



Feline Conservation Federation

May/June 2016 • Volume 60 Issue 3



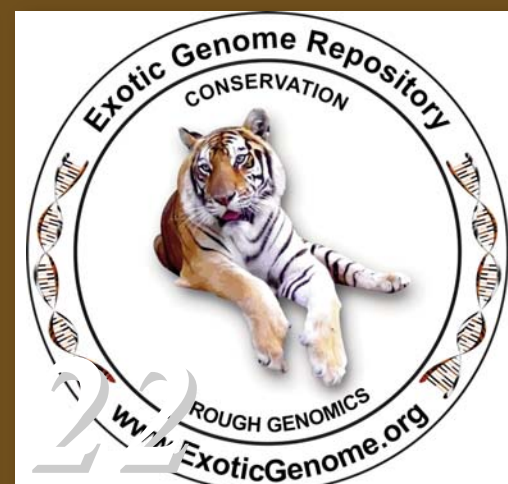
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A membership to the FCF entitles you to six issues of the *Journal*, the back-issue DVD, an invitation to FCF husbandry and wildlife education courses and annual convention, and participation in our online discussion group. The FCF works to improve captive feline husbandry and conservation. The FCF supports captive and wild habitat protection, and provides support for captive husbandry, breeding programs, and public education. Send \$35 annual dues (\$40 Canada, \$50 international) to FCF, 141 Polk Road 664, Mena, AR 71953.

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Contact Us

FOUNDER:
Catherine Cisin

EXECUTIVE DIRECTOR:
Lynn Culver
executivedirector@felineconservation.org

OFFICERS:
President
Kevin Chambers
7816 N CR 75 W
Shelburn, IN 47879
812-397-2302
president@felineconservation.org

Vice President
Mindy Stinner
P.O. Box 882
Mebane, NC 27302
336-421-0065
vicepresident@felineconservation.org

Secretary
Debi Willoughby
281 Albee Road
Uxbridge, MA 01569
508-380-4722
secretary@felineconservation.org

Treasurer
Lynn Culver
141 Polk Road 664
Mena, AR 71953
479-394-5235
treasurer@felineconservation.org

DIRECTORS:
Conservation
Pat Callahan
1961 Connecticut Ave
Cincinnati, OH 45224
513-304-7155
conservation@felineconservation.org

Chris Tromborg
217 Baja Avenue
Davis, CA 95616
530-753-2763
director@felineconservation.org

Robert Bean
4633 Chandler Road
Hermitage, TN 37076
615-889-4633
RBeandirector@felineconservation.org

JOURNAL STAFF:
Managing Editor:
Lynn Culver

Layout/Copy Editor:
Eden Burgess, edenburgessfcf@gmail.com

Associate Editor:
Judith Hoffman

Membership Services:
Jennifer Kasserman
816-674-7277
membershipservices@felineconservation.org

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The Feline Conservation Federation publishes the *Journal* bimonthly. The FCF is non-profit, (Federal ID#59-2048618) noncommercial, and international in membership, devoted to the welfare and conservation of exotic felines.

The *Journal* publishes articles on exotic feline conservation and husbandry, management, and regulatory and legislative issues affecting ownership for our members. The author's point of view does not necessarily represent the point of view of the organization. Reproduction of any material in the *Journal* may not be made without the written permission of the original copyright owners and/or copyright owner, FCF.

Letters to the editor and guest editorials are also published.

Display advertisement space is available at the following prices: \$10 business card, \$25.00 quarter page, \$50.00 half page, and \$100 full-page ad.

Submission deadline for articles and advertisements is the 10th of even numbered months. Please submit high resolution photos and articles to the *Journal* Managing Editor. Photos and articles may be emailed to

lynnculver57@gmail.com, or send by postal service to: 141 Polk 664, Mena, AR 71953.



Feline Conservation Federation

Letter from the President

Another great convention has concluded. I think members who missed this gathering will enjoy reading about all the fun we had and information we learned in this edition of the *Journal*. And those who did attend can relive those fond memories.

Speaking of the *Journal*, this issue contains a constitutional amendment to change from a bi-monthly publication to a quarterly publication. There is a ballot enclosed and members need to cast their vote and mail their ballot to accountant Joy Courson, 195 Wild Oak Lane, Roxboro, NC 27574. Ballots must be received

by September 5th. I think we can all agree that the *Journal* is a great member benefit, but to maintain this high quality level requires lots of input from photographers and authors and lots of editing and layout from our *Journal* staff. Additionally, printing costs have risen, while advertising income has not, which means something has to change if we are to keep on schedule. Most organizations offer quarterly publications and I think it's time for the FCF to join this trend.

By the time you read this May/June issue of the *Journal*, the nomination period for the board of director positions will likely be closed. That's because the *Journal* is behind schedule, another reason to convert to quarterly output. The next issue will contain biographies of candidates for office. I do hope we receive some nominations. At this time we have none. Most of this board has been serving for more than one term and several are considering retiring after this term. It is time for others to step up and lead this organization into the future.

FCF Secretary Debi Willoughby has submitted a

letter of resignation. Debi has done a fine job in this position. The FCF secretary is responsible for meeting minutes, processing handler registrations, and participating in board meetings. This position could be filled by appointment. If you are interested in serving on the board, please contact me by email or phone.

New FCF T-shirts have arrived, featuring a snow leopard on the front. We have all sizes, from small to XX large. There are three shirt color choices available, charcoal, navy blue, or black, image screened with bone white ink. You can order the shirts from www.felineconservation.org, prices delivered to U.S. addresses are \$20, and \$23 for the XX large size.

Kevin Chambers



Registered Exotic Feline Handler Program

The FCF board of directors congratulates the following individuals for being accepted into the Registered Exotic Feline Handler Program since the past *Journal* issue.

Kylie Reynolds - Basic
Beth Rhines - Basic
Nora Battista - Intermediate
Chiara Lombardi - Intermediate
Michelle McKay - Intermediate
Brenda LaTorre - Advanced
Ron LaTorre - Advanced

Basic Feline Handlers have documented at least one year of experience, Intermediate level is at least five years of experience, and Advanced handlers have more than ten years experience. Update your registration when you obtain additional handling experience or new species experience.

The online registration form can be filled out directly in the members-only section of the FCF website. The \$30.00 registration fee can be made through PayPal.

Being a registered handler is the first step to becoming a Professional Member. Professional Membership application is also online on the Members-Only website.

Congratulations to all of these members for their dedication to their cats.

Debi Willoughby, FCF Secretary

Donations

The FCF Board of Directors thanks the following individuals and corporations who have made donations to FCF projects since the last published *Journal*, providing additional funding for educational materials for members and legislators, supporting conservation, and improving captive feline welfare.

We appreciate each donation, no matter the amount, recognizing that it is the many small gifts that, when combined, add up and make a difference in the effectiveness of the FCF. We encourage everyone to follow this example and donate funds for projects that interest you.

General:

JB Anderson
Abraham Basmajian
Jim Kelley
Chris Tromborg
Leila Wasson

Conservation Grants:

Linda Hampstead
Nanette McGann

Wildcat Safety Net:

Linda Hampstead

The FCF appreciates your generosity & continued support.

From the Executive Director

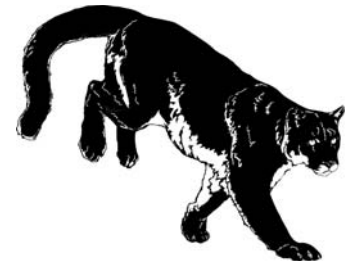
By Lynn Culver

One of the highlights of Convention was the opportunity to interact with hand-raised kittens and cubs, a practice that could disappear in the future. The USDA has re-opened the public comment period on handling of dangerous animals by the public. Comments need to be submitted before August 31st, by using the www.regulations.gov website, under "Animal Welfare" (Petition to Develop Regulations to Prohibit Public Contact with Potentially Dangerous Animals). Originally proposed in 2013, this HSUS idea has already gone through one comment period that generated around 15,000 public opinions, mostly from animal rights extremists who oppose allowing the public any opportunities to hold or pet baby big cats. USDA has reopened the comment period specifically to take in science-based information on this subject, not more emotional opinions. Those of us who have experience with hand-raised and mother-raised felines need to speak up on the effects of hand-rearing and mother-rearing and how it affects stress levels,

fear responses, and our ability to perform husbandry and veterinary procedures.

Several member facilities are facing USDA court cases due to their records of non-compliance with animal welfare regulations. Defending your actions in a USDA court is an expensive and uphill battle, as the case is before a USDA judge who favors the inspectors and the administration. Running a business requires that you follow animal welfare regulations, maintain proper paperwork, hire trained personnel, provide proper veterinary care and husbandry for your animals, and keep your animals and the public safe. It is not an easy task; it is not a high paying career; and it should not be taken lightly because the penalties are extremely expensive when the government decides to go after you. I am sure that personalities play a big role in the success of your relationship with your USDA inspector. So much of the enforcement is subjective, so get along, cooperate, and communicate. Getting a write-up should not be ignored; either correct it or appeal it. Each non-compliant item can turn into a \$10,000 fine if you are taken to court.

In this issue is the latest news on the court case between the Animal Legal Defense Fund and Cricket Hollow Zoo. The judge ruled that ALDF cannot charge the zoo for its attorney fees. After winning their case against Cricket Hollow, they are now targeting another zoo in Pennsylvania, Animaland Zoological Park. The motion is a cookie cutter form, nearly the same as the one used against Cricket Hollow Zoo. Will this animal rights tactic work before a judge in a different district? We will find out. But certainly this is another reason to follow the animal welfare regulations, since it is the non-compliance record which is combined with citizen complaints that comprises the ALDF case.



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2016 FCF Convention Review

By Teralee Harrel

There are very few times that we leave our beloved animals each year, but attending my second FCF convention, I did just that, and it took me to beautiful Fort Lauderdale, Florida. I attended last year's convention in Wichita, and had such a great time; I just had to go again. I believe the majority of the members of FCF either own or work with exotic cats. Unfortunately, I do not do either of those; I wish that I could. So, what we do have in common is the love for exotic cats. My favorite cat is the jaguar; it is the cat I'm most drawn to. The second is the caracal. Non-cat people always ask, "What is a caracal?"

I have yearned to be in the presence of exotic cats since childhood, visiting zoos and wild cat parks as often as possible to admire the big cats. I would later come to love the smaller cats in the just the same way. I would spend hours reading what I could about anything and everything that had to do with these majestic creatures. First in libraries and, later, the internet. Early on, my goal was to make some type of flashcard for each and every exotic cat that existed. I wanted pictures and facts, tracks, all of it. Mostly for my own use, but also to quiz my kids, grand-kids, or anyone else I would be able to get a hold of. To me, it sounded like such a grand idea, and it gave me a project with pur-



Being able to visit, interact with, and enjoy kittens like this caracal was a motivating enticement for Taralee to return to the FCF annual convention.



A pair of young black-capped capuchin monkeys were shared with convention goers at the Zoological Wildlife Foundation. Taralee is all smiles holding the pair.

pose to help me do something productive with the information gleaned. To do this, I first tried to figure out how many species existed. I would get so excited when I'd find one that I hadn't heard of before. I tried to soak up everything that I could. I'd get lost in looking at pictures of these magnificent creatures and find myself crawling into bed at odd hours, because I just couldn't stop reading and learning.

I have three hybrid cats. Owning a hybrid can be a hot subject with people who do or don't own cats, and I have found it can

also be true with people who own exotic cats. It is a controversial subject. In Oregon, I cannot own a serval, a caracal, or an Asian leopard cat. But I can own the hybrid. I have a beautiful F2 Bengal (ALC grandparent) named Shieka, an F2 savannah (serval grandparent) named ZaZoo, and an extremely rare F2 caracal (caracal grandparent) named XotiKiss. Because it is not an always agreed upon subject, and because I worry about the safety of my cats, I do not always share their breed information. Do you know how hard it is to be passionate about something, yet not always feel comfortable talking with people about it? So I started looking at groups on various sites on the internet which embraced exotic ownership. One of the groups I found is the Facebook group "Exotic Animal Owners and Friends," owned by FCF member Kurt Beckelman. It was through Kurt that I came to know about the FCF and what they do and stand for. And they have an annual convention? With kittens? I can join even though I don't own an exotic or work with them? And they have kittens!! Sign me up!

Going to an FCF convention is amazing. First, there are kittens! (Thank you, Lynn Culver!) The kittens are not kept out of reach. You can play with them, touch them, and take pictures with them and of them. How great is that? At the convention, I have gotten to spend time with lynx, bobcat, Geoffroy's, and caracal kittens. Last year, several members brought their full-grown servals.



This year's convention location overlooked the beautiful blue Atlantic Ocean and a palm tree lined white sandy beach.



Dr. Jim Sanderson was one of the Saturday line-up of speakers who educated convention goers on conservation, safety, genetics, and enrichment.

I have met some fascinating people at convention. Extraordinary people. Everyone is very welcoming and easy to talk with. I have a terrible time trying to start and keep conversations going. At the convention, people are there to share their knowledge and to share their mutual love of the cats. Conversations were everywhere, and I would be included every time. At the ice breaker dinner, it was so interesting to hear where everyone is from and how they are connected with cats.

Being at the convention, you are fortunate to have a variety of speakers to listen to. It is crazy how many ways you can find to talk about and learn about cats. Each speaker kept my attention and I most definitely learned from all of them. It is so much more interesting to listen to people, and to hear and see the passion they hold for exotic cats while they share their wealth of knowledge and experience than it is to read articles on the internet or at the library. There is an excitement in hearing about conservation efforts or the research to aid in conservation. For the people allowed to keep or work with exotic cats, there are several husbandry courses that are offered. It would be impossible for you to leave the convention without learning something new.

Going to the FCF convention means traveling for most everyone. Some have to go farther than others. The location and hotels are carefully chosen. Meals

planned. Schedules made. Speakers secured. The amount of work that must be involved makes my head spin, yet the details are all painstakingly worked out for all of us to enjoy. The field trips are one of the things that allow you to enjoy the perks of FCF membership and are a big highlight of the trip. As a member, we are allowed behind the scenes, hands-on, with exclusive access to things the public won't always get to experience. Last year it was petting snow leopards. This year it was playing with baby tigers at one facility, and our very own up-close experience with a cheetah with a catered lunch at another. Both were private affairs for FCF.

Saturday night is also full of fun. You can dress up and have a nice dinner with all of your fellow members. The friendships made and kept here go back decades for some. The silent auction is wrapped up before dinner. Bidding is done from the day of regis-


tration up to dinner on Saturday night. All of the items for auction are donated by the members and with so much variety, there is something for everyone. After dinner, the live auction begins. It is very entertaining to watch and it is exciting to see money raised for FCF. I've come home with treasures both years. Of course, I can't leave without adding a FCF T-shirt to my spoils to enjoy throughout the coming year. I wear it proudly and always hope someone will ask about FCF. The new window stickers for each of my vehicles, and a few extra for family members, will hopefully give me another chance to share with others what FCF is about. Do I think the convention was worth traveling across the United States from Oregon to Florida to see and learn about cats and talk with the people who care for

them? It is wholeheartedly and most definitely a YES!

Feline Conservation Federation... What it does for the cats is beyond admirable and certainly laudable. What it has done for my own personal life through attending the convention, well, it has created new friendships that extend beyond an annual event. It has allowed me to be in the presence of exotic cats and that is living the dream right there. It has taught me so many important facts about the creatures I care so much about. What I hold as most valuable is the chance to be a part of something bigger. FCF is working all over the world. It has given me a chance to support and share in the conservation of the cats we all so dearly love. Even if you can't live or work with cats, you can still be an FCF member. You can still attend an exotic cat conservation convention to learn and to enjoy life. Change your world. Change the cats' world. Together we can and will make a difference. I'll see you at Convention 2017!



Randy Stearns and Lynn Culver hold up one of the auction items for bidding during the live auction Saturday night.



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Jim Sanderson Speaks on the Global Conservation of Small Cats

By Lynn Culver

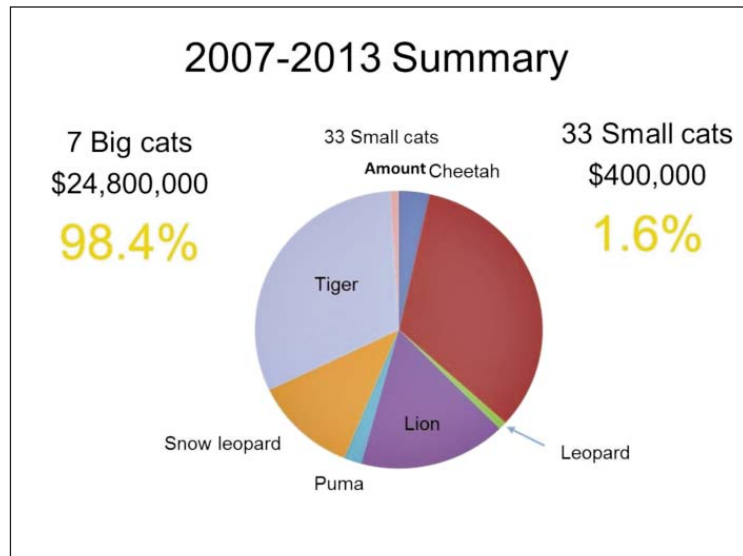
Sorely missed at the Wichita Convention, Dr. Jim Sanderson, FCF Conservation Advisor, joined FCF members at this year's convention to update us on global wild cat conservation efforts. His talk began with the news that the IUCN (International Union for Conservation of Nature) Cat Specialists Group has reviewed the latest data on wild cats and will be announcing later this year changes to the recognized list of species. There are actually 40 species of wild cats; seven big cats, 33 small. This increase in the number of small cat species is not due to finding new animals, like the Sundari clouded leopard discovered in 2006, but represents a reorganization of the delineation between species and subspecies of wild cats. Stay tuned to find out how this breaks down.

species.

Another example of scientific changes can be seen in the cougar. Back in the 1980s, when I first got interested in this species, it was generally accepted there were 32 subspecies, based on geographic location and morphological attributes. By 2005, however, based on genetic study of mitochondrial DNA, the puma was reduced to just six subspecies, one in the U.S., and five in central and South America; so much for the uniqueness of the Florida panther. Now there is talk in the scientific community of



One of Jim's colleagues is Alvaro Garcia Olaechea, who is camera-tracking wild cats in Peru.



Anya Barashkova is studying the Pallas's cat in Russia.

Pie chart showing that 98% of money raised for feline conservation goes to the seven big cat species, leaving only 1.6% available to help 33 species of small cats.

Brian Davis, another one of our other presenters at convention, also touched on this subject, explaining the latest in DNA analysis and how it will impact the way we approach conservation. In fact, he is part of ground-breaking DNA analysis that shows there are only two sub-species of tiger; the mainland tiger and the Sumatran island tiger. It is highly doubtful the governments of the world will accept this science, as politics are involved in maintaining separateness of the tiger sub-

only two subspecies of cougar.

Dr. Sanderson founded the Small Wild Cat Conservation Foundation (SWCCF) to support conservation efforts for small wild cats. Four species are of special interest to him: the Andean cat, bay cat, fishing cat,



Tashi Dhendup is working in Bhutan, to document small wild cats like this marbled cat.

and the flat-headed cat. Dr. Sanderson believes the bay cat is the most endangered feline on earth.

Dr. Sanderson's SWCCF works with the Mohamed bin Zayed Species Conservation Fund to create new conservation superstars and projects. In 2016, SWCCF added \$26,000 to the \$39,500 awarded by Mohamed bin Zayed Species Conservation Fund, so that \$64,500 could be directed to small cat conservation projects.

SWCCF works with students and colleagues globally, and examples of this cooperation included Alvaro Garcia Olaechea camera-tracking wild cats in Peru, Anya Barashkova working in Russia to study the Pallas's cat, Ganga Regmi working in Nepal on the Pallas's cat, and Tashi Dhendup in Bhutan, who is documenting the population and threats to small wild cats like the marbled cat.

Jim has a special interest in fishing cats, found in South and Southeast Asia. His SWCCF initiates conservation practices to conserve fishing cats in Sri Lanka, and



Map of fishing cat sightings and probable fishing cat habitat in South and Southeast Asia.

monitor distribution and ecology of fishing cats in hill country and associated areas.

Educational projects are an important component of conservation. Lack of awareness and lack of funding are small cat species' two greatest threats. To combat these issues facing fishing cats, SWCCF supports workshops for students, fishing cat youth camps, publishing booklets to educate younger generations, erecting road signs for fishing cat crossing areas, and also the rescue of wild cats in trouble.

The Small Wild Cat Conservation

Foundation is a tax-exempt, non-profit charity with two parts. One focus is current projects, and has an annual budget of \$80,000. The other part is a permanent endowment fund for perpetual funding of conservation. Currently the endowment fund holds \$1,450,000, and the goal is to reach \$2,000,000 so that interest from this fund can be spent annually and last into perpetuity. Another \$550,000 must be raised to reach this goal.



One way to conserve fishing cats is to educate the younger generations about their native felines. Here, members of a 2014 fishing cat youth camp pose for a commemorative photo.



Road signs educate drivers about the presence of fishing cats in the area and the need to slow down and be alert.



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Happy Memories of Convention

By Laura Walker

What a great place to go to for the FCF convention -- Ft. Lauderdale. I had not been there since 1976. What a shock to my system. I remembered the largest building was four stories high and now ... it has skyscrapers, mansions that are \$20 to \$40 million apiece, waterways with mega yachts, and beautiful shopping areas, restaurants, and still the beautiful beach! We went swimming at that beach and the water was warm!!! We stayed at the Bahia Mar right at the marina. The convention was held in a room where you could look out a window and see the palm trees and the sea...

There were some very good speakers during convention hours, from enrichment to genome research, to Jim Sanderson on little wildcats and their progress and building his fund for continual encouragement to study them and find ways to help them to continue to populate. One man, Brian Davis, gave a talk through a computer recording about his genome research, and how that is helping them discover ways to fight cancer, but also finding out how genetically diverse we are

or are not. It is thought now that there really are just two species of tigers, and that the genetic diversity in tigers in the wild is not healthy, and that there might be 100 individuals or less that have the appropriate genetic diversity. It was said that the ones we have here in captivity have healthier gene pools than in the wild. To me, that underlined the need for private ownership and breeding for conservation, zoos, etc., because zoos even do not have enough genetic diversity and they are reliant upon private owners.

Jim Sanderson talked about the Iberian lynx that has started to make a comeback because they have been able to release 100 individuals held in captivity back into nature and it seems to be working to bring the numbers up. That was a very happy account of what can be done by conserving and breeding in captivity.

We had a nice dinner with our usual auction where everything was auctioned off to raise money, and certain people donated money to the FCF, and special interests within FCF to sponsor research and care, etc.

It was very rewarding to see some of the same people, but to meet new people



Laura Walker and Debi Willoughby pose next to a spectacled owl at Zoological Wildlife Foundation's interactive animal session.

who have facilities in other parts of the USA, who truly love their cats and are doing right by them. I thank Lynn Culver for bringing her kitties to the convention and for pulling this all together along with all the board members who work hard to run this organization and make it interesting for all of us cat lovers!

By Joy Courson

After missing the last three FCF Annual Conferences, I was determined to make it to Ft. Lauderdale this year. A grueling 14-hour drive brought us to the lovely Bahia Mar Hotel, right on the beach! For the entire stay, the staff was very friendly and the food at both the restaurant and the FCF events was great.

Thursday night's mixer had adorable kittens to take our mind off the pressing issues facing us. Lynn brought us babies! A caracal, a bobcat, and, in my biased opinion, the most beautiful, a Eurasian lynx, held court in the corner of our hospitality suite, the Grand View Ballroom. There was also a young spotted Geoffrey's kitten. I am sad that I have no photos of me completely falling under these kittens' spells; however, maybe another attendee has one and can share. There have to be tons of photos of the kittens enjoying their weekend.

On Friday, we all journeyed south for a

trip to Zoological Wildlife Foundation, owned by Maria and Mario Tabraue.



Joy Courson gets a warm hug from Nura, one of two tiger cubs shared with convention goers at Zoological Wildlife Foundation.

ZWF is a haven tucked into the outskirts of Miami. The collection included lions and tigers, to birds, sloths, and reptiles. While we enjoyed walking through ZWF's grounds, we were excited to have up-close animal encounters with capuchin monkeys, an armadillo, an adorable baby emu, albino boa constrictors, and some Florida baby alligators. As our tour came to an end, I heard a rumor that we would be able to visit with one of ZWF's young tiger cubs. We had observed two adorable cubs, an orange cutie named Amira and a royal white name Nura, on our way into the park and I was elated at this news. Janesse, the tour guide, ushered our group in (ten people at a time) and we formed a circle as Nura put on a perfect display of young tiger behavior. From her backward stance to pounce to her ferocious head-butts, Nura won all of our hearts. I thank you, FCF, for the opportunity to interact with others in my field (and passion) as well as be able to travel to other facilities to extend our network.

By Lenard M. Hughes, MD

I am a retired pediatric surgeon and have been performing surgery most of my life, which has been very rewarding. I have had an interest in animals since I was a very young child. I had box turtles, two caimans, many snakes, a dog, hamsters, and several cats. When I was in my residency training, I brought home one of my laboratory rats as a pet that lived with me for around five years. I already had two tabby cats that I loved very much, and I later got a young iguana, then another iguana, and, eventually, even more reptiles. I currently own about 40 snakes of all types, three monitor lizards, one sulcata tortoise, and a beautiful six year old female serval. I just recently acquired two very large Aldabra tortoises. I also own a 16 year old Bengal cat that is still getting along pretty well for an older cat. He is the “boss” kitty of my house.

I enjoy working with wood and have built and designed all of my cages and pens for my animals. I also enjoy reading and learning more each day about my animals. There is so much similarity between animals and humans medically and surgically, but I continue to gain new knowledge every day with my creatures.

I joined the FCF about six years ago to

learn more about large and medium sized exotic cats straight from the people who own them, rather than relying on outdated and incorrect knowledge in publications and textbooks. The “experts” seem to get a lot of things confused and basically incorrect. I have enjoyed corresponding with other members about my serval; some members were supportive in my attempt to get my wildlife license to possess my cat in Florida.

I recently attended the Feline Conservation Federation Conference in Ft. Lauderdale, Florida, and would like to share some of my tremendous experiences I had while attending this conference. The conference started on June 16th and continued until June 19th. The meetings took place at the Bahia Mar Hotel in Ft. Lauderdale.

On the first day, we all met in one of the conference rooms in the hotel. Lynn Culver had brought several of her kittens, which included a Eurasian lynx, a very young caracal, and a bobcat kitten. Someone else had brought a young Geoffroy’s kitten. I really enjoyed handling all the kittens, especially the young lynx, which was apparently destined for the Zoological Wildlife Foundation in Miami. There were also multiple cat-related items to bid on in the room. I bid on a discount for some frozen rodents but got outbid by another person. The kittens were all adorable. We then had a buffet-style supper and had the opportunity to introduce ourselves to everyone in the room. Several of the



Lenard and others pet Amira the tiger cub while he investigates a member’s red purse at ZWF.

leaders spoke to the group about future opportunities and where to hold future meetings, among other items. So many states are getting stricter and stricter about exotic animals, about transporting animals into their states, or bringing them to hotels.

The following day, we all met in the front of the hotel and took a tour bus to the Zoological Wildlife Foundation in Miami, Florida. This was a wonderful experience and included some direct hands-on time with two tiger cubs. One of the tiger cubs kept attacking a woman’s red purse on the floor. The cubs were so cute and lovable; too bad they do not stay that small and innocent. The facility took us on a tour of their grounds, where we got to hold a very tame, young alligator, meet an owl up-close, and play with a



Young Eurasian lynx relaxes in Lenard’s lap during the Thursday social mixer at the Bahia Mar hotel.



Mindy Stinner examines the three-banded armadillo rolled up into a ball.

three-banded armadillo. They also had many primates at the facility and we got some real hands-on time with two small capuchin monkeys, which really enjoyed removing hats from anyone who held them. We also got to handle a beautiful and very tame caracal cat that walked readily on a harness and leash. We also got to meet some anteaters and a few porcupines that liked to lick your hand. They also had some adult lions, one of them white, including several adult male lions. Then we got to feed some very friendly camels that loved sliced-up sweet potatoes. Some of the braver souls fed the camels by holding the food in their own mouths to get a camel kiss. We also met a leopard and a young cougar.

In the afternoon, we then took the bus again to Miami Metro Zoo, which included a close-up encounter with one of their cheetahs. He was totally preoccupied

with his Kong toy, but allowed all of us to get up close to him. What a beautiful animal. We had lunch at the Metro Zoo, in a nice, cool pavilion, which was a definite relief from the heat. The visit to the zoo was more or less freestyle and everyone went their own way. I should have rented a pedal cart, because the zoo is so large that there is no way you could walk around and see everything in one afternoon, not to mention it was very humid and hot. We then took a long bus ride back to the hotel.

The third day was some lectures and the Feline Husbandry Course. I did not make it back down there on the third day. I had been driving down to the hotel each day from the West Palm Beach area, but wish I would have spent at least one night at the hotel. Of course, parking was extra.

Overall, I would say this was a very enjoyable experience for everyone. I just

wish we had more hands-on time with the beautiful kittens. I hope people will continue to bring their kittens to these meetings, because, to me, that is definitely the highlight of the conference. We need to stay one step ahead of the laws and legislation regarding exotic animals. As a group, we need to encourage breeding in captivity to ensure survival of each species of cat. The biggest threat to exotic cat survival is the exponentially growing human population on this planet and destruction of these animals' habitat. Poachers are also doing their share to destroying animal life on our planet. We must continue to be advocates for these beautiful creatures and to stand up against legislation and narrow-minded politicians who are trying to take all this away from us.

By Dixie Gibbs

My name is Dixie and I'm a zookeeper at Safari Adventures. I've worked with animals of all shapes and sizes for the last eight years. My everyday job is to teach cubs how to properly interact with their handlers, and I also care for around 300 animals. That may seem like a lot, but



Dixie Gibbs is all smiles as she holds a beautiful albino python at the Zoological Wildlife Foundation.

once you get the hang of it it's pretty fun. I honestly wouldn't trade my job for anything. I'm very fortunate in that none of my days are ever the same; it's always something new.

My overall experience at the Feline Conservation Federation convention was once in a lifetime. While attending the convention, I got to experience hands-on contact with a variety of different animals. The animals included everything from a bobcat to an alligator. We had a field trip to the Zoological Wildlife Foundation and the Miami Zoo. While we were at the Zoological Wildlife Foundation, we got to take a tour of the facility and learn about their animals and mission to help. Once the tour completed, we had a special surprise encounter with a tortoise, armadillo, a python, alligator, caracal, and baby tigers. From there, we went to the Miami Zoo. Once we were there, we could walk around and experience the zoo on our own. In one part of the zoo, I got to hand-feed a rhinoceros, which was absolutely amazing. The overall field trip day was astounding. The next day, we attended class where we listened to different guest speakers who presented on an enormous selection of topics. Finally, I attended the basic husbandry course, in which I learned all about the basic handling and proper care of the animals. The class wasn't just a boring, sit-there-and-listen type of class; it was a very interactive, where everyone participated.



ZWF ambassador caracal was brought out for us to photograph and Dixie pets the beautiful feline.

During the course, we talked about proper diets, fencing, housing, and, of course, enrichment. The enrichment section was personally my favorite because I'm always looking for new way to keep our animals engaged and entertained. My overall take away from the whole experience is that the FCF is a great foundation that is not only beneficial to our wildlife but also to the peers who help care for and educate the public about them.

Advanced Husbandry Workshop

By Laura Walker

My partner Abe and I signed up for the advanced husbandry workshop and it was given by Mindy Stinner and Debi Willoughby. While much of the information most cat owners know about on some level, it was extremely informative to relook at some of the topics involving disaster planning and mishaps. Mindy talked frankly to us about planning for any unforeseen events, from escapes, loss of electricity, and to a non-authorized person or child getting inside of a cage. She said a very telling statement which is true: We cannot plan for everything and all the ways that people can be stupid. I had to laugh in the way she presented the truth and drove home the fact of thinking carefully about as many scenarios as could possibly happen and have a written plan for it. She also explained that some of that written plan could be a detriment, as you will be held liable for not following your plan exactly to a tee. So, conscientious wording of a plan, and perhaps not boxing yourself in with certain wording, is important. She expressed the importance of having staff who know which individuals have what skills and, through those particular and unusual or usual skills, who you can count on to do what in case of an emergency. All skills have some sort of value in daily life and in emergencies. The person with the best ability to deal with people and public relations with that great, winning smile (LOL) is the one to

put on the front line, to gather people and herd them to an area, or to keep press at a distance. And when choosing to speak to the press, it is necessary to choose your wording carefully, keep any sensationalism down, and perhaps miraculously turn it around in your favor! We learned about what tools we should have on hand, of any kind, that might help mitigate any kind of situation, and the importance of knowing where they all are, keeping things organized, and perhaps even running drills to make sure you have things in order in case of an emergency. Also, make copies of your plan and leave it with a few people, as well as have it posted. Have all important phone numbers posted in case of an emergency. Practice and learn to work as a team with drills, and think up scenarios of problems you may have and organize a plan. The more organized you are, the more you have planned for, the more success you will have in avoiding a bigger problem from a mishap or unfortunate event. She gave very realistic scenarios and spoke of some of her own mishaps that turned out just fine at her facility. I will be passing along information to the owner of the place where I have a bond with a Canada lynx who is now 12 years old, as I feel it is invaluable information.

Debi talked about training and enrichment, and while many of us know training techniques, it was interesting to look at the pictures she had for illustrations on what might or might not work better, and we came up with suggestions that might promote better success for enrichment, training, and even exhibit structure. People came up with different ideas on what was missing, how to do something different,



Mindy Stinner teaches Contingency Planning at the Advanced Husbandry Workshop on Sunday at the Bahia Mar.

and what they do with their own animals. Debi also used slides of her own animals to illustrate what might or might not work, from how to walk a cat on a leash or have it get food in a new way. We also learned about multi-training. This is something I had not heard about before, and she talked about a man who trains lions at the age of two years old, but he works with more than one at a time in the same enclosed setting. The workshop went fast and it was great to hear what different people felt about things. And, from all the answers, I can tell that the FCF members love their animals and are conscientious, responsible animal owners and workers.

Basic Husbandry Course Review

By Audrey Loya

As a first time attendee of the FCF Convention, I was particularly excited to take the Basic Feline Husbandry Course. The class was taught by Mindy Stinner, Debi Willoughby, and Kim Barker. It was an intense and fact filled eight-hour day. I would have loved to have more time, since there was so much information that was covered. However, I was impressed at the organization and structure of the class. The instructors managed to keep it fun and kept the students engaged.

The class covered natural

history, regulatory agencies & permits, facilities & equipment, handling, behavioral conditioning & enrichment, nutrition, health care, and contingency planning. I am thrilled to have the companion textbook to look back on for future reference. It is an invaluable asset, as it is the print version of the power point presenta-

tion.

This course made me realize how much I have already learned while volunteering at Panther Ridge Conservation Center. It also taught me many new things, and I obtained different perspectives and new ideas. I walked away with a plethora of information that will hopefully make me a better volunteer and someday an extraordinary owner of an exotic.

If you have never taken the Basic Feline Husbandry Course, I highly recommend it for anyone with an interest in exotic felines. As for me, I am looking forward to the advanced class next year!



Instructor Debi Willoughby covers all the basics during Introductory Wild Feline Husbandry.

A Constitutional Amendment to Change the FCF Journal from Bi-Monthly to Quarterly Production Proposed

By Lynn Culver

The Feline Conservation Federation has a history spanning back to the 1950s as the Long Island Ocelot Club. The club was formalized and structured and incorporated as the LIOC Endangered Species Conservation Federation in 1979. It is a society with a mission of education and conservation. The structure which guides the organization is a Constitution, which can only be changed by an approval of two thirds of the voting members, and a set of by-laws, which are proposed and voted upon by the elected board of directors.

In the Constitution, which can be read in full in the members-only website, are the ground rules for membership, nomination and elections, voting procedures, the board structure, and the publication.

For more than five decades, the organization has produced a bi-monthly newsletter or journal. The premiere issue in 1957 was just two pages and was the basic way members learned about each other and what challenges were being faced. Over time, the publication expanded to more than 40 pages with color cover and centers.

In the past two years, keeping the *Journal* to the bi-monthly publishing schedule has become impossible; only five issues were produced. This is due to a number of reasons; the FCF printer has sometimes delayed production turn around to more than a couple weeks. The post office has

at times, delayed delivery due to our non-profit status, which is not first class mail and allows the envelopes to sit if first class mail fills the delivery trucks. And another reason has been delays in article submissions and layout duties.

Meanwhile, other channels of communication have improved. We have the Yahoo list, the Facebook Group, and nearly universal long distance phone service and text messaging.

Keeping the six issue production schedule going into the future will necessitate several things; improved submissions by members, improved production by the printer, improved postal service, and an increase in either advertising income and/or an increase in membership dues.

At this time, several FCF members have proposed that, rather than raise dues, reduce printing quality, or reduce *Journal* size, a more appropriate approach is to restructure the *Journal* to quarterly issues. There can still be additional means of communication through e-newsletters, or emails, or Facebook posts.

A Constitutional Amendment to change the *Journal* production schedule from every two months to every three months is before the members for their vote. A ballot is enclosed with this *Journal* asking for your vote to approve this amendment. Please take the time to vote and mail back to the accountant for counting. The Constitution can be amended by a 2/3 majority vote. If this motion passes, then it becomes official in August.

Constitutional Amendment

In accordance with the FCF Constitution, Article VI Membership Participation, 2.

2. During February and March, eligible members of the Feline Conservation Federation may introduce motions to amend the Constitution. These motions must be undersigned by three (3) valid Feline Conservation Federation members and sent either electronically or by U.S. mail to the secretary. The Directors shall authorize that a properly submitted motion be published in the May issue of the Corporation's Newsletter.

We move that the following amendment to the Constitution be considered by the members of the FCF.

In ARTICLE X - Publication

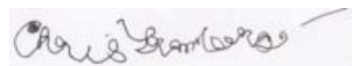
Strike the word "six (6)" and replace with "**four (4)**" and strike the words "January, March, May, July, September, November" and replace with the words "**January, February, March issue, April, May, June issue, July, August September issue, and October, November, December issue**"

So that ARTICLE X reads:

ARTICLE X - Publication

1. Feline Conservation Federation shall publish a Newsletter four (4) times a year bearing the dates: January, February, March issue, April, May, June issue, July, August September issue, and October, November, December issue successively.

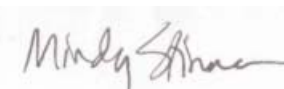
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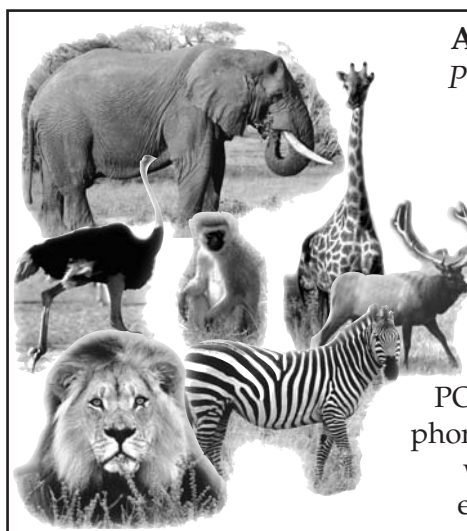
Chris Tromborg, FCF member # 3157
March 30, 2016



Lynn Culver, FCF member #2919
March 30, 2016



Mindy Stinner, FCF member # 4004
March 30, 2016

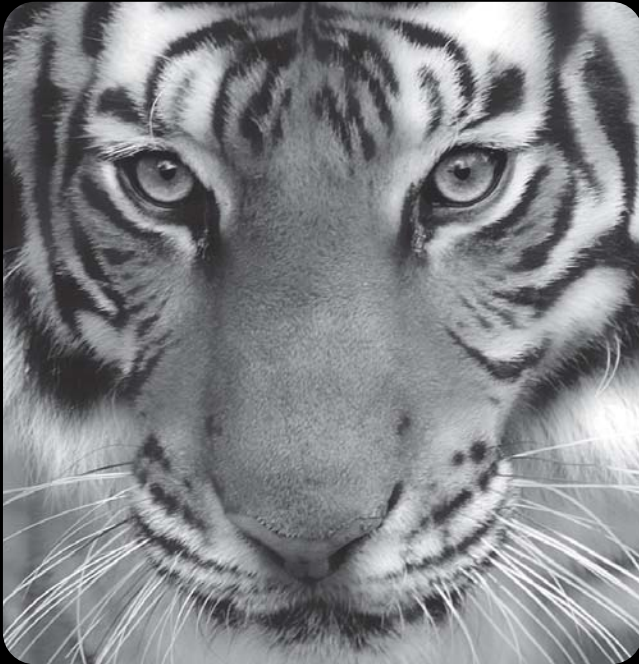


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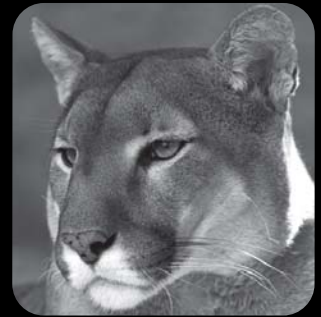
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Touring Three Animal Facilities at FCF Convention

By Laura Walker

We enjoyed very much going on several field trips to animal places around the Ft. Lauderdale area. We went to a beautiful place that seemed off the beaten path called Zoological Wildlife Foundation, set on five acres. It was beautifully land-



Zoological Wildlife Foundation has an Amur leopard cohabitating peacefully with a North American puma.

scaped and the exhibits were gorgeous. They were so well done. It was obvious that the owners loved their animals and cared a lot for them and their property, that it was a well thought out labor of love by a couple who own the place with dedi-

cated staff and volunteers. We viewed all kinds of monkeys, a binturong (which we learned was part of the *Viveridae* family), lions, white lions, clouded leopards, different species of birds, a puma, a leopard, and a jaguar. All the animals looked in great condition, relaxed, and seemed very happy in their lush surroundings. Here we got the experience to touch

an owl, armadillo, albino Burmese python, capuchin monkeys, baby emu, and an alligator. We also got to meet a young caracal, over a year old, and two tiger cubs. The caracal came outside and we sat on the bench with her and got to pet her. Ten of us at a time went into a room to have a chance to interact with a tiger cub. It is always so interesting to feel the fur of all the animals that we interacted with, and see what they are like, to hold and hear their special noises. It never gets boring to meet new kittens or hold species you've never met before! This was the first half of a long, great day!

The second half of our day took us to Zoo Miami, where we saw an animal show involving birds, a serval, and a cheetah. The highlight was to stand just a few feet from the stage and talk to the trainers about the cheetah they have at the zoo, after the animal show. It seemed unbothered and was enjoying chewing on a rubber Kong toy.




Laura pets a yearling caracal brought out for our group by one of the ZWF tour guides.

The zoo had a lot of interesting tropical plants around the area. There were different kinds of palm trees, mimosa trees, as well as other kinds of trees that I have never seen before. The zoo has a big monorail-like train that you can take all around the zoo, as it is more than 80 acres,



Debi Willoughby and Fred Boyajian took part in the tiger cub encounter at ZWF. Two of their young cubs were shared with small groups of the FCF visitors.

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A trained serval comes out during the Miami Metro Zoo wildlife program.

and a good distance to walk to all the exhibits. We did not do this as we were exhausted from the heat. FCF had arranged for a great lunch and reserved an air-conditioned pavilion overlooking the lake at the zoo for us to enjoy.

On another day, we spent half the day at Panther Ridge Conservation Center. Judy Berens is the owner of this property and she has an excellent hands-on relationship with all of her animals. These animals also have superb enclosures, roomy and built to match what they would like out in

their natural habitats. We watched her feed every animal and go in with them. She went in with the cheetah and fed him and petted him while he ate, and she brushed him, too. She fed and petted a jaguar, and the jaguar rolled all over her and was very happy to have her company. All of the cats that she has on her property are like this, very content to know her and have a relationship with her. She has cheetah, jaguar, leopard, clouded leopards, a cougar, serval, caracal, and ocelots.



Judy Berens, founder of Panther Ridge Conservation Center, sits down and offers one of the resident clouded leopards a bowl of food. Touring this private facility was a bonus tour many convention goers took on Sunday.

She got her clouded leopards from a zoo who sought her out to take them on because they were exhibiting stress from too many visitors to the zoo. They seem very happy in her place and it was very rewarding to watch her interact with these cats, and to learn about some of the stories behind the animals and how they end up with her. Her property is ten acres and she has room to expand if need be. I have a feeling she will be taking on more cats

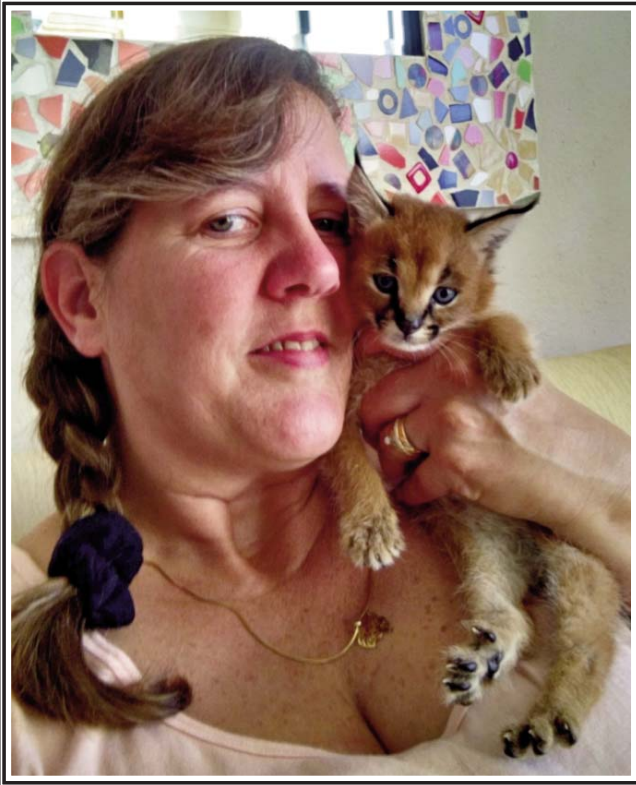


After Miami Metro's wildlife show concluded, an encore presentation of their ambassador cheetah for FCF convention goers was combined with the opportunity to walk up to the stage for closer looks, photos, and to ask questions of the trainers.

at some point. She has one staff member and a few volunteers to help her with all that she has to do on her property. Panther Ridge is in Wellington, Florida, and for any of you who live nearby who didn't go to the convention, it is well worth a visit to see what can be done by a responsible private owner.



Miami Metro Zoo is over 80 acres, and smart visitors like Vera and Robert Chaples rented pedal bikes to cover more ground and see more exhibits.



Debi Willoughby takes a selfie with the caracal kitten at the Bahia Mar hotel room.



Teralee Harrel shoots Scott Kendall photographing tigers during the cub encounter session at ZWF.



Kurt Becke lap time with too. Photo

Your Best Conv Cat Shots



Christa Donofrio looks like she might be planning to walk off with this caracal kitten. Photo by Lynn Culver.



Carol Donnor, friend of Chris Tromborg, left, has her first ever tiger hug. Photo by Teralee Harrel.



Alman gets in some
h the caracal kitten,
by Teralee Harrel.



Laura Walker captures this lit-
tle Eurasian lynx cub relaxing
in someone's lap.

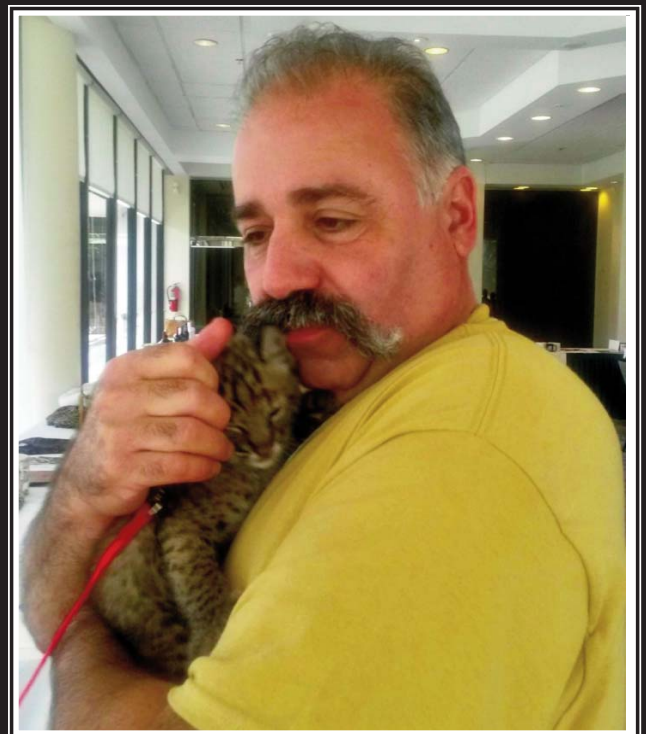


Could Robert Hohn be any hap-
pier than at this moment with a
tiger cub in his lap? Photo by
Teralee Harrel.

ention !



Sara Reifenberger plays with Keko, a
Geoffroy's kitten, during the
Thursday social mixer.



Abe Basmajian cuddles with the bob-
cat kitten at the hospitality suite.
Photo by Laura Walker.

Genetic Considerations for Exotic Feline Conservation

Dr. Brian W. Davis is a comparative evolutionary genomicist at the National Human Genome Research Institute of the National Institutes of Health. He is the cofounder of the Exotic Genome Repository, a multi-institutional biobank that collects and cryopreserves tissues across mammals. EGR generates and documents genomic data for the scientific and exotic communities in order to facilitate genetic discovery and informed conservation decisions. He has been involved in numerous feline, canine, and equine genome projects throughout his career, with an eye towards the ways in which we can compare genomes within and between species. From Texas A&M University, he received his MS redefining the evolutionary history of genus *Panthera*, and his PhD examining species boundaries using the genomes of feline interspecies hybrids. He currently focuses on the evolutionary history of multiple species and domestic breeds towards an understanding of inherited disease and cancer, particularly how similarities and differences in disease mechanisms between populations can aid both humans and animals.

By Brian Davis

The way we think about species and subspecies boundaries is essential to the question of how we formulate conservation management plans. The basic idea of species is bounded by the ability of individuals to reproduce with one another, and have fertile and viable offspring. Termed the “biological species concept,” it is foundational to our understanding of biology and evolution. However, the nature of subspecies tends to be a bit murkier. Customarily, organisms within a specific geographical region define these. They do not engage in interbreeding with other populations, which over time produces a detectable genetic signature that is distinguishable from other populations. This genetic divergence is important when we consider how to define a management unit. The key question being: should we intervene and intermix two populations in order to increase genetic diversity, or should we maintain them independently?

To date, the conventional knowledge has been to maintain subspecies as separate, isolated populations for fear of nullifying a local adaptation or perturbing some as yet not known genetic stability.

However, recent work by Andreas Wilting (2015 Science Advances) examined genetic and morphological (craniodental and pelage) variation among all nine tiger subspecies. They found very little overall variation and strong overlapping traits between these subspecies. Because of a severe population decline in the Late Pleistocene, there was also very little genetic variation. Their conclusions supported the recognition of only two subspecies: the Sunda tiger (*Panthera tigris sondaica*) and the continental tiger (*Panthera tigris tigris*).



Author Brian Davis plays with an adolescent lion at one of the facilities collaborating with the Exotic Genome Repository.

They suggest that the most pragmatic approach to conservation management programs, as well as captive breeding and reintroduction across population boundaries, utilize this paradigm to maintain the genetic health of the entire species. This is particularly profound in the context of the recurring and increasingly fragmented landscape of tiger populations in the wild (Figure 0). When we consider tiger management populations in captivity, effective population sizes for each of the managed subspecies within the U.S. are significantly below 100 individuals, some with a few dozen.

In truth, previous work by Shu-Jin Luo has shown that many tiger “subspecies” present under human care are more genetically diverse than in the wild. As an example, the captive Amur population (Figure 1) was significantly more unrelated to one another than computer simulations predicted. This indicates that there are alleles (versions of a genetic

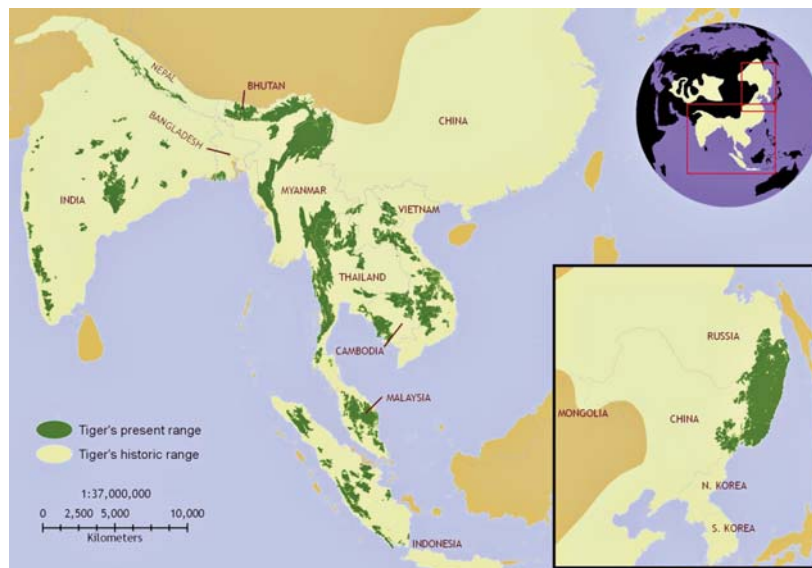


Figure 0. The present fragmented landscape of tiger populations in the wild overlaid onto the much larger historic contiguous range of tigers.

region) that are present in the captive Amur population that may not be from the Amur tiger. Further analysis showed that, indeed, a proportion of the captive tigers denoted as pure subspecies possessed alleles that originated in another subspecies. This work is being continued by comprehensive sampling of individuals within the community by our biobank, the Exotic Genome Repository (www.exoticgenome.org), in order to facilitate thoughtful management of these populations with emphasis on genetic health.

Regarding the genetic health of this species, it is important to underline a misconception that has been propagated over time. The myth of the unhealthy white tiger should be laid to rest in the context of causality. Recent work, also by Dr. Luo, identified the genetic variant responsible for the leucism that

produces white pelage in tigers. A single base pair change in the SLC45A2 gene is responsible for altering the function of the protein leading to pheomelanin deposition in the tiger coat. There are no documented biological conditions that cause a loss

of fitness in an animal due to this variation, and leucism is quite common throughout mammals and birds. In fact, to quote Dr. Luo:

Many white tigers captured or shot in the wild were adults, suggesting white tigers in the wild survive without fitness being substantially compromised. The undesirable traits often associated with captive white tigers are thus most likely due to human-induced inbreeding. This polymorphism has persisted for at least several hundred years and should be considered a part of the genetic diversity of tigers that is worth conserving.

The effect of inbreeding, or reduced genetic diversity, can be seen in the Florida panther. It took only eight females transplanted from Texas to drastically recover the

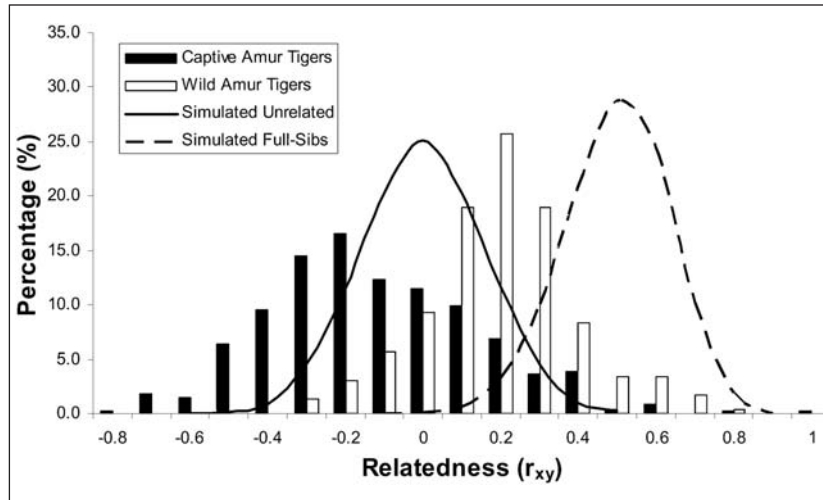





Figure 1. Captive Amur tiger population is significantly more unrelated to one another than computer simulations predicted, indicating that the captive Amur population may not be pure subspecies.



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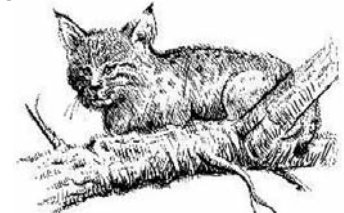
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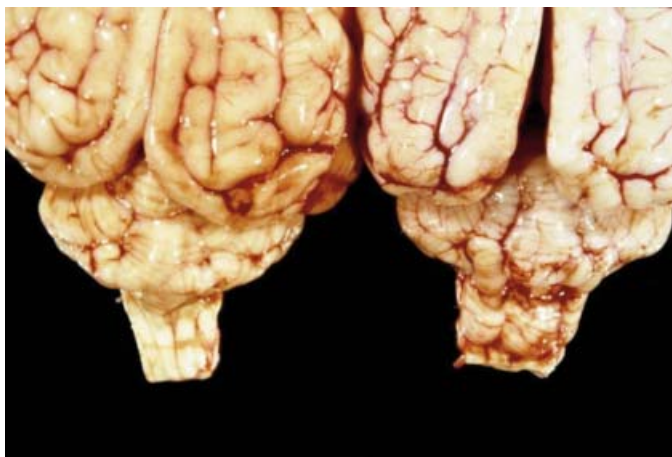


Figure 2. A bony growth that induces herniation and compression of the cerebellum causes mild to severe spinocerebellar ataxia found in African lions in the U.S.

survivorship, fertility, and genetic health of the entire population. Within captivity, we see this manifesting within the tiger population. Utilizing the same markers as Luo et al., preliminary genetic evidence facilitated by the collaboration of the Exotic Genome Repository with dozens of zoological facilities demonstrates that the white tiger population within the U.S. is as genetically diverse as the orange population. Thus, the era of inbreeding is at an end. Though we should be vigilant with future breeding practices and utilize genomic evidence to plan reproductive decisions, the maintenance of the white allele within the tiger population is emblematic of how we should consider conservation. Not only is the one base change leading to white coat color maintained, but the remainder of these genomes that is not present in other populations is as well.

The first step to understanding what should and should not be preserved within the genetics of these animals is to record the genomes of each population under human care. As we see in human and canine populations, within exotic felines, heritable disease is more prevalent in some populations than others. The key to understanding why is documenting as much of the diversity that exists within these animals as possible. As an example, mild to severe spinocerebellar ataxia is present within the African lion population in the U.S. This condition appears to stem from a compression of the cerebellum, due to a bony growth, that induces herniation (Fig 2). Understanding the genetic



Figure 3. Ataxic lion. Ataxia is a neurological condition causing lack of voluntary coordination of muscle movements that cause gait abnormality.

mechanisms of this disease is essential to identifying unaffected carriers in the population and making informed decisions regarding their reproductive outcomes. Additionally, these animals with such close veterinary surveillance can provide a way to better understand human health. We have documented and sampled hundreds of cases of cancer in the exotic population across numerous species. The incipient study is regarding melanoma in tigers, but there are many others planned. Given our work in canines, we hypothe-

size that there are fundamental genetic mutation commonalities between wide varieties of mammals that lead to the same outcomes. Therefore, the exotic community is an essential resource, not only for the long-term preservation of species, but also for the understanding of heritable disease. In order to do so, we must preserve, document, and curate the genomes of these animals as rapidly and effectively as possible. The truth always exists within the empirical data, so long as we can collect and analyze it. The exotic community is our essential partner in this.



Four colors of tigers. Dozens of zoological facilities collaborated with the Exotic Genome Repository. Preliminary genetic evidence demonstrates that the white tiger population within the U.S. is as genetically diverse as the orange population.

A Short History of Behavioral Enrichment through Environmental Engineering: From Flying Meatballs for Servals to Acoustic Prey for Leopards

By Chris Tromborg

The increasing rate of decline of many species in the wild and the growing importance of captive endangered species in conservation education and research require that improved techniques of animal husbandry be developed. This brief review addresses the efficacy of environmental enrichment through behavioral engineering for captive animals, especially felines.

Managing populations of wild animals in captivity has become increasingly important in recent years as a result of the decline of animal populations in their natural environments. Institutions which maintain populations of wild animals, including zoological parks and aquaria, have undergone a change of philosophy with respect to their very reasons for existing. Historically, the primary role of zoological parks was one that emphasized recreation and entertainment for their visitors. However, the increasing human population, and the simultaneous explosion in the exploitation of certain animals for food, fiber, traditional medicine, commercial hunting, and similar consumptive activities have placed severe pressure on populations of formerly abundant wild animals, which are now declining significantly. These trends are especially evident in the case of the 37 species of felids, many of which are commonly found in the collections of both large zoos and in those of smaller facilities. In the near future, it is extremely likely that many species of animals, including many felids, will virtually cease to exist in nature, will exist in the disturbed, discontinuous remnants of their former ranges, or will exist only within the confines of captivity. This latter probability strongly suggests that any and all approaches to improving the conditions under which captive animals are maintained should be explored. All of this is occurring at the same time that we are developing an understanding of the cognitive complexities of nonhuman animals, both in natural and artificial environments. While captive populations can never replace free-living ones, artificial environments can be improved by emulating aspects of an animal's natural environment

in ways that promote the preservation of species-typical behavior. There is a critical need to determine which components of artificial environments can be manipulated to provide greater opportunities for the expression of naturally occurring behaviors. The identification of environmental variables, that, when properly manipulated, improve reproduction and survival, or at least reduce behavioral arousal and locomotor stereotypies, might assist institutions attempting to manage captive populations of endangered animals well into the future.

The earliest records of menageries suggests that the first collections of exotic wild animals were maintained by wealthy or militarily victorious rulers, who collected animals from the wild that were emblematic of power or which were obtained as the spoils of nationalistic conquests. The first collections of wild animals that were accessible to the public appeared in Europe in the early 19th century. Historically, these early zoological gardens emphasized the collecting and presentation of animals for the entertainment and recreation of the public. Due to limitations in transportation and communication, urban dwellers were seldom able to observe exotic animals except at local zoos; this was the only game in town.

The development of the urban zoo that facilitated this began in earnest in the early 19th century with the opening of the Regent's Park Zoo in London. The first similar zoo in the United States was the Philadelphia Zoo, opened in the early 1870s. During the next 150 years, most large cities constructed zoological parks with a competitive zeal. The early emphasis was on the collecting of as many indi-

viduals representing as many different species as was possible, once again, with a view toward outcompeting neighboring zoos by exhibiting the greatest diversity of species. This led to a "postage stamp" approach to the aggregation of animal collections in zoos. Little consideration was given to the long-term management of the populations of captive animals. Animals that did not survive captivity could be easily replaced from abundant wild populations, which were then perceived to be inexhaustible. Mortality rates for most



In 1979, the keepers at the Pana`ewa Rainforest Zoo and Gardens, in Hilo, Hawaii, train a tiger to chase a lure. This experiment in behavioral enrichment sparked a civil war between the naturalists, who wanted exhibits to look good, and the interactive camp, who wanted to get animals moving.

species were high; zoos were consumers of wildlife, not producers of new animals. Not until the late 1960s was the relationship among housing, stress, and mortality in artificial surroundings firmly established and actively studied.

Early on, wild animals maintained in captivity were perceived as being interesting oddities of nature. They were universally housed in concrete or stone structures with iron bars. Ironically, during the medieval and renaissance periods, common criminals were placed on public display in concrete cells, behind iron bars—a theme that would be perpetuated in zoos well into the 20th century. Visitors to zoos were probably being subconsciously reminded that the animals that they were



Asian small-clawed otters at Marine World, California, were given pool slides for enrichment.

viewing were dangerous, inferior curiosities, and not interesting, complex beings. Animals housed in the barren, unresponsive enclosures found in these traditional zoos frequently manifested stereotypic and abnormal behaviors resulting from improper socialization and non-existing behavioral opportunities, reinforcing the negative opinions of the zoo-going public. The unnatural housing and bizarre behaviors of these improperly housed animals entertained zoo visitors for all of the wrong reasons; they certainly did not effectively educate visitors about the natural histories of animals. Animals were so uninteresting that the modal time visitors spent in front of a typical enclosure seldom exceeded ninety seconds. Certainly, these conditions did not encourage respect for captive animals or their wild relatives.

The current trend toward changing zoos from institutions emphasizing recreation and entertainment, to institutions more concerned with education and conservation took place over several decades.

During the first century of zoo history, little research on the mortality or morbidity of zoo animals was conducted. In the early 20th century, the Pennrose Institute of the Philadelphia Zoo began to conduct post-mortem studies of animals lost on exhibit. Here, there was a general desire to discover some of the causes of diseases commonly found in captive animals.

During the decades of the 1940s and 1950s, there was little advancement in the nature or purpose of zoos. Notably, Swiss zoologist Heinrich Hediger, the generally accepted “father of zoo biology,” began to

wild animals, to facilitate safer handling during medical procedures performed by zoo veterinarians. The controversy surrounding taming and incipient domestication is still with us today.

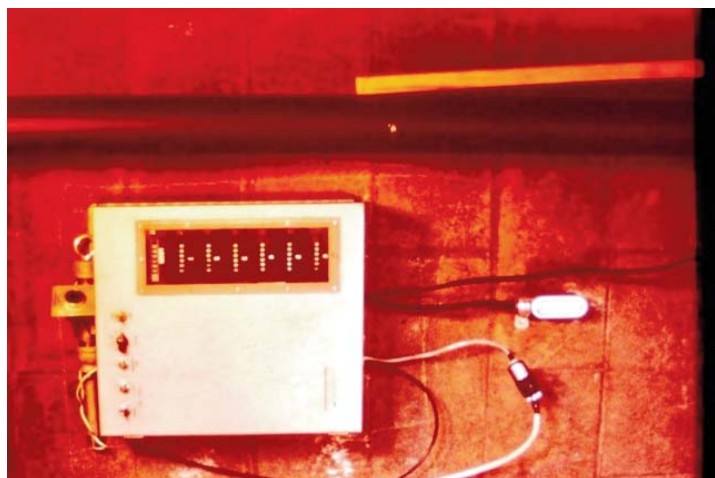
Beyond the contributions of Heinrich Hediger, little change in zoos occurred until the dawn of the environmental movement, around 1969. It was shortly after that, in 1971, when I experienced my own epiphany with respect to zoos. I found myself at the San Francisco Zoo, the city named after the patron saint of animals, and which possessed one of the most archaic zoos in the United States. In a scenario strangely reminiscent of that reported by the founder of Panthera, Dr. Alan Rabinowitz, I was standing in front of a traditional concrete and bar enclosure, probably 12 feet on each side, with absolutely nothing in the enclosure except two animals. The enclosure housed a single female jaguar and her cub. For two hours, I watched this mother attentively bathe her infant. This jaguar cub was the only other object besides the mother in the enclosure, the only other thing to

advocate for the active interaction between zookeepers and their charges. He believed that keepers should form strong social and psychological bonds with their charges. He further believed that animals should be trained to perform some behaviors, primarily to provide them with psychologically rewarding activities in captivity. Finally, he advocated the taming of captive

which she could devote her attention. I became increasingly angry as I viewed this scene and left the zoo vowing never to visit another zoo again.

Meanwhile, Dr. Hal Markowitz and others had discovered that if very young kittens were handled extensively and stimulated tactilely, auditorily, and after their eyes open, visually, they grew more quickly, grew larger, and learned more quickly than kittens raised in unresponsive, impoverished surroundings. By the early 1970s, research on domestic kittens and other animals suggested that information from the environment modulated neural development; enriched environments promoted more neuronal complexity, while impoverished environments encouraged neuronal death. The negative effects of impoverishment were more severe in inbred populations--and most populations of zoo animals are inbred. The positive effects of enrichment were extended into advanced age--and zoo animals often live for extended periods. At least in the laboratory, environmental enrichment had been shown to positively influence behavior and anatomy.

By 1973, Dr. Markowitz was making proposals that would change the lives of many animals housed in artificial environments outside of laboratories. In that year, he published the very first article proposing that the environments within which zoo animals were housed exerted profound effects on their behavior. He fur-



At the Portland Zoo, gibbons were housed in classic 12 by 12 monkey cages. For enrichment, a computer game much like Donkey Kong was installed. Visitors and gibbons loved to play the game together, but some zoo professionals hated it, thinking it was demeaning to the animals and sent the wrong message about what a zoo is.

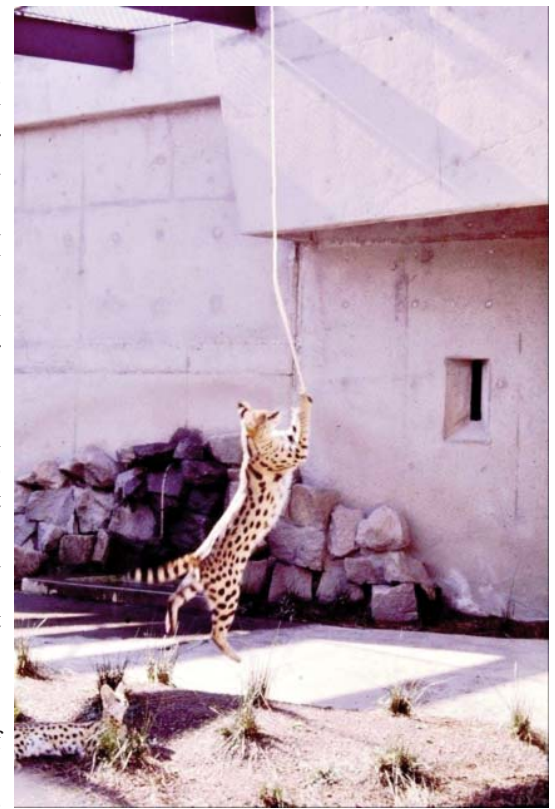
ther proposed that these effects should be assessed and then that artificial environments should be modified in specific ways based on this research.

That improving the importance of the physical environments within which captive animals in zoos were housed had been suspected for several decades. The restricted environments typically found in zoos had been associated with stereotypical locomotor behavior, depressed activity in overall levels of behavior, increased aggression toward cage-mates, self-inflicted injury, poor reproduction, and a host of other abnormal behaviors. In addition, the close confinement of large numbers of animals in close proximity with one another was thought to result in olfactory and auditory hyper-stimulation, although little research had ever been done in order to investigate these problems.

While many in the zoo biology community quickly embraced the concept of environmental enrichment, a severe disagreement soon emerged between those advocating “naturalistic” approaches to enrichment and those advocating “interactive” approaches to enrichment. The naturalistic approach often employed passive components which mimicked some aspects of an animal’s natural environment and which often yielded a more natural appearing exhibit, though this approach often yielded environments which were not very responsive to captive animals. The “interactive” approach was seldom concerned with appearances,

focusing instead on the cognitive abilities of animals and their behaviors. To critics of this approach, this method of enrichment frequently resulted in exhibits that could appear more similar to a laboratory than a zoo exhibit. For many years, the advocates of each strategy appeared to be in contention for legitimacy within the zoo community. Fortunately, this controversy ultimately would subside with the proposal for an integrated approach to the improvement of artificial environments, one envisioning the provision of animals with opportunities to interact with ecologically relevant variation in their surroundings.

The earliest zoos were characterized by featuring exhibits with insufficient space. Early attempts at improving zoo environments concentrated primarily on increasing the amount of space available to animals. At first, only the amount of horizontal space was thought to be important. As habitat designers obtained more experience, they realized that the complexity of the space was more important than the actual amount of space. For example, vertical complexity could be introduced to provide climbing and leaping animals, such as most felids, with more useable space. Increased vegetative complexity could provide increased horizontal and vertical complexity to an



The first ever mechanized, interactive exhibit was at Washington Park Zoo in Oregon. Servals were offered flying meatballs. These kinds of exhibits not only provide interactive viewing but can also reveal health issues, as was the case here. The male serval’s locomotion led to the discovery of a hernia.



San Francisco Zoo experimented with aural stimulation of their black panther. Sabrina follows the sounds emanating from small speakers throughout her enclosure. Random bird calls and rodent rustling sounds increased her movement and use of space. Frequency of sounds was sparing and random, to prevent habituation.

environment, dramatically increasing the effective internal space available to an animal without requiring that the physical size of the enclosure be increased, an important consideration for smaller institutions. Substrate complexity could be augmented to provide animals with opportunities to manipulate their surroundings, forage for prey, and even seek cover and escape from zoo

visitors under the substrate in their environments. Provision of complex substrates and appropriate vertical complexity could influence the musculoskeletal health of captive animals by encouraging species-specific locomotor behavior. Ultimately, however, environments were often landscaped simply to appear more natural to observers, i.e., more naturalistic. Increased apparent naturalism in an exhibit certainly seemed to reduce the sterile appearance of traditional enclosures.

Another aspect of the environment that zoo professionals attempted to improve relatively passively was the social environment. Of course, this requires space and additional animals. Adequate social surroundings could provide an interactive environment facilitating social learning at all stages of development, probably important for the development of reproductive and parenting behavior. Early research on reproduction in zoo-born felids lacking adequate parenting opportu-

nities suggested that they usually were incapable of normal reproduction. Initially, the provision of more complex social environments was thought to be important only for social species such as primates. As knowledge of the social systems of other species developed, including that of felines, the provision of adequate social environments began to appear to be important for a variety of species. Recent research on free-living mountain lions reveals far more complex social relationships between adult animals than the outmoded model of the solitary adult feline would warrant. The more scientists learn about nonhumans, the more complexity we discover. In inadequate social surroundings, where adequate social development is impossible, several types of stereotypies could develop, including excessive auto-grooming, allogrooming, and pacing. With the provision of social complexity, many of these undesirable behaviors decline.

Zoos began to realize that they could improve environments physically or socially. However, these approaches tended to overlook the importance of the behavioral dimension of captivity. The issue of behavioral opportunities for captive animals was seldom addressed by many of the previously mentioned passive approaches to environmental enrichment. Consequently, a more interactive approach to improving artificial environments emerged, one exploiting contemporary advances in technology.

The concept of behavioral enrichment through environmental engineering, as first proposed by Hal Markowitz, was based on the notion that animals have been prepared over time for a specific range of environmental expectancies. He was aware of the cognitive complexities of many of the species of animals commonly found in zoos, and believed that the impoverished environments in which virtually all captive animals were housed did not allow them to engage in complex problem solving while contending with variation in the physical properties of their environments. Not only did this have profound negative implications for the health and well-being of individual animals, but also for the long-term management of populations of endangered captive ani-



Successful behavioral enrichment helps relieve boredom in captive animals, along with improving visitor interest and understanding of wildlife.

mals.

In order to provide adequate interactive environments, Hal believed that the natural history of an animal should be investigated and the environmental contingencies with which it commonly interacted in nature should be brought into the confines of captivity. This approach was to turn out to be particularly useful in situations where the pre-existing environment was too confining to accommodate a more expansive naturalistic approach to environmental enrichment. In some unfortunate instances, where inadequate ancient enclosures could not be structurally improved, the most effective approach was to retrofit enclosures with interactive equipment, what was termed a “Band-Aid” approach. As far as appearances were concerned, this could make a bad situation worse; now, ugly enclosures had Frankensteinian equipment scattered within the cages. Those who objected to the installation of unnatural-looking devices could sometimes be placated by the use of natural-looking materials to disguise interactive equipment.

Oddly, the objections raised by some over the introduction of modern technology into zoo environments were probably spurious. Most major advances achieved in zoos over the past few decades have been based almost entirely on the application of modern technologies to meet the conditions of captivity. This discussion about the degree of intervention under environmental enrichment is also an odd

one: The most profound form of intervention in the life of an animal is its removal from its environment and the placing of it into an artificial environment. Some believe that environmental enrichment is inhumane because animals might be forced to perform some strenuous behavior to obtain food. This is an odd argument as well, since this is what animals do in nature. Also, research on captive animals reveals that every species tested, except two, will work for food in the presence of free food. The two exceptions are (surprise) humans and domestic cats.

Environmental enrichment is primarily concerned with elevating the levels of appropriate species-typical behavior. In addition to encouraging more normal, species-typical behavior, improving the educational effectiveness of exhibits, and maintaining an animal’s musculoskeletal health, another major benefit of increased activity is that deviations from normal behavior can be more easily detected. Since wild animals tend to disguise any injury or disorder, changes in normal locomotor behavior might be used to monitor the health status of captive animals. Significant deviation from typical behavior might indicate an injury that should be investigated by zoo veterinarians.

At the Washington Park Zoo, in Portland, Oregon, in one of the earliest approaches to behavioral enrichment through environmental engineering, a pair of servals was provided with dynamic prey in the form of flying meatballs, which they had to pursue in order to capture and obtain a meal. When the male serval attempted to chase the meatball, his abnormal movements allowed veterinarians to diagnose an abdominal hernia. Here, not only did behavioral enrichment provide behavioral opportunities, but it facilitated the monitoring of an animal’s health.

One of the aspects of artificial environments that have been largely overlooked is the acoustic environment. The acoustic surroundings of urban zoos are characterized by a considerable amount of anthro-

pogenic noise. Some studies have measured the typical background noise levels at some zoos in excess of 85 dB, an extremely high level. On the other hand, sound can be used to influence the behavior of animals in conceivably beneficial ways. Perhaps the acoustic environments of zoos could be modified to resemble natural environments, with the immersion of the zoo, its animals, and the visitors, in naturalistic acoustic tapestries or soundscapes. This could isolate the zoo from unnatural, provocative sounds while enhancing the educational effectiveness of the entire zoo experience.

More to the point, acoustic phenomena can be employed to provide animals with behavioral opportunities. The provision of acoustic prey has been successfully demonstrated at the San Francisco Zoo with an African leopard. The leopard was provided with constantly shifting avian vocalizations that appeared randomly throughout the leopard's otherwise unresponsive enclosure. The leopard actively oriented toward these sounds and often engaged in prolonged investigatory behavior in response to the sounds. Her overall levels of locomotor activity were significantly increased after the acoustic prey were introduced compared to their levels before the enrichment began.

One of the high points in the design and execution of behavioral enrichment through environmental enrichment schemes involved the provision of automated prey for tigers to pursue. Here, artificial rabbits were presented to a tiger on an invisible conveyor belt and the movement of the prey was used to provoke the tiger to stalk the prey. The tiger stalked the prey to the end of the belt's travel, at one end of the enclosure, where the prey disappeared and was automatically replaced with a meat reward. The system was completely automated and required no keeper intervention as long as everything worked. The enclosure was heavily planted in a naturalistic fashion, so that none of the equipment was visible to the public. Needless to say, tigers are very hard on equipment and the system experienced considerable down time.

One of the primary reasons for providing improved habitats for captive animals is to reduce levels of arousal, as measured by reactivity, possibly indicative of elevated levels of stress. The regulation of stress, as measured by its physiological consequences, is fundamental to the con-

temporary paradigm of behavioral enrichment. Stress is an organismic response often correlated with environmental factors over which an animal has no control. It is characterized by psycho neuro-endocrine influences on the physiology and behavior of an organism through the activation of its sympathetic nervous system, evoking the classic "fight-flight-or-freeze" response. Increased reactivity, greater numbers of stereotypical behaviors, excessive grooming, pacing, elevated aggression, and even increased eliminative behaviors are possible indicators of elevated levels of arousal, or stress responses. Hypothetically, stress should be reduced if animals are provided with some means of controlling their surroundings.

Chronic stress is probably an important causal factor in the high rates of mortality observed in some species of captive animals. Prolonged over-stimulation of the autonomic nervous system is correlated with increased activity in the hypothalamic-adrenal system and in the suppression of the immune system. As with humans, when non-human animals are allowed to increase their locomotor behavior or to exercise some control over their surroundings, both physiological and behavioral measures of stress responses seem to decline.

When servals can chase flying meatballs, leopards stalk acoustic prey, and tigers attempt to capture running rabbits, even in potentially barren, unresponsive environments, then a small victory has been achieved. The expression of relatively normal behaviors, even in artificial environments supports the premise that the provision of more interactive, ecologically relevant housing will improve the health and well-being of captive animals. This is the primary rationale for improving artificial habitats. The degree to which habitat modifications have been successful can be difficult to quantify. One commonly applied measure of the success of housing conditions and maintenance regimens is reproductive success. Unfortunately, even between closely related taxa, there are large differences in reproductive success, reducing the general applicability of these approaches as representing successful solutions. The environment can encourage or discourage the development, expression, and, ultimately, possibly the retention of important behaviors, including those involved in defense,

communication, and reproduction.

While field studies can illuminate aspects of the ecology and behavior of free-living animals, the ability to view and interact with exotic animals at close range provides unique opportunities to improve our understanding of the influence that captivity exerts on behavior. Differences in responsiveness to environmental variation are the norm; captive management and behavioral enrichment schemes should be designed with a thorough knowledge of the natural histories of target organisms, including their mating and social systems, reproductive physiologies, and systems of communication, in order to realize the greatest improvement in prospects for future survival in captivity. The concept of behavioral enrichment through environmental engineering has gained acceptance by most captive animal managers. The primary goal of behavioral enrichment is to offer captive animals some degree of control over their surroundings. Perhaps behavioral enrichment through environmental engineering only restores a small portion of the control over the environment that an animal loses when it enters the world of captivity. In this instance, we become an important aspect of the environments of our animal friends... Go be an environmental enricher.

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Wild Florida Accreditation

By Lynn Culver

Wild Florida Airboats and Gator Park in Kenansville, Florida, is the latest member to gain FCF facility accreditation. This “real Florida” attraction is just three years old. It started as just an airboat business giving tours of the headwaters of the Everglades ecosystem and all the diverse wildlife it supports. It seemed only natural to develop the 15-acre property, situated at the edge of Hawk Swamp, into a wildlife exhibit to compliment the visitors’ airboat experiences. It took a special permit to develop the property on protected swamp land. Today, over 80 former nuisance alligators live at the park. Local trappers remove the unwanted reptiles from backyards,



Wild Florida’s bobcat enclosure includes elevated platforms, real log hanging swings, tire swing, firehose hammock, claw logs, various plants, and an above-ground cement pond.

golf courses, and other areas too close to human habitation, and bring them to Wild Florida.

Kylie Reynolds and her boyfriend Brian

have been with the park since its inception. Brian was hired away from Discovery Cove in Orlando, a facility that offers guests the opportunity to swim with dolphins. Kylie had been employed at Joel Slaven’s Professional Animals prior to being hired as one of the facility’s four full-time keepers. Brian became a valued consultant, helping to design and create exhibits and acquire animals for the collection. He is presently the manager of Nature Works at the Orlando Science Center.

Some of the first species acquired were

Watusi cattle and zebra. Other exotics exhibited include lemurs, sloths, porcupines, wallabies, servals, and various birds. Besides the large population of alligators, other Florida native species are fox, raccoon, and bobcat.

There is an educational component at Wild Florida where visitors get an up-close experience. There are four animal presentations daily, and the park offers animal encounters with sloth, lemur, and porcupine.

The two feline species living at the park are bobcats and servals. The serval enclosure houses a pair of females, one being seven and the other age ten. Kylie says the girls, Princess and Zena, are not snuggly, but are good learners. Keepers have target-trained them and use clickers to get these girls to jump to surfaces. The older serval is on an exercise plan and has to work for her meals to help her trim down a bit.

This serval exhibit is 42 by ten feet wide and is 9.5 feet tall. It has a roof of one-by-one inch wire, and the walls are constructed of two-by-six pressure-treated wood. The front wall facing the visitors is full tempered glass with a surface compression of 10,000 pounds per square inch, secured by two-by-six pressure-treated wood.

The bobcats, Duke and Duchess,



Duchess gets up on her hanging log to get a better view of the squirrels climbing the trees around her habitat. Duke sits on the wooden trap/cage built with natural tree limb dowels, to get a better view of the peacocks strutting outside.



Bobcat peers out at the visitors at Wild Florida Airboats and Gator Park.

arrived last year as kittens and were, for a time, a popular outreach and public interaction attraction. The yearlings will someday, hopefully, produce offspring. They live in a 36 by 11 foot enclosure, 10.5 feet tall. Wall fabric is welded wire with 1.5 inch openings. The framing is built with large poles, and the wire is stapled together with B gauge staples. A base about two feet high is built from two-by-six pressure-treated wood. Because Wild Florida is open to the public, there is a barrier fence in front of the exhibit with plants in front of the enclosure to create an additional barrier between the guests and the enclosure walls. Recent construction of an additional ten-by-ten foot area is complete and it will be the birthing den next spring when the pair is old enough to mate. For now however, it is a novel environment for the pair to explore and occupy.

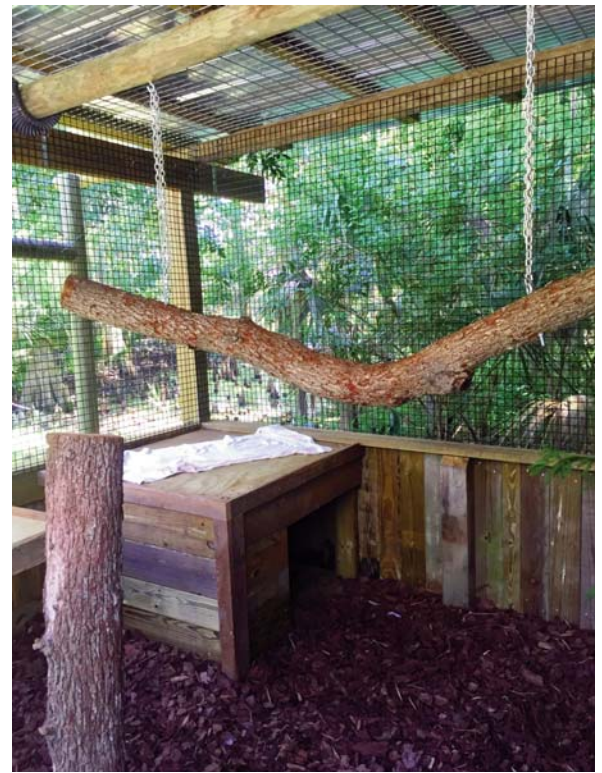
Both feline enclosures have wiring on the ground to prevent digging. Both have safety catch double door systems with a guillotine area built for the cats, all made out of two-by-six pressure-treated wood. The guillotine door opens and closes with a wire cable pulley system. Each enclosure also has fans for ventilation, partial shade roofs, elevated surfaces, and ponds in their enclosures. Kylie says the servals will play with the fish but only eat them at

night when nobody's looking. Both feline species have been taught to go to their station and stay, and shift into shift boxes for medical exams. Fortunately, none of the felines have any medical conditions at this time.

Felines are fed a diet of chicken wings and breast and fish and gizzards with Oasis vitamins.

When Kylie is not at the park, she is caring for wildlife at her own non-profit rescue, Amazing Animals, Inc.

This is a USDA- and Florida-licensed facility. Some of Kylie's animals are also taken out for outreach education.



A recent addition to the main cage was built to provide Duchess privacy and a den box to deliver next spring when she is old enough. The bobcats have access by way of a connecting passageway that can be opened or closed.



The enclosure floor is covered with a layer of pine bark mulch to keep things dry when Duke goes splashing in his pool.

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General Membership Meeting Minutes

The 2016 General Members Meeting was held at the FCF Convention in Ft. Lauderdale, FL, on June 16, 2016.

The election was discussed. The members were informed that all board positions are open, how to submit a nomination, and that the deadline to submit is August 10th.

Every member was given time to introduce themselves.

Chris Tromborg explained to the members that we have an aging membership and we are having a hard time recruiting younger generations. He mentioned that the board discussed marketing to other animal organizations and he asked for ideas from the members. No ideas were given.

Chris Tromborg gave the members an update on the Education Committee and told them we need to spread the message about the value in small facilities. He asked for ideas on how to improve our educational outreach. No ideas were given.

Pat Callahan told the members that we were going to reach out to *Cat Fancy* and other animal organizations to recruit new members. He asked the members for ideas on how/where to recruit more members. No ideas were given.

Pat Callahan told the members that we aren't receiving many conservation grant applications, so we are looking at setting up a conservation safety net with Jim Sanderson to help fund worthy projects that fall short on funds.

Kevin explained to the members that it is becoming harder and harder to find suitable convention locations where we can bring cats in, due to legislation changes across the country. We also look for locations that are an easy access from an airport and that don't have high flight costs. After mentioning that the location of Sarasota was suggested, he opened it up to the members for other suggestions on where to have our 2017 convention. Suggestions were: Branson, Missouri, but transportation would be tough; Alabama. Kevin told the members the Convention Com-

mittee would look into those suggestions.

Kevin opened the floor to the members so they could discuss anything they felt was important. The members felt it is important to have kittens at convention and suggested that anyone who brings them be reimbursed for the cost of the cats to attend. Another suggestion was that if we had a current database of members and their cats, members would be able to utilize it to help with their breeding, which may result in more cubs at convention.

Kevin asked the members what can be done to increase membership. It was suggested that we need young people to constantly update social media and that we should talk to Mario's PR person. Another suggestion was for the FCF to fund an interactive wild feline display at a museum(s).

It was asked if we are keeping the convention within the first two weeks of June. After members gave their input it was clear that July was a more popular month to hold it in.

Board of Director Meeting Minutes

2016 Second Quarter Board of Directors Meeting was held at the FCF Convention in Ft. Lauderdale, FL, on June 16, 2016. Board members present were: President - Kevin Chambers, Vice President - Mindy Stinner, Treasurer - Lynn Culver, Secretary - Debi Willoughby, Director - Pat Callahan, Director - Robert Bean, and Director - Chris Tromborg.

Ratify the 1st Quarter 2016 Minutes: The minutes stand ratified as previously approved, no changes or comments made.

Treasurer's Report:

Total in bank: \$82,897

Income down from previous years, because we haven't done any big fundraisers in last year.

About \$10-11K for SWCC funds raised to build a building for Andean Cat Conservation, which a building isn't needed for anymore. Will ask Jim if he has a current Andean cat project; if he does, the funds will go towards that. If not, we will ask Jim to write something up that we can put in the *Journal* to notify people of what is going on and if anyone objects, they can

let the board know.

Robert Bean suggested putting expense pie chart on website for public to see.

Mindy Stinner suggested to pull our best year, 2011, and analyze the data to see what we can do to improve the organization. Julia has a software package and can get the info for us in an easy format.

Update on Members Committee: Per Chris Tromborg, we need to find younger members. Younger members don't seem to join things. We need to figure out what sectors to market to, maybe we can cross pollinate with other conservation groups. We also need to beef up social media.

Mindy Stinner suggested that we need to define one message that the FCF wants to market.

Chris Tromborg suggested we need to find the small hobbyists to join, too.

Robert Bean asked if we can get involved with the Felid TAG meeting. We can probably reach zookeepers there.

Chris Tromborg to talk about how to attract new members at the membership meeting tonight.

Chris Tromborg stated we don't know enough information about our members; we should include a simple postcard (and

online) to our members with important info and asking for info from them. We seem to attract members to our events by letting them view live felines. This gives us the opportunity to teach people in a professional manner.

Update on Education Committee: Per Chris Tromborg, the website has been revised. He has been reviewing it and coming up with ideas to improve it. He suggested we need to improve on our search keywords. He is getting the younger generation to critique it to get some ideas. He suggested using Facebook to educate more.

Robert Bean suggested we look at colleges as a venue.

Update on Conservation Committee: Conservation Grants and proposed Signature Project idea were dealt with by a committee appointed by the president. The Signature Project idea (Callahan proposal) was voted down by this committee. The Conservation Grant committee continues as before, but did not get any legitimate applications. The board approved a mechanism that would allow expedited applications, for financial assistance, coming via Jim Sanderson/Small Cat Conser-

vation Alliance. These would be made to the board. Jim/SCCA would vet the applicants. These would be small, emergency type or project completion grants that would give due credit to FCF. Monies approved would go through SCCA. Articles for the *Journal* might or might not be required. Note: articles are required for FCF Conservation grants. Pat Callahan contacted people to be on this committee. Update on the Marketing Committee: We have been selling items (tees, mugs, etc.) to raise a little money. It was suggested that we market in hunting magazines. The question was raised if we want to brand ourselves as being the anti-branding against hunting. Kevin Chambers didn't think we should do that. Pat Callahan asked if we have ever advertised with Moor Park College and Santa Fe Teaching College. The answer was no, but we should look into it. Pat will also look into advertising in AAZK.

Robert Bean did not have any updates on the committees he is responsible for.

Old Business

Ratify Bring Back the Conversation: FCF paid for Mindy to attend and provide info to us.

Journal feedback on Mindy's info was positive. Mindy informed the board that there are more workshops coming up and she has people that she can send to these things and provide us feedback if FCF supports it. FCF approved and sent \$ for this event. Everyone ratified, Mindy Stinner abstained.

Ratify Safety Net: Ratify \$1,000 for Mystic Jungle for relocating tigers. There were 5 yes votes (Lynn Culver, Debi Willoughby, Mindy Stinner, Chris Tromborg, Pat Callahan) and 2 no votes (Kevin Chambers, Robert Bean).

Constitutional Amendment to change the number of *Journals* issued per year from six to four: This information will be in the next *Journal* for members to review.

Conservation Grants: The committee met and suggested a signature project instead of approving funds for grant requests. It was decided that we will keep the grant application process but we may add some items through the Small Wild Cat Conservation Alliance. This needs to be discussed with Jim Sanderson to see how it can work. Jim had suggested a Conservation Safety Net for projects that fall short on funding. Pat Callahan to review our programs and policies and propose a rewording of them.

Ashwin with the Fishing Cat Conservation Project sent a thank you letter to the FCF for its donations and gave a quick update on the project. He also sent a few items for the auction.

Studbook update: Per Mindy Stinner, the reporting system is almost complete; it should be done within a few weeks. The ZAA is not interested in funding it anymore, because they are moving to the ZIMS system. Mindy's team is now discussing collaborating with another company that is similar to ZIMS but more cost effective. The studbook may become a component of their system, which would

cover the development costs.

Census update: The last census was completed in 2011; we need to do another one. Julie Wagner looked into doing it and estimates the cost will be about \$5,000 to process the reports. The USDA's system isn't working properly and every report has to be downloaded individually and is quite time consuming. Mindy Stinner noted we need credible data that has backup if someone questions it. Julia informed the board that the data she has pulled down from the USDA website has been inaccurate and unreliable. The board agreed that we need more time to discuss this and decided to regroup on Saturday. No other old business to discuss.

New Business

Nominations: There haven't been any nominations submitted for the board election yet. The deadline is August 10th. We will discuss this with the members at the members meeting.

Election: The votes are supposed to be counted by an independent accountant. Mindy Stinner suggested we ask Joy if she is interested in doing it. The board will decide which method to use to count the votes once we see how many nominations are received.

2017 Convention: One suggestion - Kay Rosaire's place in Sarasota, FL. We will ask the members for their input at the members meeting.

No other new business.

Blast from the Past: Maharajah

Long Island Ocelot Club
Volume 6 Number 1
January 1962

By Mrs. Quinn Baird
Centerville, Cape Cod, Massachusetts

In November, 1951, a couple of pounds of fur and eyes, coat pocket size, arrived in Centerville, Massachusetts, as a gift to Spencer L. Baird III. Now, two years later, "our" margay who still, incidentally, shows his first allegiance to his master but who has become the whole family's pet, is nine pounds of eyes, claws, teeth, and, most of all, heart. The raising of Rajah followed the usual path often described as "the hard way," i.e. finding out what

you've - done wrong after you've done it. He very nearly lost his life when he was castrated, as the local veterinarian was not aware of these animals' sensitivity to phenobarbital, and Raj was in a coma for a week, requiring intravenous feeding and catheterization. Our pet has failed to grow to average margay weight, but we find this has some advantages.

When he playfully leaps from the top of the break-front, some eight feet high, and lands on your neck while you are writing at a table nearby, you



appreciate his small size. It certainly doesn't keep him from getting on top of

anything in our house, tops of doors being no exception.

His favorite sport is retrieving, but he quickly gets bored with an easy throw from one side of the room to the other. If there's a challenge, like a toss to a high bookshelf or between the shutters and the window, he is actually grinning when he returns the ball. Raj prefers to play at night and sleep in the daytime on the highest shelf.

One box for sleeping was put as high as a sloping ceiling permitted. Raj would not go in the box, but slept on top until a false front was put above the box tight to the ceiling. At the age of about one year, he developed toilet habits that required the building of sand boxes with backstops. Four of these are strategically situated around the house. His claws were clipped

weekly until he became a year and a half old, when it grew to be too big a chore for both Raj and the clipper, but especially the clipper. The job is now left up to him entirely and he seems to be doing a fine job using two tree trunks that have been set up in different rooms, the tops of which lead to sleeping shelves and boxes. He doesn't like to get into water if it comes up over his paws, and always drinks lion fashion, in a prone position.

As far as we are concerned, Rajah is housebound. He has other ideas and several times has managed to elude us. His most spectacular foray was at the age of nine months. We were out for the evening and when we returned, Rajah was gone. Enlisting the aid of friends and even two of Centerville's finest, we scoured the village until 3 am. After another hour of

searching the next morning, we had about given up when we heard four or five jays scolding like mad at the top of a nearby tree. Looking up, there in the topmost branches was Rajah.

Rajah's first chance to meet a fellow margay, at least since he was six weeks old, came last fall at the LIOC picnic at Amagansett. He played quite nicely with Mr. Pepys, until the latter started to investigate his "cave" (carrying case), whereupon Raj became quite anti-social, scrambled inside, and just sat at the entrance and growled. When they first started to play, Tom Griffith, Mr. Pepys' master, stated it wasn't quite fair as Mr. Pepys was declawed, but Mike Baird, Spence's brother, came back with a quick, "Yes, but he's bigger than Raj!"

The Liberty Summit 2016

By Mechel Whitaker

"The Liberty Summit 2016," presented by The Cavalry Group on June 24th and 25th, in St. Charles, Missouri, was meant to unite, motivate, and activate a movement among animal-related industries and liberty-minded Americans. It is a call to protect and secure our rights to private property, ultimately allowing us to push back against the tyranny we all have been experiencing first-hand. Mark Patterson pointed out in the words of William Howard Taft, "Next to the right of liberty, the right of property is the most important individual right guaranteed by the Constitution." Mindy and Mark Patterson did a tremendous job preparing for the Cavalry Group's first Liberty Summit. The food and accommodations at the St. Charles Convention Center got a five star rating from me, and I feel everyone else that attended would agree. The barbecue hosted at the Frontier Park on Friday evening was delicious and relaxing. The view of the Missouri River relaxed and calmed our minds. Everyone was pleasantly impressed.

There was a lot of valuable information covered by the selected speakers. The meeting was started off with a prayer and the Pledge, and then a local freedom band, The St. Charles Drum and Fife Team, dressed as patriots, marched in playing the "Star Spangled Banner." Opening

remarks were made by Mindy Patterson, president of the Cavalry Group. Following Mindy came several inspiring speakers:

Beth Ann Schoeneberg is a talk show host who understands and discusses on her show the everyday struggles faced by farmers, mothers, educators, and the common working man. Beth has a strong passion for our nation, our Constitution, and a love and respect for our ranchers, farmers, and rural America, which is reflected in her Common Sense Coalition talk radio program.

Sonya Anderson is a Republican representative in the Missouri House of Representatives. Sonya represents part of Greene County, Missouri, and was elected to her first two-year term in November 2012. Rep. Anderson currently presides as Chairman of the Conservation and Natural Resources Committee and Vice-Chair of the Bipartisan Privacy Caucus. Rep. Anderson is an advocate for all animal enterprise and industry in the House and fights hard each and every day for the farmers, ranchers, and animal industry owners.

Amy Fox specializes in exposing the ideology behind sustainable development and its impact on our liberty and American way of life. Amy spoke to us about liberty vs. sustainable development and gave us a very informative insight into what sustainable development is and how

it is threatening our liberty. This topic took me by surprise. It opened my eyes and gave me a wakeup call. I encourage everyone to learn about this topic.

Karen Budd Falen spoke on the regulatory taking of private property by the Clean Water Act and the Endangered Species Act. Karen is one of the leading legal advocates protecting private property rights dealing with challenges from the Endangered Species Act, Clean Water Act, and other environmental statutes in the western United States. Karen served for three years in the Reagan administration, U.S. Department of the Interior, Washington, DC, as a special assistant to the Assistant Secretary of Land and Minerals Management.

Will Coggin spoke about the importance of going on offense against activists. Will is the Director of Research at the Center for Consumer Freedom, which produces HumaneWatch.com, where he focuses on animal rights and environmental issues. Will is a frequent critic of radical activists who seek to take choices away from Americans and put farmers out of business, such as the HSUS, PETA, and Greenpeace, and he has been a contributor to numerous print and broadcast media outlets.

Eva Hughes is a former vice president of the Horse and Carriage Association of New York City, and, along with her husband, is a longtime NYC carriage owner.

Eva spoke about the lessons learned battling animal activists in New York City. Eva has dedicated herself to defeating the freedom-destroying animal rights movement. Her goal is to protect not only her beloved and iconic family business, but also to create alliances with other horse and animal businesses to combat the AR agenda. Eva was recently part of a successful effort to kill a bill aimed at crippling the NYC carriage industry. Eva gave us tips on how to manage a successful Facebook page for our businesses or special interests.

Sheriff Richard Mack, former Constitutional Sheriff of Graham County, Arizona, has served in a wide variety of roles over the course of his nearly twenty-year career in law enforcement, advocating for state and individual rights. Richard is the founder of the Constitutional Sheriffs and Peace Officers Association, and he also established the County Sheriff Project, both of which challenge the authority of

spoke to us about standing firm against the animal rights agenda. Joe grew up on a farm in Garden City, Kansas, and a large cattle ranch in Centennial, Wyoming. He later began traveling and doing magic with tigers, while building the world's largest private zoo in Oklahoma. Joe is a warrior for animal welfare. He faces extreme animal rights organizations and has been a champion in protecting private exotic animal ownership. He has gone to the extreme to get public awareness out about the animal rights agenda and where the money trail leads. He is raising awareness by filming daily videos focusing on animal welfare and fighting back against the attackers. He is also raising awareness by running as a 2016 presidential candidate.

Theresa Manzella, a Montana House Representative and lifetime competitive horsemen, spoke about her "wild ride" when she faced numerous assaults and threats from animal rights activists as a

try on how to communicate more effectively to today's consumers.

Kurtis Reeg is the managing partner of the St. Louis office of the international law firm Goldberg Segalla and serves as legal counsel for The Cavalry Group. Mr. Reeg discussed a very important topic, ways to protect your property and business from the challenges that Americans and American business owners face from overzealous regulation, bureaucrats, and activists. Kurtis says if someone shows up at your door to cause trouble, the first thing to do is ask if they have a warrant. Mr. Reeg is one of the top litigators in the nation, practicing in the fields of agriculture and animal law, environmental law, and product liability.

Charly Seale showed us stunning film clips of his massive, free-range exotic animal operation. Seale is a fourth generation rancher and converted his family ranching operation from a traditional livestock operation to an elk, whitetail, and exotic breeding and hunting operation in the early 1980s. Resulting from that move, Charly is the executive director of the Exotic Wildlife Association, based in the heart of the Texas Hill Country, representing exotic wildlife producers and conservationists. Charly has been the victim of numerous attacks and has been able to hold his ground. The work he has done to bring his exotics back from the brink of extinction is impressive.

Matt and Janet Thompson spoke of their family's experience in Australia, and the fight to save their business. The Thompsons are ranchers and passionate advocates for private property, liberty, and agriculture. Matt and Janet experienced tyranny firsthand when they lost everything in Western Australia after taking a stand against climate change policies in Australia. When they moved back to the U.S., they noticed the uprising tyranny here in the land of the free and are taking a stand by sharing their story in order to raise awareness.

Christine Vaught brings a unique perspective and experience to fight against animal rights extremism with her lifelong involvement with equine management and her 17-plus years' experience as a professional dog trainer. Uniquely, Chris also spent over 35 years working for the U.S. government, where she spent time dealing with environmental activists in the forests of Oregon. Christine supports the American way of life and fights to protect our



Speakers at the Liberty Summit from left: Joe Exotic, Will Coggin (Humane Watch), Matt Thompson, Kevin Murphy, Janet Thompson, Christin Vaught, Mindy Patterson, Theresa Manzella, Karen Budd-Falen, Amy Fox, Eva Hughes Beth Schoeneberg, Kurtis Reeg, and Charly Seale.

unconstitutional federal laws. Richard spoke about the duties of the sheriff and the oath they take to be a constitutional sheriff. "A county sheriff is America's last hope." It impressed me and made me realize how important a sheriff is to his community. A sheriff will stand between you and the government and will protect you and your God-given rights. The constitutional sheriffs are being bought out today by our government. The government does this by offering them grants in return for their loyalty. The constitutional sheriff stands strong against tyranny and will fight to the death to protect your rights.

Joseph Maldonado (Joe Schreibvogel)

result of her naively starting a horse rescue after the economic crash in 2008. This awful experience caused her to make the decision to run for office in order to fight back and to help protect the people, state, country, and industry she dearly loves from the problems caused by radical activists and tyrants.

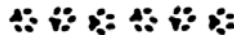
Kevin Murphy, advertising and marketing executive and founder of Food-Chain Communications, spoke about how his organization is working to counter the false propaganda being used to impact our national food production. Kevin recognizes the importance of language in dealing with food issues, and advises food producers, retailers, and restaurant indus-

private property rights. In order to be a more powerful leader in the fight against tyranny, Chris decided to get her law degree and will take the California Bar Exam in July 2016.

Ryan Osredker spoke to us about the National Federation of Independent Business and the importance of joining. The NFIB monitors key small business votes that your lawmakers cast and presents special interim reports that cut through the rhetoric of campaigns and look at the hard facts, including how U.S. senators and representatives voted on small business issues during the 114th congress. Mr. Osredker is the Midwest Division Manager of NFIB.

Senator Michael L. Parson surprised us when he showed up to deliver a thoughtful and very supportive speech. Senator Parson is a Republican who represents the 28th District in the Missouri Senate. Sen. Parson served as the Polk County Sheriff for 12 years. He also served six years in the U.S. Army, where he was stationed in Germany and Hawaii. Sen. Parson was raised on a farm in Hickory County. Parson is a third generation farmer and currently owns and operates a cow and calf operation near Bolivar.

Trevor Loudon spoke about what inspired him to write the book *Enemies Within*, and explained that it was designed to show American voters exactly how modern communism works and how it impacts our life every single day. Just how do the communists win big on things like Obamacare and immigration reform, which go completely against the wishes of the American people? Trevor Loudon's research has been cited by Glenn Beck, Rush Limbaugh, countless articles, blog posts, and in books by well-known authors Paul Ken- gor, Aaron Klein, and Jerome Corsi. He has given countless radio interviews and addressed audiences in more than 30 states in his four tours of the United States. Trevor Loudon speaks on internal subversion, communism and socialism, national security, culture, and constitutional conservatism.



The Liberty Summit Barbecue speakers were:

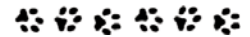
Lt. Governor Peter Kinder. Kinder was first elected the 46th Lieutenant Governor of Missouri in 2004. Previously, Kinder served in the Missouri Senate representing the southeast counties of Missouri. While in the Senate, Kinder became the first Republican elected President Pro Tem, the Senate's top official. Kinder was the only Republican to win statewide office in both 2008 and 2012.

Joshua Hawley is a constitutional attorney and one of the nation's leading experts on constitutional law. He has twice defeated the Obama Administration in the U.S. Supreme Court, including the landmark Hobby Lobby victory. Josh is a candidate running for Missouri Attorney General.

John Brunner served as an infantry officer in the U.S. Marine Corps. Brunner has been engaged in business as an entrepreneur and manufacturer for over three decades. He is involved in worldwide Christian missions and relief organizations. In addition to his leadership in the military and business, John has served

extensively in charitable, community, and church activities. His focus has been on helping to mentor young adults with disabilities with a special emphasis on leadership development.

Bev Randles was raised in Sikeston, Missouri. She knew from a young age that she would grow up to be a lawyer. Watching Perry Mason as a young girl with her father sparked her interest and, with the support of her parents and hard work, she has been able to fulfill her dream of becoming a lawyer. She is also running for Lt. Governor for the state of Missouri. Bev was the seventh of twelve children. Bev learned early in life the value of a strong work ethic and the benefits of a good education. Her father was a farmhand and his knowledge of how to work the land was passed down to Bev and her siblings. They grew up working in the fields of Missouri. In 2008, Bev began writing and giving speeches about how the Republican Party can win back minorities and disenfranchised voters in the current political climate. From 2010 to 2015, Bev served on the board of the Missouri Club for Growth. Bev and her husband are partners at a Kansas City law firm they founded together, Randles and Splittgerber.



The Liberty Summit inspired us as patriots and encouraged me to move forward with this movement. I have scheduled a meeting similar to the Liberty Summit meeting in Alabama. I am calling in "Liberty for Alabama." It will be held in Dothan, Alabama, on October 8, 2016. I am in the process of inviting speakers for this meeting. If you have any ideas for speakers, please contact me at (334) 449-0168. I hope everyone at the meeting stays focused and involved and continues to fight against tyranny. "Proclaim Liberty throughout all the Land unto all the Inhabitants thereof" is written on the Liberty Bell, which is a symbol of the American Revolution. It is a symbol of liberties gained and a reminder of liberties denied.

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Cricket Hollow Update

By Lynn Culver

On June 11, 2014, the Animal Legal Defense Fund (ALDF) filed a complaint seeking declaratory and injunctive relief against Cricket Hollow Zoo and its owners, Pamela and Tom Sellner. ALDF claimed this zoo was violating the Endangered Species Act and asked the court to enjoin this zoo's owners from acquiring or possessing lemurs, tigers, wolves, lions, and servals. Following a four-day trial in October 2015, the court granted the relief requested regarding the lemurs and tigers housed at Cricket Hollow Zoo. Specifically, the court ordered that within 90 days following the ruling, the Sellners were to transfer the lemurs and tigers in their possession "to an appropriate facility which is licensed by the USDA and is capable of meeting the needs of the endangered species."

On February 11th of this year, the Sellners appealed this decision in a motion to Stay the Execution of Injunction. In their defense, legal counsel for the Sellners pointed out that ALDF expert witness Mr. Klopfer, who works at Duke University Lemur Center in North Carolina, gave testimony that lemurs in troops less than a dozen constitutes distress and harassment of an endangered species, which is a standard being imposed upon the Sellners not met by most AZA zoos and private facilities. Additionally, in this motion, the Sellners offered to hire full-time help for the tigers, increase enrichment, have monthly site visits by the veterinarian of record, and perform full necropsies on all deceased animals. On April 29th, the judge ruled against this motion to stay, because in part, while the Sellners' case was compelling, it lacked evidence that they would be "irreparably injured absent a stay."

Meanwhile, not satisfied to have removed the tigers and lemurs from the Cricket Hollow Zoo, the ALDF had filed a motion to object to the Sellners' proposed placement of the animals, Exotic Feline Rescue Center in Indiana for the tigers, and Special Memories Zoo in Wisconsin for the lemurs. A hearing was held on May 25, 2016, to address that issue. The ALDF presented Pat Craig, founder of Wild Animal Sanctuary in Colorado, their preferred destination for the Cricket Hollow tigers, who testified on his facilities

and qualifications and testified that he had visited Exotic Feline Rescue Center several times and trashed the Exotic Feline Rescue Center by innuendo about the facility and its qualifications. In a phone call to Joe Taft, EFRC founder, I learned that Pat had only delivered a couple of leopards to the entrance of the facility more than a decade ago and has no first-hand knowledge of the sanctuary. ALDF wanted the pair of ring-tailed lemurs and single red-ruffed lemur to be transferred to an unlicensed sanctuary in Florida that had much less experience than Special Memories Zoo, and did not even have any red-ruffed lemurs. The Sellners' attorney concluded, "Fact is that one of the facilities recommended by plaintiffs on its face does not meet the criteria set forth in the prior Court Order (it is not USDA-licensed) and the other facility has a president (Pat Craig) who has for a number of years threatened to euthanize the animals in his care."

The judge's Order for Declaratory Judgment and Injunctive Relief, filed February 11, 2016, declined to award ALDF the costs of litigation, including attorney fees. ALDF immediately responded on February 25th, with another motion asking that they be permitted to file a motion for attorney fees and costs under the Endangered Species Act, together with supporting documentation.

ALDF wanted to be awarded attorney fees in the amount of \$221,205, plus other costs in the amount of \$18,045.75.

According to a declaration by Jessica Lynn Blome, one of the plaintiffs' attorneys, the Animal Legal Defense Fund is a national, nonprofit organization with approximately 40 employees, including 12 lawyers. The ALDF never charges its clients a fee or a retainer and outside counsel often provide their services on a pro bono basis, as was the case here. Accordingly, the individuals who brought forth this case have not paid any attorney fees. The ALDF argues, however, that "without statutory fee recovery, ALDF does not have the ability to represent individual plaintiffs as it did in this case." ALDF wanted Cricket Hollow to pay its attorneys and staff and to reimburse expenses associated with transporting three expert witnesses to the trial. The attorney for Cricket Hollow Zoo argued they should not be "punished" by defend-

ing what ALDF has apparently described as a "landmark case."

In its June 28th ruling on this motion, the court stated that although the Endangered Species Act authorizes a civil suit against "any person" violating the Act, most cases brought under the Endangered Species Act and other similar fee-shifting statutes are directed to government agencies or government officials.

The court found that it is not "appropriate" to require the Sellners to pay the ALDF attorney fees. "The Sellners did not act in 'bad faith' and it cannot be said that their position was frivolous. As ALDF apparently acknowledges, there is little, if any, precedent for a citizen suit to be brought against a private zoo for an alleged violation of the Endangered Species Act."

Moreover, the court considered that the Sellners' lack the financial ability to pay the plaintiffs' attorney fees. One of the principal arguments made by the plaintiffs at the time of trial was that the Sellners lacked the capital and income to properly care for the animals housed at Cricket Hollow. Exhibits offered by ALDF attorneys at trial clearly demonstrate that the Sellners lack the ability to pay ALDF litigation costs.

Jon Stuart Scholes, Chief Magistrate Judge for the Northern District of Iowa, wrote in his conclusion, "An award of attorney fees under these circumstances would have a chilling effect on private animal owners to defend lawsuits brought by well-financed national organizations."

Editor's note: In a recent phone conversation with Pam, I learned that the two ring-tailed lemurs and single red-ruffed lemur have been moved to Special Memories Zoo. After a short acclimation period, the red-ruffed lemur was introduced to the zoo's other red-ruffed lemurs and is already socially grooming. On Sunday, July 2nd, two tigers arrived at the Exotic Feline Rescue Center and are settling in.







Feline Conservation Federation

May/June 2016 Volume 60, Issue 3

The mission of the FCF is to support the conservation of wild felids by advocating for qualified individuals to own and to pursue husbandry of wild felines, providing expertise and material support to ensure the continued welfare and viability of these populations, contributing to research, and funding protection programs that benefit felids living in nature.

Front Cover: Keko, a young Geoffroy's cat, was one of four species of feline attendees at the FCF Annual Convention, held at the Bahia Mar Hotel, on Fort Lauderdale Beach. Keko lives with Kurt and Patty Beckelman. Photo by Teralee Harrel.

Back Cover: Female caracal kitten and male Eurasian lynx cub take a well-deserved "catnap" during the Thursday afternoon social mixer held in the Grand Ballroom, overlooking the beach and Atlantic Ocean. The pair was on display for FCF members to admire and interact with on the opening day of Convention. Photo by Lynn Culver.



www.FelineConservation.org