

Advancing Welfare

New imagery standards, accreditation activities, enterprises in enrichment, and more



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Our Impact Depends on You

Who funds Lincoln Park Zoo? You do! Zoo members, donors, and visitors help cover around 80% of our annual operating costs to keep this nonprofit, privately managed institution open and free every day and support its mission of wildlife conservation, animal care, and learning. Support the zoo at *lpzoo.org/donate*.





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Historic Institution, Modern Zoo

2022 is looking like a great year for Chicago, and a great year for Lincoln Park Zoo. We are fully open and optimistic that COVID-19 will continue its slow, steady retreat from our bodies and minds. Of course, we are still requiring enhanced use of personal protective equipment for staff and encouraging guests to wear masks in animal buildings—safety first. We are also continuing to vaccinate animals in our care as vaccines become available. To date, all great apes and adult big cats at Lincoln Park Zoo have been vaccinated. You can learn more about that effort in this magazine's Wild File section.

Spring heralds all things new. We are constantly looking for ways to make our institution, which is one the nation's most historic zoos, also one of the most modern. When you come back to Lincoln Park Zoo this season, you'll find new attention to accessibility and inclusion in our buildings and grounds (look for the KultureCity signs to indicate information for people with sensory differences!). If you haven't seen it yet, you can also discover the new Pepper Family Wildlife Center, home to five African lions, which was built using behavioral science to inform habitat design. You'll also see how we're saving some of the historic trees on grounds not only to preserve Chicago history for future generations, but also to help ensure a future for birds, bugs, and small mammals that rely on them for survival in our urban environment.

Furthermore, in the last year or so, we've leveraged research conducted by the Lester E. Fisher Center for the Study and Conservation of Apes and Animal Welfare Science Program to revise our policy around portrayals of great apes and big cats—and how you can help save these species through the social media content you share yourself. We've expanded the Urban Wildlife Information Network to include international partners, now gathering truly global insights on how best to coexist with wildlife on an increasingly urban planet. Through the Animal Welfare Science Program, we've monitored and evaluated animal enrichment to individualize care for many species.

Your zoo can't do this work without you. Your visit or your contribution helps fund the leading care, conservation, and community work our experts do every day. Thank you. We can't wait to welcome you back to Lincoln Park Zoo.

For Wildlife. For All.

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MEGAN R. ROSS, PH.D. PRESIDENT & CEO

BY SABRINA CYNOVA AND HELEN A. LEE

Inspired by Chimpanzees

This May, look out for the new book *Chimpanzee Memoirs: Stories of Studying and Saving Our Closest Living Relatives.* The 216-page essay collection from Columbia University Press is a book about great apes, but it's even more so about the great people who have decided to spend their lives working with them and for them. It shares the experiences of chimpanzee experts from anthropologists to veterinarians—from Jane Goodall herself to researchers like the Republic of Congo's David Koni. They explain in their own words how they became inspired to study chimpanzees, the direction their careers have taken, and what continues to motivate them

tories of Studying

Living Relatives

and Saving Our Closest

Stephen Ross

Lydia Hopper

ourtesy of Columbia University Press

in their work.

Chimpanzee Memoirs is edited by Lincoln Park Zoo's own Stephen Ross, Ph.D., director of the Lester E. Fisher Center for the Study and Conservation of Apes, and Lydia Hopper, Ph.D., of Johns Hopkins University School of Medicine, a former assistant director of the Fisher Center. The book also includes illustrations by zoo Nutrition Center Technician Dawn Schuerman.

In his foreword for the

book, Ross says, "These scientists, like all the authors in this book, have taken very different and very unique paths to get to where they are today. The stories they tell here show that they are just like you and me, facing challenges to goals they have set and overcoming them to converge on a common goal. In this case the goal is to understand and protect our closest living relatives on this planet."

Voluntary Vaccination

COVID-19 isn't just dangerous for people—it affects animals as well. In mid-2021, experimental regulatory approval was given to a vaccine formulated by the company Zoetis specifically for veterinary use. More than 11,000 doses were donated by Zoetis to 70 facilities in 27 states, including Lincoln Park Zoo. Great apes, big cats, and selected at-risk species were prioritized to receive two doses per animal to become fully vaccinated.

The effort required a great deal of cooperation and collaboration between Animal Care and veterinary teams to get the vaccines where they needed to go in a timely way. During the process, animal choice was a major consideration: vaccine injections took place during routine training sessions that keepers have with each individual animal. In the end, more than 95 percent of the doses given were administered voluntarily.

"This is an amazing testament to the trusting relationships the animals have with their keepers, which made this endeavor happen smoothly," Vice President of Animal Care & Horticulture Maureen Leahy says. "The staff worked to set each animal up for success. It is infinitely rewarding to see animals voluntarily participating in their own care."

A second allotment of the Zoetis vaccine is pending. It will be given to smaller primates and other species now that more is known about the coronavirus' effects on animals.

Leadership Update

Over the last year, Lincoln Park Zoo has seen some exciting changes to its executive leadership team. You may already know that at the beginning of 2022, Dr. Megan Ross became the zoo's new CEO and president. She took over from Kevin J. Bell, who served the zoo as its head for more than 25 years. Ross previously acted as a curator, vice president of Animal Care, executive vice president, and as zoo director before being named to the CEO position. Her accomplishments here also include launching ZooMonitor, the animal behavior monitoring app, and helping to create comprehensive animal welfare and conservation science programs over the course of more than two decades. Take a look at her plan for the future of the zoo at *lpzoo.org/vision*.

The zoo appointed Brendan Daley to the position of Vice President of Operations last summer. Daley, an expert in strategy, policy, and environmental sustainability, joined the zoo from the Chicago Park District, where he managed the creation of the Office of Green Initiatives. He also served as Deputy Commissioner for City of Chicago, worked for the city's Department of Environment, and gave instruction at the National Recreation and Park Association Green School.

Lincoln Park Zoo also has a new Vice President of Conservation & Science: S. Sunny Nelson, who came to the zoo in 2010 after starting her career at Zoo Atlanta. She first became lead keeper of McCormick Bird House and has since also served as zoological manager and Hope B. McCormick Curator of Birds. Her work has involved overseeing the zoo's science centers while also collaborating with international groups to end wildlife trafficking and preserve the populations of birds like the Bali myna, the Puerto Rican parrot, and the Great Lakes piping plover.





New Arrivals

We're not "lion"—Lincoln Park Zoo is roaring with excitement to share the arrival of an African lion cub at Pepper Family Wildlife Center. On March 15, 3-year-old Zari gave birth to a cub. The young one is the first offspring born at the new state-of the-art lion habitat and marks the first cub birth at the zoo in 20 years!

"The pride was formed as part of the African Lion Species Survival Plan[®] with anticipation that breeding could occur. This cub's arrival signifies the lion pride, which arrived at the zoo this past fall, feels at home in their new habitat and is receiving the best possible care," says Curator of Mammals Mike Murray.

While the cub grows in size and strength, it will remain behind the scenes with mother Zari and will not be visible to the public. The zoo looks forward to welcoming guests this summer to celebrate the cub's arrival when the youngster will be visible at Pepper Family Wildlife Center.

Over at Regenstein Small Mammal-Reptile House, the zoo has welcomed two sets of new arrivals. Next to the prehensile-tailed porcupines, you'll see the Carlsbad green tarantula. This eight-eyed invertebrate with a five-inch leg span hunts by injecting prey with venom via its fangs. It also has urticating hairs, which cause a stinging or prickling sensation as a defense mechanism against predators. This particular tarantula was confiscated by U.S. Fish and Wildlife Service officials at O'Hare Airport as part of an illegal export. Carlsbad green tarantulas are widely distributed and not considered to be at risk.

The population of Egyptian fruit bats in the Regenstein Small Mammal-Reptile House has expanded. These flying mammals with fox-like faces are native to sub-Saharan, northern Africa, and Middle Eastern habitats and can live in groups of up to 9,000 individuals. Even though they don't eat insects, Egyptian fruit bats use echolocation to find their food—usually soft fruits like dates, apples, and apricots. They're light brown with darker wings, a long muzzle, and a wingspan of up to two feet. The new bats recently arrived from the Minnesota Zoo to join our group of males, which now numbers 25.

A Wildlife-Friendly Design

The Urban Wildlife Institute (UWI) has partnered with the Obama Foundation to ensure the process of building the Obama Presidential Center is as wildlife-friendly as possible. In August 2021, UWI scientists began monitoring wildlife at five locations within Jackson Park. Throughout construction, as well as post-construction, the zoo's scientists will look for changes to the wildlife community, assessing the impacts of the creation and design of the center on local species.







²hoto by Bryan Summerford



Shaping Chicago's Human-Wildlife Interactions

Even in a city as big and populous as Chicago is, wildlife surrounds and enchants both kids and adults alike. From coyotes to skunks—and even red foxes—many unique species call the Windy City home.

Lincoln Park Zoo Urban Wildlife Institute recently partnered with the City of Chicago and Chicago Animal Care and Control to establish a new Chicago wildlife management plan emphasizing human-wildlife coexistence.

The new plan guides strategic wildlife management efforts on behalf of the city and serves as a resource for Chicago residents interested in discovering more about local wildlife populations.

"Wildlife plays a critical role in urban environments, and as a research team, the Urban Wildlife Institute uses science-based approaches to mitigate human-wildlife conflict, ensuring both humans and animals can thrive in our cities," says Director of the Urban Wildlife Institute Seth Magle, Ph.D. "This new plan provides the tools to observe and respect the wildlife in our own backyards."

Act Today to Ensure Wildlife Thrives Tomorrow

You can help ensure Lincoln Park Zoo remains free and open to all and support the zoo's expert animal care, learning initiatives, and global conservation efforts by including a future gift for the zoo in your estate plans.

Simple ways to make a big impact include giving through a will or trust, or naming the zoo as a beneficiary of your IRA or life insurance policy.

To learn more, or to let us know you have already included the zoo in your plans, call 312-742-9570 or email heritagesociety@ lpzoo.org.

Polar Bear Checkups

Animals at Lincoln Park Zoo get regular wellness examinations just like humans do—but setting up veterinary visits for large mammals like polar bears isn't easy. After all, polar bears can get up to eight feet tall and weigh 1,700 pounds! When it came time to evaluate Siku and Talini in February, the proce-



Photos by Christopher Bijalb.

dures involved the entire Lincoln Park Zoo's vet team and carnivore Animal Care staff, along with specialty and Species Survival Plan consultants from the Association of Zoos and Aquariums. Polar bears are anesthetized for these procedures, so this adds additional challenges.

It took two days—one for each bear, after six weeks of planning. In addition to the usual sampling and assessments, male Siku underwent a dermatology procedure to re-evaluate his allergies. He has been undergoing hyposensitization treatment to treat his allergy-related skin issues, and it is working well. Talini had a full reproductive evaluation and a canine tooth extraction, following a previous root canal that had failed after nearly 12 years. Both bears were reunited successfully in their habitats and are doing fine.

A Zoo for All

Lincoln Park Zoo is committed to creating an environment that is inclusive and welcoming to all. The



zoo has partnered with KultureCity, a non-profit dedicated to effecting change in the community for those with sensory needs, to ensure the zoo and all of its programs and events are sensory-inclusive. To receive the sensory-inclusive certification, zoo staff was trained by leading professionals on how to recognize guests with sensory needs and how to handle a sensory overload situation.

Sensory-inclusive bags equipped with noise-canceling headphones, fidget tools, verbal cue cards, and weighted lap pads are available for guests. Prior to visiting the zoo, families can also download a mobile app to get a preview of what to expect while exploring the zoo. Generous support for these initiatives is provided by the John Hart and Carol Prins Fund for Visitors with Special Needs.

Picture Perfect: Setting Standards for Animal Imagery

BY JILLIAN BRAUN

T's likely you can picture a video of a tiger cub playing with a puppy, an image of a "smiling" young chimpanzee in clothing, a post of an otter swimming with people in a pool, or a clip of a toothbrush combing through a marmoset's fur. These viral images may be considered cute...but at what cost to the animal, or the species as a whole?

For years, Lincoln Park Zoo has been at the forefront of understanding how images like these are consumed by the public and how their virality impacts animals. Armed with research, passion, and a drive to do better, the zoo is righting wrongs and setting the standard for animal imagery across accredited zoos.

Keeping Apes Great

Since the inception of the Lester E. Fisher Center for the Study and Conservation of Apes in 2001, Lincoln Park Zoo has been dedicated to understanding the lives of primates both in human care and in the wild to better their care and conservation.

One prominent example is the creation of Project ChimpCARE by Stephen Ross, Ph.D. Through this initiative, Ross located every single chimpanzee living in the United States—be it living at a zoo, sanctuary, unaccredited roadside zoo, or circus, or even as a pet in a private residence. The goal? To improve the lives of every chimpanzee by the most appropriate means. In some cases that meant moving a chimp to a more suitable facility, while in others it meant supporting legal cases to ensure a chimpanzee was moved to an appropriate situation where it could live life as a chimp should—among other chimpanzees.

During one of his numerous site visits, Ross met Eli and Susie, two chimpanzees that were being used as performers in the entertainment world. For years, Ross tracked their every move as they appeared in movies and music videos and also changed owners. By 2018, both chimpanzees had landed at Wildlife Waystation, an unaccredited facility that closed the next year. With this facility shut down, more than 40 chimpanzees were left without long-term care. Ross worked with local authorities and the North American Primate Sanctuary Alliance to help identify homes for dozens of those chimpanzees and today, Eli and Susie reside with a troop of chimpanzees right here at Lincoln Park Zoo. For perhaps the first time,



"...when humans saw images

of chimpanzees in unnatural

human-they were less likely

endangered and more likely to

see them as potential pets."

settings-such as an office,

in clothing, or alongside a

to view chimpanzees as

they are able to just be chimpanzees and to live among their own kind, creating appropriate social bonds and making up for those lost years on the movie set.

Individual welfare and differences in a specific animal's life are what ensure that each one can flourish—under the best possible care.

A Picture Worth a Thousand Words

Another aspect of the Fisher Center's research is understanding how images impact humans' perceptions of animals and their

respective conservation status. The findings from a study published in 2011 showed that when humans saw images of chimpanzees in unnatural settings-such as an office, in clothing, or alongside a human-they were less likely to view chimpanzees as endangered and more likely to see them as potential pets. This Fisher Center study was later replicated with other nonhuman primates such as lemurs with similar findings.

These images not only impact the welfare of the individual animals who

are often forced to partake but also their wild counterparts who depend on humans to conserve them.

This research has informed many animal care and imagery policies across Lincoln Park Zoo and beyond and empowered

the zoo to be data-informed advocates, especially for chimpanzees greatly affected by these images. Most recently, this research helped facilitate the decision for CVS Pharmacy to cease selling greeting cards featuring chimpanzees. The zoo has also helped pull Amazon ads featuring primates and stopped capuchin monkeys from appearing in dog races at county fairs. This year, Lincoln Park Zoo has also endorsed the International Union for the Conservation of Nature's (IUCN) photo guidelines for nonhuman primates. These are all steps in the right direction.

> While we haven't expanded this research to big cats and carnivores quite yet, we can rely on the growing evidence and have confidence that nothing good can come of animals being shown in unnatural settings or engaging with people for entertainment.

> In addition to Lincoln Park Zoo being home to chimpanzees Eli and Susie, we welcomed American black bear Birch in 2014 after he was passed around a college campus as a cub, which resulted in a bite. He now spends his days engaging in natural behaviors alongside fellow

bear Katai, foraging for his favorite foods, sleeping the winters away, and splashing around the stream in his habitat.

On the other side of the spectrum, we have television shows



like *Tiger King* that go viral because of the emphasis on direct, and often unsafe, human interactions with wildlife. These portrayals tend to largely overlook the mistreatment of the animals at these unaccredited facilities where individuals are generally bred without consideration for their welfare or the health of the population. Long after their frequent photo ops at these "zoos," the animals are often discarded and sent to disreputable facilities without the expertise or resources to provide proper care.

Millions of eyes on these shows mean revenue for content producers and even expanded audiences for unaccredited zoos. What they do not do is help animals experience good lives nor support wildlife populations. So, the best thing you can do for wildlife is just don't watch.

With this in mind, Lincoln Park Zoo is committed to educating everyone about how these inappropriate portrayals affect wildlife. We won't showcase animals in environments that could be harmful to their welfare or conservation outcomes. The zoo is evolving its imagery policies to no longer share images of big cats or other carnivores in contact with people. The only exception will be images of veterinary exams which clearly portray the careful work of our professional staff. It is our responsibility, as protectors of these animals both in our care and in the wild, to lead by example to make sure we are part of the solution.

You can also help protect these incredible animals and Take Action With Us. (see sidebar)

Take Action With Us

How can you support wildlife every day? By being cognizant of what images you consume and share across social media and Pause Before Posting.

When you see a photo or video of wildlife take a few moments to ask yourself:

- Is this animal in a natural setting?
- If they're a social species, are they with other animals of their species?
- Does the animal have choice or control over their environment or actions?

If you answer "no" to any of the above, you should not promote or share the image. Report it, if it's appropriate to do so.

You can also apply this same idea to any wildlife experience.

- Are you visiting an Association of Zoos and Aquariums (AZA)-accredited facility or Global Federation of Animal Sanctuaries (GFAS)-accredited sanctuary?
- Are animal caretakers experienced?
- Does the animal have choice or control whether or not to interact with humans?

If you answer "no" to any of those questions, that facility may not have proven methods of animal care and may prioritize entertainment over animal wellbeing.

Being an advocate for animals among friends and families is a great way to share your knowledge on how these images or situations impact species. By making informed decisions about your wildlife experiences—whether in-person or online—you can help protect both individual animals and their wild counterparts.

Learn more at *lpzoo.org/action*.



Accreditation: The Gold Standard

BY SABRINA CYNOVA

Association of Zoos and Aquariums (AZA) accreditation is coveted by institutions all across the globe, including Lincoln Park Zoo. What does the accreditation process entail, and why is it important?

t's a sunny Thursday afternoon and a team of zoo staff from various departments meets inside Regenstein African Journey. As team members meander through the building, they keep their eyes wide open, searching for peeling paint, trip hazards, worn-out signage, animal habitats that need improvements, and other items that an Association of Zoos and Aquariums inspector might notice. Notes are taken, and the team parts ways until they meet again the following week at another building.

Lincoln Park Zoo is a proud member of the Association of Zoos and Aquariums (AZA). AZA is a nonprofit organization dedicated to the advancement of zoos and aquariums in the areas of conservation, education, science, and recreation and is the gold standard in zoo and aquarium accreditation.

Receiving accreditation is a monumental affair and a goal for zoos and aquariums as a signal that they are leaders within their fields. What exactly does this process entail, and why is being a member of AZA important to institutions all across the globe?

All About Accreditation

When an institution receives accreditation, it means that they are meeting and/or exceeding the standards of animal welfare, care, and management set forth by AZA.

"The zoo being an AZA-accredited institution means that we are continuously striving to grow and challenge ourselves to make Lincoln Park Zoo the best it can be," says Manager of Zoo Programs Marisa Shender.

What does AZA evaluate? Essentially, everything! When it comes to animal welfare, the Accreditation Commission considers the animals' living environment, social groupings, health, and nutrition. Animals should also be provided with enrichment in order to stimulate their natural behavior and provide variety in their daily routine. Other aspects that are evaluated include the institution's involvement in conservation and research, its veterinary and education programs, safety policies and procedures, security, physical facilities, guest services, finances, and the quality of the staff and their overall satisfaction with their role and opportunities for further professional development.

AZA's standards and guidelines for accreditation are continuously being updated, as zoos and aquariums are constantly evolving and changing to meet the needs of their communities and the animals in their care. Zoos and aquariums must keep up with the changes to remain accredited and have to go through the entire accreditation process every five years.

Making the Grade

How exactly does an institution become accredited? The Accreditation Commission meets twice yearly to review applications. Zoos and aquariums in colder climates, like Lincoln Park Zoo, must submit an application by March 1 to have a hearing at the September AZA Annual Meeting. Once the application has been submitted to the Commission, an AZA inspection team is formed and plans are made for their on-site





Enrichment platforms built for cats on th Center, painting exhibits for flaking pain typical walkthrough to discuss possibiliti







e south side of Pepper Family Wildlife ; and the inspection team during a ies.

inspection in the spring when the weather is warmer and they can experience a more typical day at the zoo. Following the on-site inspection, the team meets with the institution's CEO to discuss their findings. Any issues that have been identified need to be fixed or in the process of being resolved by the institution's hearing in September with the Accreditation Commission. At this hearing, the institution will hear if they have been accredited for another five years.

While some institutions receive accreditation or keep their status, in rare cases, others lose it.

"The most time-consuming part of the accreditation process is the application," says Shender. "It can take anywhere from six months to a year to gather, update, and organize all the necessary documents. It's a very technical and thorough process that requires staff from departments across the zoo to be involved. We're all working together to ensure Lincoln Park Zoo remains a top-tier institution dedicated to animal welfare, care, and management."

Every year, the Accreditation Commission releases updates and new standards. Zoos and aquariums review these updates annually and make any necessary changes to their operations to remain in good standing, although inspections happen every five years.

Lincoln Park Zoo was first accredited in 1976 when it was a voluntary process and then was re-accredited in 1985 when it became mandatory to be accredited as part of the zoo's membership in AZA. Lincoln Park Zoo has remained accredited consistently since 1976.

"Lincoln Park Zoo is unique compared to other institutions because we have weekly mock inspections with a team of zoo staff from various departments," says Shender. "Once a week, our team inspects a different building at the zoo, searching for items that need to be fixed or improved. We strive to always be in compliance with the standards and guidelines and inspection—ready every day of the year!"

ASSOCIATION

Why Accreditation Matters

AZA accreditation serves as a guide for the public as to which zoos and aquariums are providing the best for the animals in their care. Lincoln Park Zoo's accreditation sets the zoo apart from other non-accredited institutions and marks it as an example of excellence. (see Take Action With Us, page 9)

"When you visit Lincoln Park Zoo, you're visiting an institution dedicated to advancing the highest quality of animal care, education, science, and conservation," says CEO & President Megan Ross, Ph.D. "We're continually determining what can be improved and how we can evolve to provide the best possible care for the animals at the zoo. We're proud to have attained this gold standard and dedicate our knowledge, skills, and time to remain at this level."

Before your next adventure to a zoo or aquarium, be sure to research the institution to see if it's AZA-accredited. Doing this ahead of time allows you to ensure that the institution you are visiting and supporting is dedicated to providing the best animal care at all times. One of the benefits of being a Lincoln Park Zoo member is that most AZA institutions offer reciprocal benefits! Learn more and discover which institutions participate in this program at *lpzoo.org/membership*.



Enterprises in Enrichment

BY HELEN A. LEE

When you visit an Association of Zoos and Aquariums (AZA)-accredited facility, you'll often hear the term "enrichment" being used. Sometimes the term is preceded by the words "behavioral" or "animal" or "environmental," and it typically refers to a novel object or toy that's been placed in the exhibit. But what exactly is enrichment, and why is it important?

Enrichment is a vital part of animal care and has been for decades. It's a way of encouraging animals to use their senses and natural instincts so that they act in species-specific ways. Enrichment can encourage mental and physical exercise or provide animals with something new to explore.

Keepers can add stimulation to their charges' environments by using scents, sounds, or items, and by making other changes to habitats. This might mean placing a large barrel in the polar bears' exhibit, or putting slow-feeding conveyer belts to the pygmy hippos' enclosure. (All of these items are vetted to make sure they're safe for the animals, of course.) It might also mean hanging the giraffe's food up higher so they have to use their long tongues in natural ways to reach it, rearranging the elements inside a habitat, or creating multi-species exhibits where compatible species can coexist.

However, zoos are constantly working to improve animal welfare-and today, simply putting new things into an animal's enclosure is only the beginning. The science (and art) of enriching animals' lives with "extras" has evolved into a process that's more sophisticated and more integrated into the daily care regimen, focusing first on the animal's experience and outputs (i.e., how they feel and what they're doing). The practice, then, of providing enrichment doesn't necessarily change, but the thought behind it has moved from, "What item do I give the animals today?" to "What behavior should I promote today?"

Allison Kao, the zoo's manager of behavioral husbandry and enrichment, explains. "We focus on goal-based enrichment: breaking down what animals do and what they're adapted to do in the wild," she says. "For example, with African lions, we might look at what specific behaviors they do in order to hunt. They need to track down their prey, stalk them, coordinate with other lions, and then chase, catch and bring down their targets. It's a series of actions together, all encompassed in the hunting process. Instead of just saying we want a lion to hunt, we challenge our keepers to elicit that full string of behavior of what the animals do."

Keepers consider the kinds of adaptations that are needed to complete the various behaviors involved and then look at what kinds of positive, measurable outcomes they want from successfully eliciting these behaviors. Finally, they figure out how to get the animal to do the behaviors. It's an "animal-first" approach that also amounts to a cultural change within AZA zoos.

Building Lincoln Park Zoo's more holistic strategy also aims to replicate not just the activities animals do in the wild, but how much time they spend doing it. If an animal spends half a day foraging for food in its native environment, keepers might try to increase the time an animal in human care uses to search for its food. It's certainly easier to just drop a bucket of food into an enclosure, but that would only meet an individual's most basic needs.

To that end, the focus is more on creative solutions that challenge animals' natural physical and cognitive abilities. Every keeper here is assigned to a specific species, and they set goals for their species based on its natural history and behaviors. This process asks keepers to be more mindful of creating meaningful encounters for the animals in their care during their entire life cycle—and to move beyond just providing objects.



Photo by Todd Rosenberg





"We're shifting toward changing the environment here or there instead of only using items," Kao says.

Now, in addition to physical items purchased by Wish List supporters or created by the zoo's dedicated volunteers, the zoo continues to make changes to the animals' habitats for optimal engagement —but progress now comes as a result of thinking a bit outside the box. Under Kao's leadership, the shorebirds at McCormick Bird House are beginning to experience different water levels in their pools, to simulate the flooding and receding of tides. Meanwhile, electric fans are being introduced to other exhibits to provide the sensation of wind. Heat lamps, placed into some bird habitats, have also encouraged them to sun themselves by spreading their wings out, something they hadn't been observed doing before. The newer approach is also a way of making sure enrichment isn't thought of as something that goes above and beyond regular care. "It's something we do a part of the regular routine. We're just enhancing how we care for them, to give them more opportunity to do their natural behaviors," Kao says. "Everyone agrees enrichment improves welfare. I think we're all trying to push each other to do better."



FINLAND NORWAY Stockholm Moscow KINGDOM Warsaw London G MANY UKRAINE Paris FRANCE Milan ITALY Istanbul Madrid TURKEY Atlantic Baghdad IRAN Cairo ALGERIA LIBYA SAUDI EGYPT Dubai MALI NIGER SUDAN CHAD NIGERIA **ETHIOPIA** Ассга Coyotes seen crossing streets in downtown Chicago. Mountain lions encountered on hiking trails in Salt Lake City. Stone martens discovered in forests in Freiburg, Germany. Although DR CONGO

cities are built for people, wildlife made homes in them too. As inspiring and fascinating as these human-wildlife encounters are, they can sometimes create conflict and unexpected interactions—sparking the question "How can people and wildlife coexist in urban areas around the world?"

The Urban Wildlife Information Network (UWIN), created by Lincoln Park Zoo in 2017, is an alliance of ecologists and educators who are working to help people and animals thrive together by gathering and analyzing data on urban biodiversity and, ultimately, discovering and applying solutions to existing or potential human-wildlife conflicts.

Within each city in the network, research techniques include motion-activated cameras and/or other monitoring methods. Partners include universities, wildlife organizations, city governments, and other institutions.

South

TANZANIA

ZAMBIA

Johannesburg

SOUTH

AFRICA

ANGOLA

NAMIBIA

A Worldwide Footprint

In exciting news, the Urban Wildlife Information Network, which is the world's largest urban wildlife monitoring alliance, has now expanded to three continents.

The network has added partners in Freiburg, Germany and Cape Town, South Africa, expanding its global footprint. Freiburg, Germany is the network's first European partner. Similarly, Cape Town, South Africa marks the first time the network has partnered with an African city. UWIN's expansion to two more continents is significant, creating a global exchange of information that can be utilized to help humans and wildlife coexist near and far.

"The Urban Wildlife Information Network's growth has been quite incredible," says Urban Wildlife Institute Director Seth Magle, Ph.D. "The network was originally comprised of only eight cities across the U.S. These new international members represent a growing, global network of scientists who are committed to enhancing the ability for people and wildlife to thrive together."

The network's first European partner, the department of Wildlife Ecology and Management at the University of Freiburg in Germany, has set up motion-activated cameras across one of Europe's greenest cities. Locations include private gardens, parks, cemeteries, and city forests. Their scientists are seeking to answer various questions about Freiburg's wildlife populations, including "Do some mammal species, like the red fox and stone marten (a member of the weasel family), regularly occur in urban areas?" and "Is habitat connectivity the key factor to influencing mammal diversity patterns in this city?"

In order to understand broader patterns of urban wildlife, data from all around the world is needed. UWIN looks forward to adding future international partners.

"From flying squirrels in North America to stone martens in Europe, the more we know about biodiversity in urban environments, the better tools we have to build wildlife-friendly cities," says Magle.

New Cities Across North America

Not only is the Urban Wildlife Information Network present in three continents with the addition of partners in Europe and South Africa, but cities across all of North America continue to join this vast, growing network.

UWIN is now comprised of 42 cities from Tacoma, Washington to Boston, Massachusetts. Recently-added partner cities of UWIN include Albuquerque, New Mexico; Pomona, California; Syracuse, New York; and Vancouver, Canada.

"Wildlife surrounds and inspires both children and adults alike, and this became very apparent when people took to social media to share images of wildlife spottings during the pandemic," says Magle. "If anything, the pandemic taught city dwellers that the urban area they call home is wilder than they think. There's definitely been an increase in interest from both scientists, as well as the general public, in discovering ways that humans and wildlife can thrive together."

What's on the Horizon?

In November 2019, UWIN held its inaugural Urban Wildlife Information Network Summit at Lincoln Park Zoo to bridge the divide between scientists, urban planners, designers, and land managers from the nation. Attendees discussed issues of urban biodiversity, planning, and equity. This important dialogue later resulted in a manuscript published in People and Nature that details insights regarding barriers to building wildlife-inclusive cities learned from urban ecologists, urban planners, and landscapers.

Currently, the network is working on various projects relating to social justice and environmental equity. One such project is studying how current patterns of gentrification and segregation are related to biodiversity.

"Although the network was launched in 2017, it's only just the beginning," says Magle. "By collaborating with new partners across the globe, we're able to identify the differences in animal behavior across regions and find patterns that remain consistent around the world. We're looking toward a future full of life, diversity, and coexistence, which is all made possible due to this growing network."

UWIN is made possible by the Abra Prentice Wilkin Foundation, Davee Foundation and Grainger Foundation



42°F5°C M Camera Name



From left to right: setting up a camera trap; coyotes in Chicago, a bobcat in Long Beach, California; white-tailed deer in Madison, Wisconsin; a red fox in Wilmington, Delaware; and an armadillo in Austin, Texas.

Partners of the Urban Wildlife Information Network

Lincoln Park Zoo's Urban Wildlife Institute

University of Georgia Warnell School of Forestry & Natural Resources

The Atlanta Coyote Project

St. Edwards University

Texas Parks & Wildlife

Department of Biological Sciences, Bridgewater State University

City of Boston. **Department of Park and** Recreation

City of Boston. Conservation Commission

City of Cambridge, Water Department

Zoo New England

Wildlife Trust

Mass Audubon

Trustees of Reservation

City of Brockton. Conservation Commission

Lesley University

Harvard University Arnold Arboretum

Applied Conservation Team, Canisius College

Texas A&M University-Commerce

Fort Worth Nature Center and Refuge

University of North Texas

University of Colorado Denver

University of Alberta

City of Edmonton

George Mason University & Urban Nature Lab

University of Houston **Biology and Biochemistry** Department

The Center for Urban **Ecology at Butler** University

University of Iowa, **Department of** Geographical and Sustainability Sciences

Mississippi State University Extension

Arkansas Game and Fish Commission, Central Arkansas Urban Wildlife Project

California State University

National Park Service, Los Angeles

Urban Wildlife Project, University of Wisconsin-Madison

Kansas State University, Ahlers Wildlife Lab

Conservation Society of California dba Oakland Zoo

Arrovo & Foothils Conservancy

Occidental College, **Computation Biology**

Arizona State University, Applied Ecology Lab

Samara Group LLC

Audubon Portland

Oregon Wildlife Foundation

Seneca Park Zoo

The University of Utah, Wasatch Wildlife Watch

San Francisco Parks Department

Central Florida Zoo and Botanical Gardens

University of Saskatchewan **Seattle University**

Woodland Park Zoo, **Seattle Urban Carnivore** Project

University of Health Sciences and Pharmacy in St. Louis

Washington University, **Tyson Research Lab**

Point Defiance Zoo & Aquarium, Grit City **Carnivore Project**

University of Washington Tacoma

University of Toronto

Prairie Research Institute. **University of Illinois** Urbana-Champaign, **Carnivore Ecology Lab**

Brandywine Zoo

CalPoly Pomona, Ortiz Lab

University of Freiburg

SquirrelMapper

University of New Mexico's Smiths Lab

Animal behavior & cognition lab

iCWild, University of Cape **Town South Africa**







The World Beneath Your Feet

BY JILLIAN BRAUN ILLUSTRATION BY ASHLEY BEDORE

There's just something special about Lincoln Park Zoo. It has that...je ne sais quoi. It's the fresh air as it hits your lungs. The picnics on South Lawn with loved ones. The perfectly-timed shady spot you sat in while indulging in an ice cream cone. It's the whole other world happening above your head and below your feet.

Whether or not you've paid attention, the historic trees across zoo grounds are an integral part of what makes this park an oasis in the middle of the city. It may be easy to observe the active canopies full of migrating birds, nosy squirrels, and beautiful leaves, but it's what you can't see beneath the soil that helps these trees grow.

Many of the trees at the zoo predate the founding of Chicago and made this their home long before the zoo came along. But while we are utilizing their shade and the fresh air they provide and enjoy the changing colors, we inadvertently compact the soil surrounding the trees, minimizing the trees roots' ability to get the water they need to thrive. That's where the zoo's dedicated team of horticulturists come in!

Sometimes, after a compaction event, such as years of foot and vehicle traffic, root invigoration may be necessary to help a tree survive. Root invigoration is a process aimed at repairing damaged soil and promoting the growth and repair of fine roots. First, the ground is irrigated in various spots to help get to appropriate moisture into the soil. Then, a special tool is used to blow air into the soil to excavate and till said soil without disrupting the root system.

To date, the zoo has already conducted this process for the zoo's most at-risk and oldest trees including the oldest bur oak on South Lawn, the large bur oak near West Gate, and the large American elm



Photo by Christopher Bijalba

near Searle Visitor Center. Beginning this spring, the process will expand to many of the trees across South Lawn—so if you see these trees getting a much needed spa day, you know why!

"We've seen great success so far," says Director of Horticulture Katrina Quint. "This process provides improved soil conditions for the trees which allows them to live the longest lives possible in our urban environment." The root invigoration process can be beneficial to trees of all ages and sizes to help prevent decline. "Even at your homes the installation of a new sidewalk or driveway can be a significant compaction event," says Quint. "If you notice signs of decline, check with a certified arborist to diagnose the issue and find the proper treatment."





In Memoriam: Lincoln Park Zoo Director Emeritus Dr. Lester E. Fisher

When recalling Lincoln Park Zoo's transformation into the state-of-the-art institution it is today, one vividly remembers Dr. Lester E. Fisher's tenure as zoo director and his great strides to make the zoo a leader in animal care, conservation, and education. This past December, at the age of 100, Dr. Fisher passed away, leaving behind an exceptional legacy.

Dr. Fisher's journey to Lincoln Park Zoo, in addition to his life, was nothing short of remarkable and fascinating. During World War II, he served in the U.S. army where he cared for 5,000 messenger pigeons, as well as kept an eye on General George S. Patton's famous bulldog "Willie." From there, he became familiar with the zoo through a friend.

In 1947, Dr. Fisher was hired as Lincoln Park Zoo's first veterinarian and later served as zoo director from 1962 until his retirement in 1992. In total, Fisher's career lasted nearly 45 years at the zoo.

As zoo director and successor to Marlin Perkins, as well as through regular appearances on WGN, he quickly became a Chicago icon and household name. During his tenure, Dr. Fisher expanded and modernized animal buildings and habitats, allowing species in the zoo's care to flourish. Dr. Fisher had an affinity for gorillas, and, in 1976, he opened the Lester E. Fisher Great Ape House—enabling the zoo to continue its groundbreaking work with western lowland gorillas. Although the building has since been replaced by Regenstein Center for African Apes, his initial efforts and expertise are reflected in the facility's global reputation and research thanks to the Lester E. Fisher Center for the Study and Conservation of Apes.

He also built the first farm with domesticated animals in a zoo in the country, bringing agriculture to a large urban population. Fisher's leadership emphasized the role zoos serve in society as conservation powerhouses, and a trip to the zoo became an educational journey.

"A big piece of my heart is lost," said President & CEO Emeritus Kevin J. Bell. "Les transformed 'the old zoo' into a leader internationally in both exhibits and programs. People supported the zoo because they trusted Dr. Fisher, and he never let them down."

Dr. Fisher's remarkable efforts to transform Lincoln Park Zoo into a world-class institution and beloved Chicago destination are apparent by simply taking a trip to the zoo, where species of all kinds are flourishing in an urban oasis.



Kristin Baranack President, Auxiliary Board

How did you get involved with the Auxiliary Board?

Nature, science, and animals have always been a strong presence and passion in my life-from growing up in the country with farm animals, to my career at National Geographic Channel, even to my marriage proposal at the Bronx Zoo. I fell in love with Lincoln Park Zoo during a college internship here in Chicago and when we moved here years later, I actively sought out ways to get involved with the zoo.

What are your future goals for the Auxiliary Board?

In many ways, we are the storytellers who will drive the discourse surrounding zoos and conservation among our peers, grow their passion, and foster the next wave of members, donors, and advocates for the zoo. My goal is to develop turnkey resources to learn more about zoo projects, animals, and initiatives we love, to continue finding new ways to tell those stories.

What does Lincoln Park Zoo mean to you?

Personally, Lincoln Park Zoo is my sanctuary—it's where I would ponder my future that summer in college. It's where I've watched my children's faces light up at the white-cheeked gibbons swinging or polar bear Siku taking a plunge. It's where I often stop on my lakeshore runs for a little solace. It's the foundation for treasured friendships I have formed here in Chicago, and it has been the avenue for me to contribute in a real way to a city, community, and mission that I love.

S. Sunny Nelson

Vice President of Conservation and Science

Can you tell us about the career path you've taken to get to where you are today?

I started as a part-time petting zoo keeper at Zoo Atlanta after graduating from Auburn University. In my spare time, I helped the full-time keepers care for a flock of sun conures, a bachelor group of Asian small-clawed otters and an imprinted Bali myna. I enjoyed that work so much that I nixed my plans to move to New York to join the New York Police Department and instead decided to be a zookeeper. Over the years my interests expanded from care to include conservation, which led to my interest in understanding some drivers behind species loss and decline.

Can you share your proudest accomplishment?

I'm pretty proud of my recent promotion to Vice President of Conservation and Science. While it wasn't my intended career path, I'm excited for this next phase to help grow our conservation and science programs.

What are you working on now?

Aside from getting up to speed on my new role, I'm working with collaborators on wildlife trade issues, preparing for the next Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) meeting, and in my spare time working on my Ph.D.

What is the best part of your job?

I've always said I love working with people who love what they do. I'm especially happy that I get to work with a lot of amazing scientists who are dedicated to understanding wildlife, ecosystems, and communities to make a positive impact in the world.

-Helen A. Lee



Chilean Flamingo *Phoenicopterus chilensis*

There's a touch of gray at Flamingo Lagoon. A stark contrast from the bright, pink plumage that adult Chilean flamingos don, two youngsters can easily be identified in the flock by their gray plumage. Born in July 2021, the male chicks will sport gray feathers until the ages of 2–3 when their adult contour feathers become a striking pink.

With tall, thin legs and a long, flexible neck, as well as their stunning plumage, flamingos are a favorite species for many (and quite the sight to see). Due to their ability to tolerate extreme conditions, like the elevated Andes this species inhabits, the flock at the zoo is well-suited for Chicago's frigid winters.

The flamingos are currently being housed indoors due to highly pathogenic avian influenza (HPAI) concerns in wild birds in the area. However, this summer you'll hopefully be able to catch a glimpse of gray in a sea of pink when the birds return to Flamingo Lagoon. ■ —Sabrina Cynova

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2001 North Clark Street Chicago, IL 60614 Ipzoo.org

Upcoming Events

Perks for Zoo Members!

To Lincoln Park Zoo members who contribute to the zoo's care, conservation, and community initiatives thank you! Did you know your membership not only includes free or discounted parking, access to the Member Lounge at Searle Visitor Center, and invitations to sneak peeks and membersonly events, it also includes discounts on all zoo events throughout the year?

Not a member? Join today at Ipzoo.org/join.

MARCH

SUNDAY, 20 Teen summer programs application deadline

APRIL

THURSDAY, 7

Adults Night Out: Spring Fling It'll be the best spring party around—think post-prom party with a live DJ, outdoor fun, and themed photo ops. You'll want to dress up in your nostalgic best to enjoy animal chats and enrichment, a live DJ spinning old-school hits, lawn games, food and drink for purchase, and more. This is an 18+ evening event. Tickets start at \$15.

TUESDAY, 12-THURSDAY, 14

Spring Break Camp

Animal lovers in grades PreK-4 campers can explore nature while learning about conservation and the work of Lincoln Park Zoo.

SATURDAY, 16

Easter Egg-Stravaganza Presented by Kinder Joy®

The zoo's annual spring event is back and includes egg hunts for different age groups, photos with the Easter bunny and other spring characters, outdoor activities and games, and music to get you hopping. It's a family favorite and a perfect opportunity to celebrate the season. Tickets are \$35 each and include a \$5 ZooBucks voucher for food and drinks at Park Place Café during the event.

SATURDAY, 30

Craft Brews at the Zoo

The seventh annual beer festival, hosted by Lincoln Park Zoo and Lou Dog Events, offers more than 100 craft beers and ciders at tasting stations around the zoo's beautiful gardens. This is a one-of-a-kind, afterhours experience for adults aged 21 and over. General Admission tickets are \$55 and include 20 3-ounce tastings and a souvenir tasting glass.

JUNE

SUNDAY, 5 Run for the Zoo

Stay active while connecting to nature at the zoo's annual 5K/10K run/walk, which is back in person this year! Be competitive with chip-timed USATF-certified 5K and 10K courses, or simply enjoy a great morning running or walking with friends. The Kids' Course for ages 3–8 offers fun obstacles for younger members of the family. Race registration starts at \$39.

THURSDAY, 2

Adults Night Out: Pride Party The zoo celebrates Pride and the coming of summer with its signature event for guests 18+ only, featuring Drag Queen bingo, a live DJ, animal enrichment, and a focus on LGBTQIA+ artists and businesses. Tickets start at \$15.

THURSDAY, 9

Zoo-ologie

The Auxiliary Board of Lincoln Park Zoo celebrates its 10th anniversary at Café Brauer by hosting an upscale cocktail event that includes an open bar, bites from Chicago's best restaurants, dancing, and a silent auction.

JULY

FRIDAY, 22 SuperZooPicnic

Lincoln Park Zoo Members, mark your calendars for the return of SuperZooPicnic! This summer-fun family-focused event will take over the entire zoo between 5 and 8:30 p.m. Invitations with registration and event information will be mailed to all active members.