population. The study also proved that an inactivated vaccine is effective in preventing the disease.

### **Factors That Cause the Disease**

*Bordetella bronchiseptica* can be a primary cause of illness or follow viral infections in both cats and dogs. The bacteria attach themselves to the respiratory cilia (minute hairs that help defend the respiratory tract by moving foreign matter out), overcome them and begin to multiply. They also secrete an enzyme called adenylate cyclase, which decreases the activity of the alveolar macrophages (large white blood cells in the ridge-like border of the upper and lower jaws that ingest foreign particles and infectious microorganisms).

Clinical signs usually develop within 3 to 5 days after infection. Recovery corresponds with the appearance of immunoglobulin A in the respiratory secretions and a reduction of bacterial counts. The clearance of *Bordetella bronchiseptica* from the lower respiratory tract takes an average 6 to 14 weeks, which can result in the formation of nonsymptomatic carriers of the disease.

### **Diagnosis**

Diagnosis of this disease cannot be easily made by physical examination alone. The best way to detect a *Bordetella* infection is to have your vet use a tracheal wash to isolate and identify the organisms. This is done by anesthetizing the cat and placing a sterile endotracheal tube into the trachea. A tiny, sterile feeding tube is passed inside the endotracheal tube and attached to a syringe containing sterile saline solution. Up to 5 ml/kg is injected into the lungs and then aspirated back into the syringe. Part of the fluid is then placed in a culture medium for bacterial culture and sensitivity. The rest is used to make smears for examination of the cells to check for fungal infections and other inflammatory conditions that might otherwise be missed on a bacterial culture. If FHV, FCV or chlamydia are suspected, the conjunctival scrapings should be taken and submitted for fluorescent antibody evaluation. Simple throat swabbing is an unreliable method of detection since the organisms can be found in the throats of most cats.

The frustrating aspect of this disease is that it is so often asymptomatic, but breeders who have combated feline bordetellosis report that telltale signs

in kittens and cats include what appears to be a bad cold that will not go away, a low-grade temperature, redness around the outer perimeter of the eyes and a cough that has a raspy, dry sound much like the noise a cat makes when trying to cough up a hairball. In other words, it copies the symptoms of a nasty upper respiratory infection.

### **Treatment**

The sooner treatment is begun the more effective it is. If one or two cats are diagnosed with feline bordetellosis, the entire feline household should be treated. The most effective drug is Primaxin, but it is extremely expensive and must be administered intramuscularly several times a day. Doxycycline, a potentiated tetracycline is almost as effective and can be administered orally over a 30-day period. (Doxycycline is given 5 mg per kg of bodyweight twice a day and comes in both tablets and capsules)

Nebulization (treatment by spray) can also be beneficial in preventing the respiratory passages from becoming too dry. A mixture of .9 percent sodium chloride, aminophylline, 2 to 3 drops of Betadine solution and Enrofloxacin is used in the nebulizer solution. This is usually administered twice daily for 20 minutes at a time. Despite aggressive treatment, fatalities still occur.

Vaccination with a modified-live intranasal vaccine and an inactivated vaccine is recommended by Dr. B. Kent Cooper, a veterinarian in Grand Prairie, Texas who is working with several infected catteries.

### **Precautionary Measures**

- Be particularly careful when handling your cat and others at cat shows. Bordetellosis bronchiseptica is an airborne bacteria that can be easily passed from one cat to another.
- Avoid overcrowding in the cattery environment.
- Control FCV and FHV through vaccinations.
- Consider vaccinating your cats for Bordetella.

Reprinted from CATS

Ed. Note: Although we've not received a report of an exotic contracting *Bordetella*, it has been found in the Bengal hybrid. Remember, this is a common disease in dogs so be aware of this when visiting dog shows, or if you come in contact with large numbers of dogs.



## *The Snow Leopard* *Part III* *Food & Feeding Habits*

By Ron Eldridge, BVSc

The snow leopard's ability to remain undetected in its movement is primarily due to its cryptic colorations. Humans rarely see the snow leopard in its natural habitat. In the words of biologists, George Schaller, noted for close encounters with this leopard, the following is an account of a hunting snow leopard...."She advanced slowly down the slope....carefully placing each paw until she reached a boulder above the goat...then leaped to the ground. When the goat turned to flee, she lunged and with a snap clamped her teeth on its throat..and grabbed the goat's shoulder with their massive paws."

Given the harsh environment in which it lives and the sparse amount of prey available,

the snow leopard has probably never been common. The snow leopard in attitude is curious and calm. These cats are most aggressive on warm days from mid-morning until early evening when the day starts to cool. One study in Langu Gorge (Nepal), found the snow leopard to be crepuscular (active until 10:00 am and then again in late afternoon and evening). In central Asia, they tend to be more nocturnal. This may be due to an adaptation it developed because they are hunted by livestock farmers and poachers during daylight hours.

Although thought to be primarily solitary, the snow leopard might occupy joint territories in pairs and cooperate in hunting. Mostly the snow leopard is a solitary cat who prefers to hunt alone. The home ranges, which overlap, varies from 4 to 15 square miles; but



**Snow Leopard....continued**

this does not take into account the enormous vertical distances of mountains involved.

The choice of prey varies according to the species of game available. Ibex are the preferred prey. In other areas wild sheep such as the shapoo, bharal (blue sheep) are the prey of the snow leopard. It will also hunt tahr, goats, muskdeer, marmots, snow-cocks, monal pheasants and red-legged partridges. In Russia they take Persian gazelles and wild boar. In the winter the snow leopards are closer to the villages. This results in domestic stock being taken. When this happens, the cats are usually killed by the owners of the livestock.

The snow leopard method of hunting is stalking and ambush. It is a very powerful and agile cat, capable of making leaps up to 50 feet uphill. It will rest in the major ridge-lines, edges of bluffs and bases of cliffs. There the cat will wait and watch for prey. From these cliffs and bluffs, it will leap and fasten itself upon the unsuspecting prey. After the suffocating clamp of its teeth on the throat of prey, the animal is quickly killed and devoured. Like most carnivores, it begins with eating the stomach, ripping open the belly and eating the entrails before moving to the rump.

The future of the snow leopard depends on adequate, well-policed preserves with sufficient prey and efficient enforcement of the snow leopard's protected status.

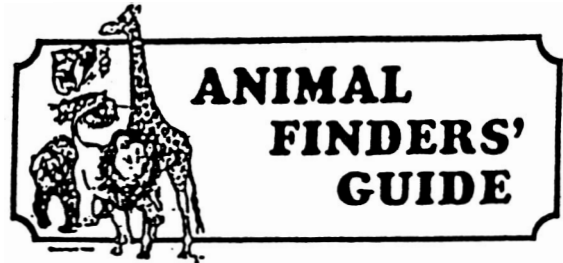


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## The Classifieds

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### June Meeting

Our June meeting was held in the home of Jackie Sinnott in Beaverton, Oregon.

After Steve Belknap welcomed members and guests, we talked about problems. Concerning us most was the problem Andy and Luisa Turudie are having with their neighbor over their cougars. They are beautiful and friendly cats that live in sturdy, wonderful cages. We all hope for the best in the upcoming court case.

Next, John Van Stry talked about the black leopard cub he is getting soon. We then discussed the print we have and how we should offer it for sale. Steve brought his monkey, Missy to visit. We all enjoyed seeing her.

The rest of the day was spent visiting, playing with Missy and Jackie's wonderful ocelots and eating lunch.

### July Meeting

The meeting was held at the home of John Van Stry in Beaver Creek. John conducted tours before and after the meeting.

Steve Belknap welcomed us and asked each of us to introduce ourselves as we had several new people in attendance.

Lynette talked about the hair-pulling problem she is having with her serval. Several members offered solutions, so let's hope one of them works.

We discussed the upcoming convention, at this time it looks as if only Gayle and Jackie will be able to attend.

The calendars were displayed and several were sold to those attending. We have only a few left.

Next we had introductions of all the babies attending, many in need of new homes. Jackie Vanderwall had 2 male bengal/jungle cat hybrids, Steve had Missy monkey, a sugar glider and 5 female Maine coon/jungle cat hybrids. Jan Merris had a three month old serval. And of course John Van Stry was there with his new black leopard cub; she is just adorable.

After our usual raffle, the rest of the day was spent visiting and playing with the kittens, many of whom went to new homes.

### August Meeting

Chris and Lynette Inocenti hosted the meeting at their lovely home. As Clem and I got there a little early, we caught them getting ready to let their serval play in his wading pool. As we, (strangers) went downstairs to his area, he didn't seem to mind in the least. He greeted us and then proceeded to play in his pool. Boy, did he have a good time.

As other members and guests arrived, we went upstairs to greet everyone. Since it was a beautiful day, we had the meeting on the large sundeck around the house.

Four legged critters in attendance were: Steve's monkey, Missy (who's looking for a home), along with his jungle cat/Maine coon kittens which are also for sale. John Van Stry brought his black leopard cub, Shawn was there with his lion cub and one of the new owners of one of Steve's hybrid kittens (sorry I didn't get the name) was there.

The only problem mentioned was concerning the lion cub, who is going through a mouthy stage, and gets a little rowdy when he eats. All sorts of advice was given, and Shawn has reported back that the problem is now solved due to the help he got.

Both Jackie & Gayle reported on the convention and Ken Hatfield's status - we all

### **Pacific Northwest Exotics - continued**

wish him well!

Gayle reported that the Oregon Dept. of Fish & Wildlife meetings will convene again the middle of September with hopes of having everything completed by March. Here we go again.....I will try to keep everyone updated since I'm on the task force.

It was decided that since the calendars were such a success and we only have a couple left, that we'd re-order. They are really beautiful.

Clem won the dollar game and we had a big raffle. After the meeting, while everyone was having lunch and playing with the cubs, Bea Lydecker arrived. She had some wonderful raffle items which we will save for the next meeting. She also had a few Kanbuchoe mushrooms for those who wanted them. You make a tea that is very healthy out of them. We'll see.

Submitted by Gayle Schaecher

**Convention Photos: Centerfold:** 1) J.B. Anderson & Nannett McGann at the falls, 2) Sharon & Jon Roe, 3) Vice President Barbara Wilton presents past President Katie Knight-Monteiro with an appreciation plaque, 4) Jay, John and Sue Perry, 5) Birthday Boy, Jay Perry, 6) Jackie Vanderwall & Gayle Schaecher 7) Auctioneer J.B.Anderson and assistant Jeff (Vanna) Bellingham display wonderfully painted ostrich eggs (they had cats on them!) 8) Manny & Carin Sousa with Barbara Wilton 9) An enhanced Pricilla Flamingo goes back to the Anderson household (Reva, she missed you so..) 10) Our video photographer Jean Hamil at work, 11) John Perry shows off his dancing skills, 12) And the rest of us try to learn line dancing at the Thursday evening barbeque.

**From page 24 - 13)** Ethel Hauser accepts the Douglas/Engler award on behalf of Ken Hatfield. 14) Carin Sousa, Jon Roe and Jackie Vanderwall were the winners of the centerpieces made by Ethel. 15) Shirley Wagner and J.B. Anderson with the Lotty. 16) Jon Roe, 17) Corrine Cary & Steve Johnson 18) Bruce Goforth, Senior Wildlife Biologist for the Colorado Division of Wildlife.

## **Convention** **Videos** **Available**

***Videos of the 1995 Convention in Colorado Springs are now available at the cost of \$10. each (3 for \$28.00).***

- 1. Membership meeting***
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***All proceeds to LIOC. Buy a video and help the club!***

## **Moving?**



***Don't miss any issues  
Notify Member Services Promptly  
(See Page 2 for address)***



### Membership/Guest Meeting June 18, 1995

The meeting at Rock Creek Community Hall was called to order by Rod Black. Rod announced the resignation of Sharon Roe as E.F.E.S. Secretary, and on behalf of the Board, asked Shirley Malar to take over the position until the next regularly scheduled election. The attending membership voted in favor unanimously.

### Educational Presentation

#### The Many Functions of the Liver in Cats

By Ethel Hauser

The main function of the liver in cats and humans is to control the complex chemical interactions essential to life. One key function is that of facilitating the digestion of food. To do this, the liver manufactures bile, which is necessary for the absorption of fats; stores and releases energy as needed; synthesizes fats and protein; stores iron and vitamins; creates blood-clotting agents and hormones; reprocesses red blood cells; detoxifies substances poisonous to the body, and breaks down toxic waste product of digestion.

A cat's liver cannot, however, metabolize and detoxify some drugs as well as other species of animals. Among them are "aspirin based" products, or those containing acetaminophen (Tylenol, Aspirin Free Anacin, & Aspirin Free Excederin). The resulting buildup

of toxins from these products can **kill your cat!** Although your veterinary may be able to use small doses of these products on a carefully monitored basis with a margin of safety, the risks of selfmedicating are very high.

There are three major liver diseases in felines. They are hepatic lipidosis, cholangiohepatitis, and hepatic portosystemic shunts.

#### Hepatic Lipidosis:

Also known as *fatty liver disease* is a common disease in cats. It can develop when too much fat accumulates in the individual cells of the liver. This disease can be life-threatening if left untreated, but when treated promptly, the prognosis is hopeful.

Although diabetes and obesity are causes of certain types of hepatic lipidosis, *idiopathic hepatic lipidosis* has no known cause. Even though effective treatment can be prescribed, and in most cases the condition does not recur, it can never be certain that the disease is under control. This particular type of H.L. seems to occur in cats that were obese and have recently stopped eating and lost a great deal of weight. It is most common in middle-aged and older males. The treatment involves getting the cat to eat normally as soon as possible and may initially involve mechanical/tube-feeding for a period of time. If your cat stops eating for several days take him to a veterinarian, as even this short of time is potentially hazardous. If your cat is overweight, do not put him on a crash diet. Work out a safe weight reduction program with your veterinarian.

Cholangiohepatitis is an inflammation that affects the *biliary* system (the bile ducts and gall bladder). It is either a collection of similar diseases or manifestations of the same disease at various stages and no one knows exactly what causes it. Treatment usually consists of a course of antibiotics and steroid treatment. Unfortunately, the prognosis for a cat with this disease is not good and the result is often liver failure.

**EFES.....Continued**

**Hepatic Portosystemic Shunts** are more commonly a congenital problem than an acquired one. Before a kitten is born, open shunts in the liver cause the blood to bypass the liver, as the mother's liver takes over the necessary functions. At birth the shunts should close and direct the blood through the kitten's liver, but if they do not, the blood continues to bypass the liver and the liver becomes starved of blood. As a result, the kitten will fail to develop properly. Depending on which shunts are affected, surgery may be able to correct the problem.

**Parasites** can also cause problems in the liver. *Toxoplasma gondii* causes toxoplasmosis, which is usually asymptomatic in cats, but can cause liver damage. Toxoplasmosis is of more concern because of its potential for transmission to pregnant women because the parasite can harm the human fetus. Transmission to pregnant women can be prevented by wearing protective gloves when cleaning litter pans. Liver flukes mainly found in southern regions, can be a concern when cats consume the liver fluke larvae. Evidence of the liver fluke will show up in regular stool screening and treatment with an effective worming agent obtained from your vet will rid your ct of this parasite.

**Diagnosis** of liver disease can be difficult when relying solely on symptoms. A cat will often have the disease for some time before there are any signs of a problem. When symptoms do appear, they are general in nature (not eating, vomiting, dehydration, fever, seizures, etc.) and could be signs of any number of illnesses. Diagnosis of liver disease depends on laboratory tests. Although blood tests can reveal many abnormalities in the liver, the only reliable and accurate tool for diagnosis is a liver biopsy. It is important that you take your cat to the vet as soon as symptoms first occur for the best chance of successful treatment and recovery.

Colette Griffiths then presented a talk on raising orphaned kittens.

Bob and Suzette Armstrong brought their bobcat Kahuna, to his first meeting and Ethel passed out special Father's Day cupcakes to all the fathers of both two-legged and four-legged kids.

The meeting was adjourned and the rest of the afternoon was spent visiting with friends and of course the ever popular dollar game and raffle.

Respectfully submitted



Shirley Malar  
Secretary

**ST JEROME AND HIS LION**



**S**T Jerome in his study kept a great big  
cat,

It's always in his pictures, with its feet  
upon the mat.

Did he give it milk to drink, in a little  
dish?

When it came to Fridays, did he give it fish?

If I lost my little cat, I'd be sad without it;  
I should ask St. Jeremy what to do about it;  
I should ask St. Jeremy, just because of that,  
For he's the only saint I know who kept  
a pussy cat.

Anonymous.

## New Law May Become Endangered Species

### *Critics tear apart New Mexico compromise*

It was touted as historic: a compromise between cowboys and conservationists over the issue of endangered species in New Mexico.

But some critics fear the new state law is at best too unwieldy to work, and at worst could lead to diminished protection for wildlife.

"A lot of the mandates in the law are naive and unrealistic, and we're going to have to do the best we can with them," said Jim Bailey, assistant chief of the Department of Game and Fish Division that oversees endangered species.

The rewrite of the state's Wildlife Conservation Act was the product of 150 hours of intensive, closed door negotiations during the 60 day legislative session that wrapped up in March. A handful of environmentalists, ranchers and conservative land use activists were in the room.

It began as legislative business-as-usual: ranchers backing a bill to gut the state's already-toothless endangered species law, and environmentalists trying to kill the rangers' measure.

But, under the aegis of the Senate Conservation Committee and its mediation-minded Chairman, Albuquerque Democrat Tom Rutherford, the two sides began talking.

"Everybody was quite surprised to be sitting down at the table with people supposedly their enemies" said Howard

Hutchinson, one of the negotiators and a representative of the pro-industry Coalition of Arizona-New Mexico Counties.

The common ground: nobody much liked the current law. Environmentalists say it's too weak. They complain that the Game Commission can ignore recommendations from state wildlife experts to list species as threatened or endangered; listing decisions could take into account factors other than biology; and there's no requirement to come up with recovery plans for jeopardized species.

And, unlike the federal government, the state has no power to curb activities such as logging or grazing that might jeopardize species.

On the other hand, ranchers and other complain that once the state lists a species - a process they say leaves them out - federal land managers treat it as protected, whether or not its on the federal endangered species list.

"So without any recovery efforts going on, you basically had a freeze on any management activity threatening those species," Hutchinson said.

Largely because of federal activity, endangered species protection has been a hot-button issue in many rural communities in New Mexico.

The bill that passed - and became law in July - provides that:

- The Game Commission must act on listing recommendations.
- The decision to list a species must be based solely on science.

### New Mexico ....continued

-- Scientific research would be "peer reviewed" by panelists from all the state's universities

-- Public hearings on proposed listings would be held only in the quadrant of the state where the species occur.

-- "To the extent practicable," recovery plans would be developed for jeopardized species with the help of an advisory committee of anyone interested.


-- Recovery plans would have to avoid or mitigate adverse social or economic impacts.

The livestock industry likes the social and economic impact language.

However, the Department of Game and Fish, which wasn't at the negotiating table but must implement the law, warned lawmakers in an analysis that the prescribed process is long, costly and inflexible, and could actually hinder carrying out the purpose of the state's wildlife law. It would take at least 18 months to add a species to the list or remove one, said Bailey.

Supporters say the success of the law will depend on how involved all sides get in the process. And they say the changes put New Mexico in a unique position to step in if the Federal Endangered Species Act is dismantled or amended to give states or localities more power.

By Deborah Baker  
Associated Press

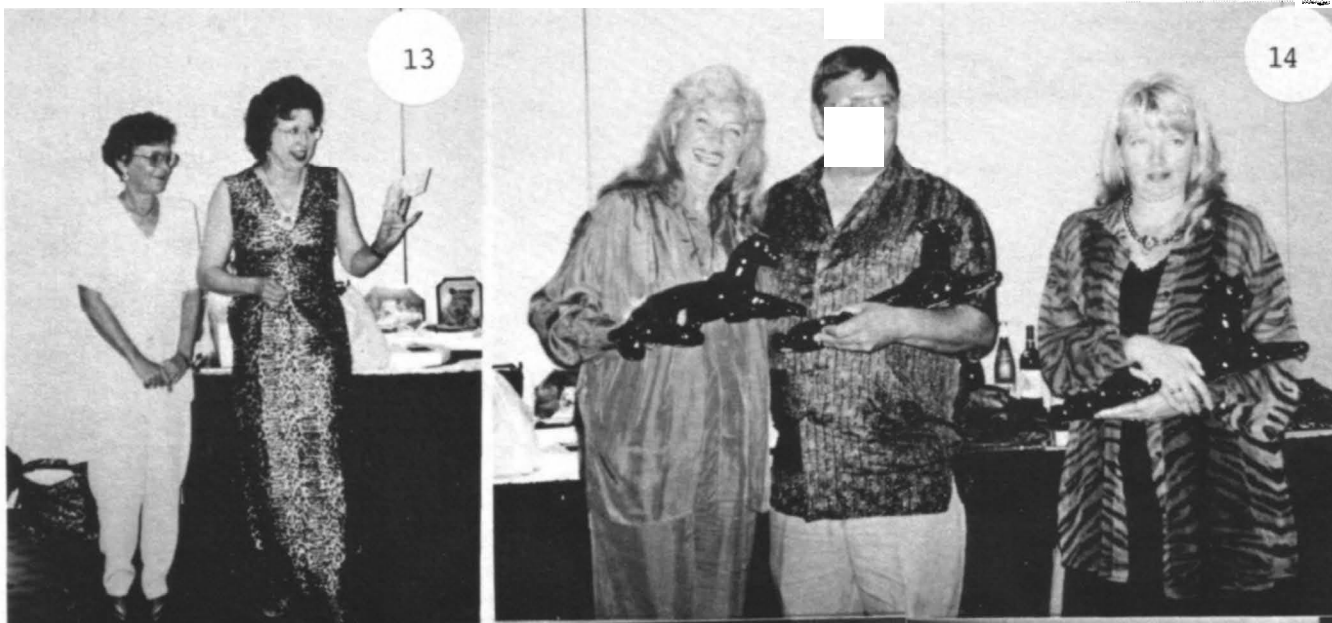


**Thinking of you...**

*Best wishes to Ken Hatfield for a speedy and complete recovery. Get well soon!*



"Well, look who's excited to see you back from being declared."



See page 19  
for the key  
to photos

**SEE YOU IN  
MAINE IN  
1996!**