



SPRING/SUMMER 2020

LINCOLN PARK ZOO®

FOR WILDLIFE. FOR ALL.



It Takes a Village

Communities in action, flourishing field sites, urban wildlife, & more

SPRING/SUMMER 2020

VOLUME 19, NUMBER 1

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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 non-profit, 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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Cover: Kao is a young western lowland gorilla and a member of one of the habituated gorilla troops zoo researchers observe in the forests of the Goualougo Triangle in the Republic of Congo.

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Visit lpzoo.org/magazine for special web-only features—including photos, video, and blog posts—inspired by the stories in this issue.



Our Global Community

I initially wrote this column in January. The world is a different place today than it was then. I'm now updating it from my home in Chicago, where I miss the zoo and am looking forward with great anticipation to reopening and discovering our "new normal."

Lincoln Park Zoo closed on March 13 for the first extended period in our 151-year history. It is surreal. We hope to reopen in the summer (check our website for updates), but in the meantime, we are learning so much. In the last six weeks, we implemented even stricter safety standards to protect staff and the animals in our care. We hosted our first-ever Virtual Spring Break Camp, inviting kids and parents to participate in zoo programming from home. With our ongoing Animal Welfare Science Program, we are monitoring animals' responses to not having guests on grounds; while some seem to notice, others are blissfully more involved in their own social dynamics. We're doing more than ever virtually, including Facebook Live sessions with Zoo Director Megan Ross, Ph.D., and even virtual events, like a happy hour with a zoo scientist.

Just like Chicago, Lincoln Park Zoo is resilient. We are confident that we will emerge strong and more knowledgeable on the other side of this crisis. But in order for that to happen, your zoo needs your support. The animals in our care need your support. Our staff need your support. This free institution—open 365 days a year before this unprecedented pandemic—needs your support.

On May 5, Lincoln Park Zoo is participating in Giving Tuesday Now, a special initiative to support nonprofits during the COVID-19 pandemic. We invite you to purchase an item for animals from our Wish List, or make a more significant donation and receive a private virtual event with our Learning or Conservation & Science teams, just for you and a dozen or so of your family and friends. Every dollar you contribute helps support Lincoln Park Zoo's expert animal care, learning programs, and conservation work both in Chicago and around the globe.

Even with everything that's changed since January, one thing remains clear: our global community is truly one community. We face challenges like COVID-19 together, and wildlife relies on us, the global community of humans, to preserve natural spaces and learn to coexist.

As always, thank you for supporting Lincoln Park Zoo and being an important part of our community.

For Wildlife. For All. ■

KEVIN J. BELL
PRESIDENT AND CEO

BY JILLIAN BRAUN & SABRINA CYNOVA & BETH KRAUSS

Arrivals of All Sizes

Lincoln Park Zoo, an urban oasis full of life, celebrated the recent arrival of various species. When you are able to visit the zoo next, can you spot them all? At Regenstein African Journey, the zoo welcomed three curious female meerkats. Catch the colony of four in action, foraging for food and exploring their habitat. Over at Kovler Seal Pool, Slater the harbor seal made quite the splash, joining fellow harbor seal Storm and gray seal Charles. Catch a glimpse of two Luzon bleeding heart doves that hatched in December at McCormick Bird House. This species is identifiable by the irregular red markings on its chest. Just around the corner, the least sandpiper joined the seashore habitat!



Female meerkat (left), least sandpiper (top right), harbor seal (bottom right).



Photo by Lincoln Park Zoo



Photo by Mike Murray

In the Field: the Great Grevy's Rally

At the end of January, Mike Murray, curator of mammals, traveled to Kenya to join colleagues from other Association of Zoos and Aquariums (AZA) institutions for the Great Grevy's Rally. This annual census of Grevy's zebras takes place in coordination with the Grevy's Zebra Trust, an organization focused

on conserving the species, and brings together hundreds of researchers, local enthusiasts, and conservancy members. The AZA cohort conducted research in a remote area in northern Kenya, as well as spent time learning how local Samburu people are working with AZA conservationists to protect native wildlife. The data collected from the census will drive conservation decisions that impact Grevy's zebras, as well as reticulated giraffes, elephants, lions, and other antelope species and carnivores. The census will help ensure these populations are conserved for years to come.

Zoo Babies

Life continues at the zoo! Over the last few months the zoo has welcomed many new faces of the feather and furry variety. The African penguin colony at Robert and Mayari Pritzker Penguin Cove recently grew by one! After a 40-day incubation period, a chick hatched and has now developed grayblue feathers indicative of penguin young. On your next visit, swing by Helen Brach Primate House, as a De Brazza's monkey was born January 7. This arboreal species is easily identifiable by its distinctive white facial hair, which resembles a beard. After a 107 day incubation in an egg smaller than a jelly bean, Henkel's leaf-tailed geckos hatched at Regenstein Small Mammal-Reptile House. At hatching, these tiny geckos weigh less than a dime. Last but not least, Regenstein Macaque Forest welcomed two infant snow monkeys to females Nara and Ono.



Photo by Lisa Miller

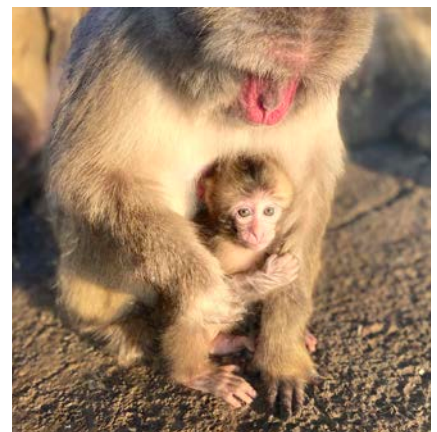
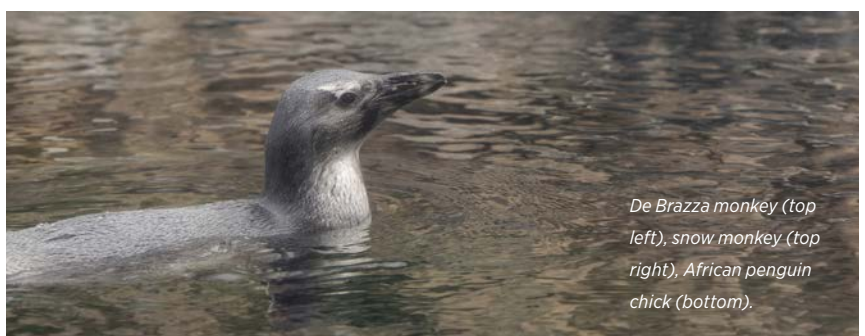


Photo by Jill Moyse



De Brazza monkey (top left), snow monkey (top right), African penguin chick (bottom).

Photo by Lisa Miller

A Strong Connection

Tap, scroll, and share your way through an all-new Lincoln Park Zoo digital experience! Later this summer, when our grounds reopen, we will offer a new, free Wi-Fi network to improve connectivity throughout the zoo. The zoo's own online destination has been refreshed as well; a new *lpzoo.org*, also launching this summer, will offer modern design with interactive features. Guests can discover the animals and plants at the zoo; get quick information on daily activities; join or donate; and dig deep on the animal care, science, and conservation work that takes place here every day. Designed with the user at the center of the digital experience, the site will make it easy to make the most of your visit. Here's what's new:

Animal Care & Welfare

Discover how Lincoln Park Zoo is working to save species worldwide, and learn what you can do to join us in taking action for the planet.

Take Action With Us

Discover how Lincoln Park Zoo is working to save species worldwide, and learn what you can do to join us in taking action for the planet.

“Today at the Zoo”

A tab on the left side of the screen follows you throughout your visit, so you can always find at-a-glance information on daily activities.

Self-guided Tours

Check the “Plan Your Visit” section for curated visits that focus on zoo highlights, such as “Big & Fuzzy” or “Weird & Wonderful” animals!

Interactive Map

Want to check dining destinations before a visit? Only looking for the monkeys? A new interactive map helps guests tailor their ideal trip to the zoo.

Accessibility

The site is designed to provide and help ensure an inclusive experience at the zoo for all people.

Calendar

A new calendar is easy to navigate to find members-only events, after-hours parties, and programs for kids. Listings may be limited to virtual events until the zoo is able to resume on-grounds events following the coronavirus pandemic.

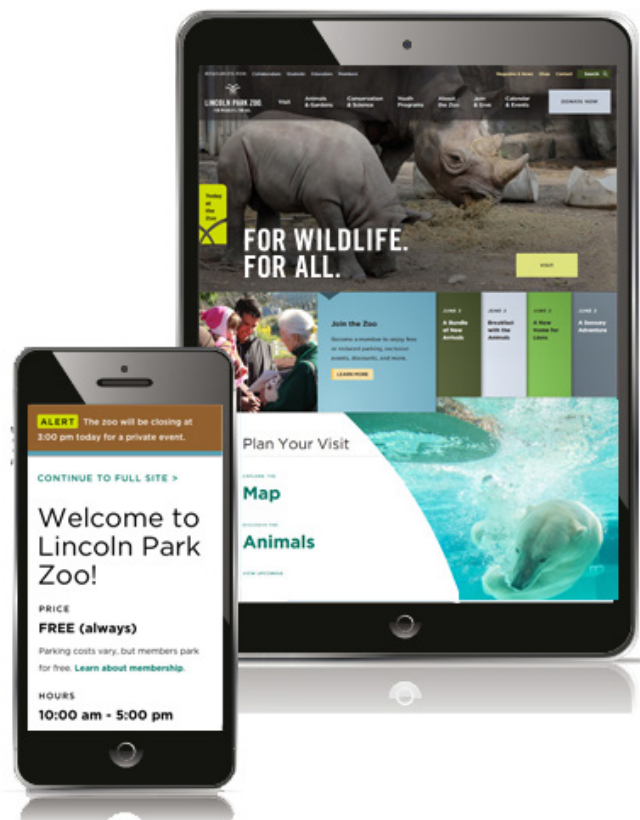
Magazine & News

Browse our biannual magazine and view new arrivals (cuteness abounds!), fieldwork updates, and more.

Resources

A dedicated set of links at the top of the page helps scientists, educators, students, and partners quickly find what they need from the site.

The site is designed in partnership with Chicago-based Clique Studios.



A Chance to Reconnect

Earlier this year, the zoo welcomed past teen program participants to the inaugural Teen Alumni Reunion. At the event, attendees reconnected with peers, shared their current education and career journeys, and learned about available opportunities at the zoo. The reunion was attended by more than 150 guests, including past participants from the Conservation Ambassadors Board, the Malott Family Zoo Intern Program, the Malott Family Research Apprenticeship Program, the Camp Teen Volunteer Program, Career Explorers, and Amplify. The zoo is already looking forward to next year's gathering.



Photo by Lisa Miller



Photo by Lisa Miller

Act Today to Ensure Wildlife Thrive 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 including giving through a will or trust, or naming the zoo as a beneficiary of your IRA or life insurance policy.

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





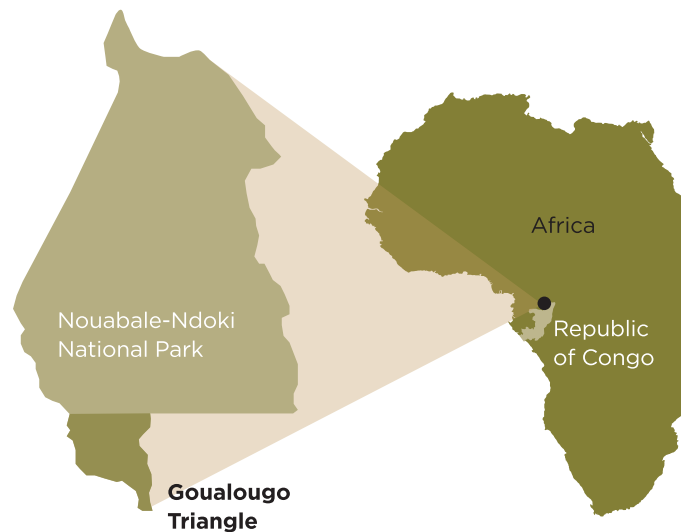
COPY AND PHOTOS BY JILLIAN BRAUN

For the last 20 years, the Goualougo Triangle Ape Project (GTAP) staff have lived and breathed wild great ape research and conservation. Under the leadership of Lester E. Fisher Center for the Study and Conservation of Apes Research Scientist David Morgan, Ph.D., the team has grown across two remote field sites and employs site managers and more than 100 Congolese nationals.

The Goualougo Triangle is located deep in the jungles of the Republic of Congo in the Nouabale-Ndoki National Park. To get there from Chicago requires multiple plane rides, a 2 ½-day drive, a one-hour-long canoe ride, and a treacherous six-hour hike through thick jungle brush and waist-high swamps. Turns out great ape research is not for the fainthearted.

To say it takes a village would be an understatement. In addition to the field researchers and trackers, dozens of porters, drivers, logistics coordinators, and partners are vital to continuing the crucial work of saving western lowland gorillas and chimpanzees in their forest homes.

“The Goualougo Triangle Ape Project may have started with great apes at the core, but it has become so much more than that,” said Morgan. “We have become a community—a family—dedicated to preserving not only the apes but also the land, the language, and the ecosystem.”



ong Apes

Poachers Turned Conservationists

In Bon Coin (which means “cozy corner” in the local language), the closest village to the Goualougo Triangle, there lived a man named Gaston Gobalo, who was a very influential member of the community and the chief of the village. The inhabitants of Bon Coin mostly consisted of indigenous Bayaka, who had long subsisted on fish, as well as meat from wildlife inhabiting the neighboring forests. Gaston was among the first local inhabitants recruited by newly arrived scientists with the Wildlife Conservation Society, who wanted to create what would become the Nouabale-Ndoki National Park. He was instrumental in convincing local inhabitants not to kill protected species, like elephants and apes. In return, he received a full-time job as a boat driver based at the nearby park headquarters. His foresight and belief that the conservation of wildlife and protection of forests would be more sustainable in the long run than exploitation was visionary and impactful.

Even in retirement, he continued to have a huge impact on conservation and research, particularly through the Goualougo Triangle Ape Project. In 2007, he encouraged his nephew, Davy Koni, to join the growing project in the hope that he would learn new skills, establish a career in conservation, and earn a living working with GTAP. Today, Davy is one of the most knowledgeable botanists in the northern Republic of Congo. ▶



Previous page: Kingo, a silverback in one of the habituated gorilla groups at the Mondika field site in the Republic of Congo. **This page:** A glimpse of the kitchen at the camp site of Goualougo Triangle Ape Project researchers.

Discovering Species and Preserving Language

As one of the most diverse ecosystems in the world, the Nouabale-Ndoki Park is teeming with hundreds of species of flora and fauna, and discoveries are still being made. Former GTAP Research Assistant Sydney Ndolo-Ebika, Ph.D., now a botanist, has dedicated his life to documenting the various plants and fungi that make up the Goulougo forests and beyond.

Sydney is part of a team that recently identified 27 species of *Ficus* (“figs”) in Sangha Trinational, a World Heritage Site. Sydney is now a collaborator on GTAP botanical surveys, and his research has led to the discovery of a new species of mushroom, called *Amanita griseostrobilacea*, found in the Goulougo Triangle.

In some cases, the flora is ‘re-discovered,’ meaning it has not yet been written about in science books but has been known locally for generations by indigenous people. Many times, the local people not only have names for these species but also have invaluable insights into their history, ecology, edibility, and medicinal uses.

“The importance of the wealth of knowledge of the local communities cannot be understated,” says Morgan. “Information has been passed down for decades, and part of our goal is to preserve this wisdom of our shared natural world for generations to come.”

As part of this preservation, the team conducts ethnographic surveys, and when researchers like Sydney and Davy Koni come across these ‘re-discovered’ plants, they document the local name in association with the scientific name so that it is recognized worldwide.

Appreciation for the Jungle

“We see many young people that feel pulled toward city living,” said Wildlife Conservation Society Country (Republic of Congo) Director Richard Malonga. “Instead of staying in the villages and inheriting forest knowledge, they are compelled to attend university and enjoy the excitement of a city, like Brazzaville.”

Training the next generation of ape researchers and conservation scientists has positively impacted the local community, which now has an understanding and appreciation of the



Photo by Meg Vogel/The Cincinnati Enquirer

“Information has been passed down for decades, and part of our goal is to preserve this wisdom of our shared natural world for generations to come.”

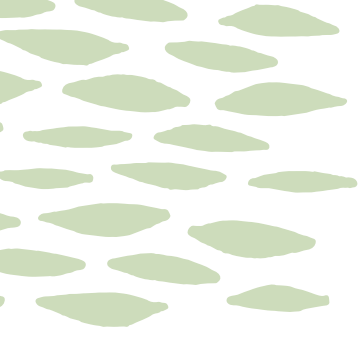
importance of protecting national parks and the flora and fauna within.

The impact of this enlightened view of wildlife conservation has reached beyond the individuals who collect data; it has also impacted the ape tracking staff. Through the Goulougo Triangle Ape Project’s long-running mentor-apprentice program, more experienced staff teach skills to newer project members. This includes the ape tracking staff, with fathers often teaching their sons how to habituate and track gorillas. In the process, the importance of monitoring the apes and protecting the forest is passed on to the next generation.

Club Ebobo: Inspiring Conservation

Decades ago, Richard Parnell and Morgan predicted the health and protection of the forests would diminish unless the local communities came together to protect it and its inhabitants. In 1997, Club Ebobo—or “Club Gorilla” in English—was formed to teach local children more about the important role apes and other local wildlife play in the forest, as well as the aims of the research being conducted in the park.

Club Ebobo, which still exists today, now leads monthly



conservation education sessions that are filled with activities to teach children about a variety of topics, from animal behavior to disease transmission to conservation and everything in between. Found throughout multiple villages, Club Ebobo serves children of all ages and has helped change the understanding of great apes in the region and the trajectory of some individuals' lives.

In some instances, Club Ebobo graduates have gone on to become GTAP trackers and research assistants. Gaitun Fidel Mbeouti, for example, was born at the park headquarters and participated in the nature club starting at the age of 5. He now leads teams of trackers in the Goulougo Triangle, where they collect invaluable data on gorillas from direct observations.

“My impressions of nature and the possibilities that come with such employment have changed greatly. I’ve learned a great deal about gorillas, the forest, and data collection,” says Mbeouti. “I now have hope for long-term conservation of wildlife and the forests, not just for this generation but for future generations.”

Learning Across the Pond

Many of the great ape researchers are conducting graduate-level research, despite perhaps never attending university. Due to their dedication, long-term monitoring, and knowledge of the forest, they are best equipped to habituate the apes, gather observational data, and summarize their data for later analysis.

“These men are extremely gifted and can be limited by circumstance, so we try to find ways for them to accomplish their goals, whether that is becoming a research assistant, attending university, or becoming a project manager,” says Morgan.

Between 2015–2016, researchers Crepin Eyana Ayina and Fabrice Ebombi came to the states to attend English training classes at Central Washington University. While here, they also attended Chimpanzees in Context, an international conference hosted at Lincoln Park Zoo, where they met Jane Goodall, an icon and one of their conservation role models.

One of the most notable experiences Crepin had during his stay was working side by side with Fisher Center staff collecting behavioral data. “It was inspiring to see the level of respect and care the chimpanzees and gorillas receive at Lincoln Park,



Previous page: A father-son team of great ape trackers. **This page, top:** The Goulougo Triangle Ape Project team. Guitan pictured fourth from right in top row. Lincoln Park Zoo’s David Morgan in light green shirt, center. **This page, bottom:** Fabrice (right) overseeing data collection while observing gorillas.



and that such a wonderful exhibit is free to anyone who comes to see them”.

This spring, research assistant Wen Mayoukou will attend two workshops, one on using spatial mapping programs and the other on biomonitoring surveys using remote field cameras.

Protecting the Forest

Logging is prominent in the Republic of Congo, which has extremely large logging concessions. GTAP researchers are working with the logging companies to evaluate the impacts of their forestry practices on great ape populations and to encourage reduced impact measures.

Many partners, including GTAP, also continuously work with government agencies to further protections in the forest. From supporting the government in declaring national park status to dedicated conservation set-aside areas, various stakeholders work in tandem to ensure the future of the trees and wildlife that rely on them.

From Zoo to Jungle

The work in the Goulougo Triangle extends much further than its borders. Every piece of knowledge is shared with researchers at the Fisher Center and with the zoo’s Animal Care team to improve care for the resident gorillas and chimpanzees—and, in turn, apes across the Association of Zoos and Aquariums and partner sanctuaries, like Chimp Haven.

The field research and observations are critical to promoting positive welfare among apes at the zoo. Collected data was used to design Regenstein Center for African Apes, which includes elements that accommodate species-specific preferences, such as imitation termite mounds that encourage the chimpanzee to use tools and raised platforms that encourage the gorillas to build nests.

In addition, many initiatives at the zoo inform research in the wild. Fecal samples that are non-invasively collected at Goulougo are then analyzed at Lincoln Park Zoo to measure stress and understand how apes react to various stimuli. The gorillas and chimpanzees at the zoo also voluntarily participate in research, which helps researchers learn more about how great apes think and experience their world. Findings from these studies can be used to inform research questions addressing similar inquiries in the field. Everything goes hand in hand to benefit apes around the globe.

Take Action With Us

BY STEPHEN ROSS, PH.D.
DIRECTOR OF THE LESTER E.
FISHER CENTER FOR THE STUDY
AND CONSERVATION OF APES



You may have heard the phrase, “Forests are the lungs of the Earth.” Forests all over the world absorb large amounts of carbon dioxide and release tremendous quantities of oxygen as a result of photosynthesis.

Even in a large city like Chicago, trees and shrubs are everywhere. Every deep breath of fresh air we take likely was filtered to some degree by the forests.

So how do we care for the forest, both here in the United States and around the globe? Some of the largest swaths of intact forest landscape exist in the Congo Basin, where Lincoln Park Zoo scientists are examining the impact of logging practices on the delicate ecosystems that are home to endangered gorillas and chimpanzees.

The zoo is working with the Forest Stewardship Council (FSC), a well-established international organization that promotes sustainable forest management practices that consider the needs of local communities and the animals. By sharing data and informing logging practices in Central Africa, scientists are able to assess and impact the future of one of the most biodiverse regions on Earth.

But you can make an impact right here at home! Through responsible purchasing, we too can influence the timber industry and support practices that sustain forests for the long-term and consider forest-dwelling animals. By selecting forest-friendly printer paper, furniture, and the like, identified by the FSC logo shown here, you are helping future generations of apes and humans alike, from Congo to Chicago, enjoy those deep, full breaths of fresh air each day. ■



Introducing the Foleys



Photo by Chris Bilalaba

Lincoln Park Zoo has had a conservation presence in Tanzania since 1995. A bustling ecosystem of lion prides, elephant herds, and mongoose mobs makes it not only a fascinating space to research but also a place worth protecting. Lara Foley, M.S., and Charles Foley, Ph.D., recently joined zoo staff and have dedicated their lives to understanding and protecting Tanzania wildlife in one of the most rich and biodiverse ecosystems.

BY JILLIAN BRAUN
PHOTOS COURTESY OF CHARLES & LARA FOLEY

Tell us a bit about yourselves

Charles: I am British but grew up with diplomat parents and spent most of my early years traveling. The defining moment of my youth came when I was living in South Africa at 7 years old and my parents took us to Kruger National Park. I remember driving into the park and seeing a giraffe standing close to the road with two red-billed oxpeckers on its neck. I was instantly smitten, and from that day on wanted to do nothing else but study animals in the wild. Little did I know then that meant I would study elephants for more than 25 years in what became the second-longest elephant study in Africa.

Lara: I grew up in Minnesota but I did live for two years in LaGrange Park and remember visiting Lincoln Park Zoo. As a young adult, I was passionate about backpacking, camping, and wildlife conservation. My first love was wolves; growing up in Minnesota, I was fascinated and encouraged by their comeback in the 1980s and '90s, and I wanted to base my future around working to protect wildlife. Africa was the mecca for wildlife and had been on my radar since high school, so I was excited to learn that I could earn college credit while studying in Tanzania during a college study abroad program. That is where I met Charles and the rest, as they say, is history! ▶



Is there one animal or story that sticks with you over your many years in Africa?

Lara and Charles: For many years, our job consisted of going out each day looking for groups of known elephants—we followed about 28 different family groups. It was, we are the first to admit, an absolutely blissful life. We gradually got to know about 800 elephants, gave them names, and started to identify their personalities.

Naturally, this led to us having our favorites, and top of the list were Addo and Big Mama. Addo was a large, good-natured female who often made the decisions on where the group went and when, and she was unflappable. On one occasion, we were flying across the park in the helicopter, looking for a female with a radio collar. A large herd of elephants heard the helicopter coming and scattered in all directions—except for one female, who looked up at the helicopter, sniffed in its direction with her trunk, and then returned to the serious work of eating. That was Addo.

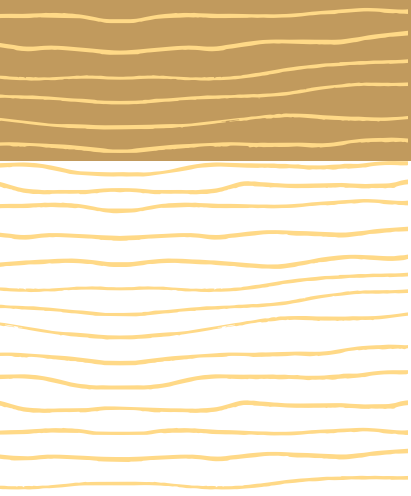
Big Mama was, as her name suggests, a huge elephant. We suspect that she was either a hermaphrodite or had a hormonal imbalance, as she was at least 30 percent larger than any other female in the population; she never [hormonally] cycled, and had two tiny tusks, both of which broke off later in her life, which left her with a sweet perma-grin. Big Mama, by dint of her size, was undisputedly the most dominant female in the population, and she and Addo combined made a formidable partnership. Although she was unable to have infants herself, Big Mama led one of the largest and most successful family groups in the population, which by 2018 had swelled to more than 60 animals.

How did you work with the local community?

Lara and Charles: The Tarangire elephants and many other species disperse outside the park during the wet season, migrating onto community land where they have access to mineral-rich vegetation. The land surrounding the park belongs mostly to the Masaai, who are traditionally pastoralists and are remarkably tolerant of wildlife on their land.

However, in the past 40 years, large parts of these pastoral lands have been ploughed up for agriculture, negatively impacting both the Maasai pastoralists and the wildlife dispersing onto them. In order to stem this transition, we





work in partnership with a local NGO, the Ujamaa Community Resource Team, and communities around the park to help the villagers protect some of their land for communal pastoral areas.

Our ultimate goal is to ensure that the remaining wildlife migration corridors in the ecosystem remain intact, allowing the elephants and other animals to continue to disperse in and out of the park on an annual basis, and the Maasai communities to continue their pastoral lifestyle.

What is a project you have been excited about?

Lara and Charles: Tanzania is justifiably famous for its wildlife. However, until a few years ago, little was known about the actual distribution of these mammal species across the country. In 2000, we collaborated with colleagues from the Wildlife Conservation Society, the Tanzania Wildlife Research Institute, and Zoological Society of London to establish the Tanzania Mammal Atlas Project with the goal of building a database of large mammal distribution across the country.

In addition to interviews with local hunters and people on the ground, we established a large-scale camera monitoring program. Motion-activated field cameras take photos or video when activated by heat or motion and are now used frequently even by the general public, but back then, the technology was still fairly new. While these days a camera can store 10,000 digital pictures on one card, the original cameras had a small film camera that would take a maximum of 36 photos.

We would select areas where we had little information on the mammal fauna and set up the cameras. Once the films had been developed, the team would sit around a desk, excitedly flicking through the pictures to see what we'd found. And sometimes we would hit the jackpot: a new species to Tanzania, a huge range extension, or

even the occasional hunting drama, with a picture of an unsuspecting ungulate, like a kudu, walking along and 60 seconds later a lioness crouched down stalking it. Did the lioness succeed? We'll never know, but it made for great entertainment.

What excites you most about working with Lincoln Park Zoo?

Lara and Charles: We are very excited to join Lincoln Park Zoo and to lead the Tanzania Conservation Research Program. We've always admired the zoo for its commitment to saving species and its world-class Conservation and Science department. Lincoln Park Zoo has been an important institution to our project, as the zoo was one of our earliest donors (starting in 1995) and we've worked with the zoo's scientists on analysis of our elephant database and scientific publications. So we are thrilled to come full circle and join the team of conservation scientists at the zoo!



Previous page: Two elephants enjoying a watering hole in Tanzania (top), agriculture (middle) impacts local wildlife and livestock-based communities (bottom). **This page:** A leopard is spotted via a motion-activated camera.



Reaching New Summits

In a rapidly urbanizing world, how do you build wildlife-friendly cities? Through research, planning, and collaboration. The Urban Wildlife Information Network (UWIN) held its first summit to encourage unity between experts of all kinds.

Making Cities Better Places
For Humans And Wildlife

BY SABRINA CYNNOVA
PHOTOS BY LISA MILLER

The Urban Wildlife Information Network (UWIN), created by the Urban Wildlife Institute at Lincoln Park Zoo, combats the biodiversity crisis by making cities part of the solution. This global network of two dozen cities shares wildlife data that can ultimately reduce human-wildlife conflict in some of the most heavily populated areas on Earth.

In November at the zoo, UWIN held its inaugural Urban Wildlife Information Network Summit to bridge the divide between scientists, urban planners, designers, and land managers from across the nation. Approximately 76 experts from across the U.S. and Canada were in attendance, representing 19 of the 24 active UWIN partner cities. During the four-day summit, attendees participated in interactive workshops, discussing issues of urban biodiversity, planning, and equity.

Here are a few key takeaways from the historic meeting, along with next steps and updates from the Urban Wildlife Institute.

Communication and Collaboration Is Vital

One common theme that wove its way throughout workshops and discussions is that communication and collaboration are

fundamental, especially between fields. From visual guides to interactive tools, communication needs to be in a form that is accessible to all involved, which helps break down the silos between the people in cities who measure, design, and implement change; govern communities; and live in these areas. The summit brought communication and collaboration to the forefront, with many attendees calling the program a “break-through” and “mind-opening.”

“It showed that there is hunger for this type of multi-disciplinary gathering on urban wildlife,” says Jacqueline L. Scott, founder of Black Outdoors.

Collaboration can revolutionize the ways cities are built, helping to create prosperous habitats for animals while reducing conflict between wildlife and people.

Addressing Barriers

Barriers to successfully incorporating wildlife needs into planning and designing cities include: financial resources, public perceptions of wildlife, balancing community revitalization with gentrification, and disciplinary differences. By understanding these common barriers, experts from across fields and the country can begin to overcome them, collaborating to fuse urban ecology and urban planning.



An Ever-changing Landscape

City landscapes are complex and ever changing, housing not only humans, but also a multitude of wildlife species. Research and policy must be adaptable, and experts must plan for revision and change in order to help people and wildlife continue to coexist. One important factor influencing the city landscape

Research and policy must be adaptable, and experts must plan for revision and change in order to help people and wildlife continue to coexist.

is connectivity, and it's essential to examine the ways that humans and animals move throughout the city and how research, planning, and design can align those movement patterns with one another.

Humankind lives on an urban planet, full of unique species of different shapes, sizes, and colors. These species can inspire and fascinate, enhancing the urban experience. A growing network, UWIN is seeking partners in cities around the world to continue to build the first global network collecting urban wildlife data.

A Growing Network

Created by the Urban Wildlife Institute, the Urban Wildlife Information Network launched in 2017 as a partnership between eight cities across the U.S. Currently, UWIN connects 24 cities across the U.S. and Canada, from Chicago to Austin to Edmonton, Alberta. Partners include universities, wildlife organizations, city governments, and other institutions.

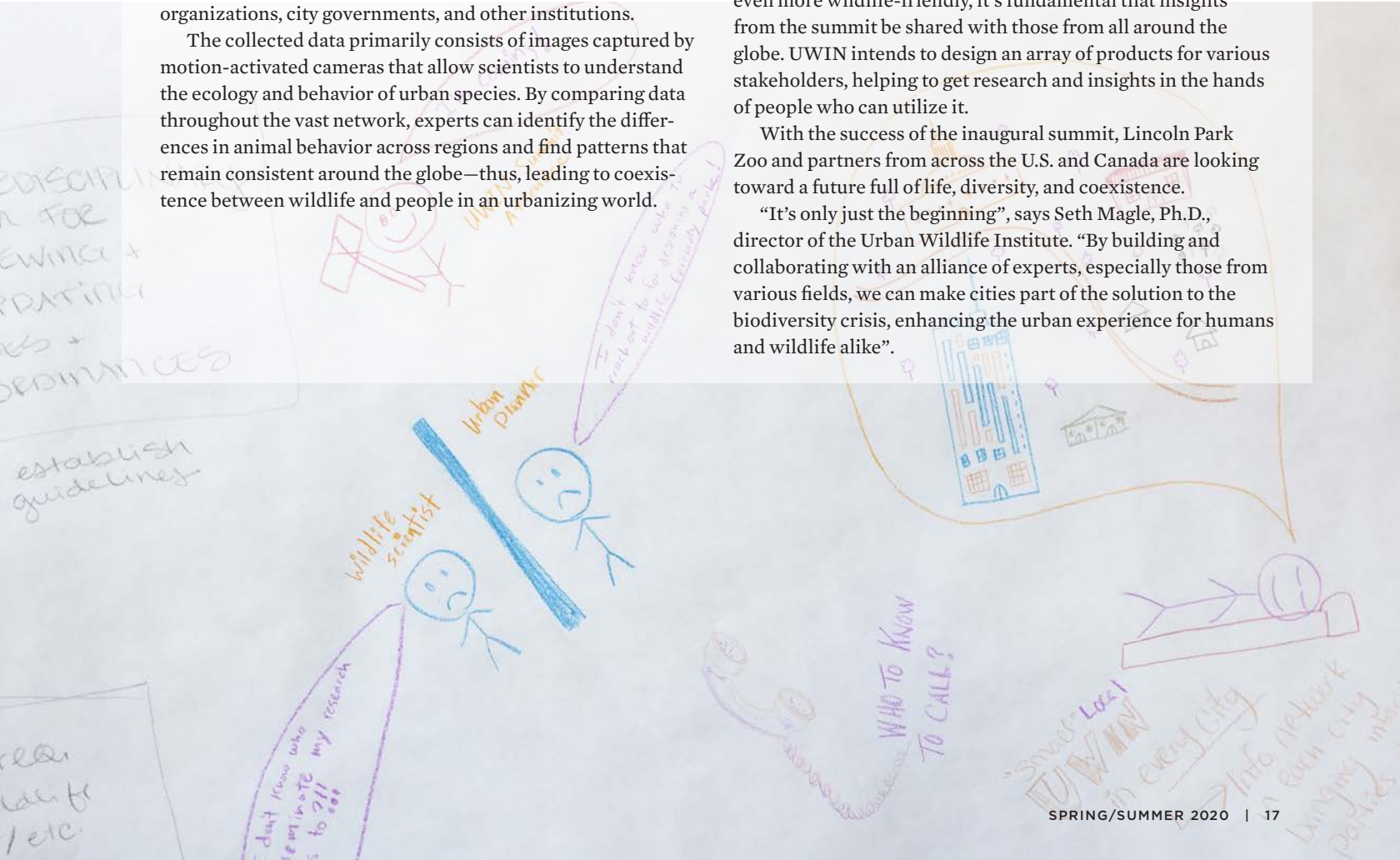
The collected data primarily consists of images captured by motion-activated cameras that allow scientists to understand the ecology and behavior of urban species. By comparing data throughout the vast network, experts can identify the differences in animal behavior across regions and find patterns that remain consistent around the globe—thus, leading to coexistence between wildlife and people in an urbanizing world.

Looking Toward the Future

UWIN is looking toward the future and implementing ways to keep fusing urban ecology and urban planning. The network currently has research and education committees, but plans to advance collaboration between experts by including urban planning and design, environmental justice, student, and social science committees and advisory roles. In order to make cities even more wildlife-friendly, it's fundamental that insights from the summit be shared with those from all around the globe. UWIN intends to design an array of products for various stakeholders, helping to get research and insights in the hands of people who can utilize it.

With the success of the inaugural summit, Lincoln Park Zoo and partners from across the U.S. and Canada are looking toward a future full of life, diversity, and coexistence.

“It's only just the beginning”, says Seth Magle, Ph.D., director of the Urban Wildlife Institute. “By building and collaborating with an alliance of experts, especially those from various fields, we can make cities part of the solution to the biodiversity crisis, enhancing the urban experience for humans and wildlife alike”.



Consistency Is Key

BY JILLIAN BRAUN

ILLUSTRATIONS BY ASHLEY BEDORE

While the Tanzanian plains might look vastly different than the forests of the Republic of Congo or the great Chicago skyline, Lincoln Park Zoo's conservation sites may have more in common than one might think. Each benefits from the zoo's tried-and-true approaches, refined using decades of noninvasively collected data across the sites, to helping mitigate human-wildlife conflict and save species.

From tools and methodology to involving the local communities, these factors are crucial to the zoo's conservation efforts across the Serengeti in Tanzania, the Goulougo Triangle in the Republic of Congo, and cities around the world, such as Chicago, as part of the Urban Wildlife Information Network.



You're on Camera!

Motion-activated field cameras, set up along pre-determined trails (transects), are a key component to understanding the biodiversity of an ecosystem. These cameras, which snap images when wildlife are near, have shed light on species range (did you know there are flying squirrels in Chicago?), never-before-seen behaviors (chimpanzees sharing tools with their kin), and nocturnal hunting behaviors (see camera image captured in Tanzania on page 15).



Follicle and Fecal Fortune Tellers

Animals can't tell scientists if they're stressed, so zoo researchers use novel ways to gather this information through non-invasively collected hair and fecal samples. The samples are then shipped to and processed at the zoo's Davee Center for Endocrinology and Epidemiology. These biomaterials provide invaluable insights into how gorillas, lions, rats, and raccoons experience the world and what factors affect their stress levels, which ultimately help inform conservation approaches.

Conservation-conscious Communities

Humans cause the decline of many wild animal populations, but they're also the solution to conserving these same species. In order to succeed, each field site relies on dedicated project leaders and passionate community members, as well as the education of the next generation of environmental stewards. Citizen science projects and conservation clubs (see Club Ebobo on pages 10–11) are just a couple ways communities can get involved. At several field sites, local community members even work as scientists and collaborators, sharing their critical knowledge of the local ecosystems.



Spring Flowers

BY CHRIS PULLAM
PHOTOS BY ELLEN NEELY

10 years later, Nature Boardwalk still treats visitors to one of the most vibrant spring landscapes across Chicagoland.

Over the past 10 years, Nature Boardwalk has transformed from a simple artificial pond into a 14-acre prairie-style garden filled with native plants and brimming with birds, frogs, fish, turtles, and insects. But the boardwalk, framed on three sides by urban sprawl, isn't like other natural spaces.

Enter Lincoln Park Zoo's Horticulture staff and their small army of volunteer gardeners. Together, they manage this fully functioning ecosystem's landscape by removing invasive plant species, adding new native plants, and conducting an annual floristic survey to assess the plant community's overall characteristics. Come each spring, their efforts result in one of the most lush and colorful landscapes across Chicagoland.

Nature Boardwalk is home to more than 100 native plant species. Here are four to watch for this season:

Wild Blue Indigo *Baptisia australis*
Wild blue indigo are one of the more common plant species at Nature Boardwalk, but the attentive visitor might even discover the two pockets of yellow wild indigo (*Baptisia sphaerocarpa*) tucked into the landscape. These robust plants grow back in the same spot each year and persist well into fall.

Shooting Star *Dodecatheon media*
This herbaceous flowering plant has long, thin purple petals that twist straight out from their center. While the shooting star's flowers don't provide much nectar, Horticulture staff have noticed bees



Wild Blue Indigo



Prairie Smoke



Shooting Star



Ohio Spiderwort

slipping between the petals and “buzzing,” or vibrating, to coat themselves in pollen, their preferred food source, before flying away.

Prairie Smoke *Geum triflorum*
This perennial starts with a deep pink flower that quickly loses its color and opens to reveal a wispy puff that resembles smoke, hence its name. Prairie smoke, which grows low to the ground, is a relatively discreet spring-blooming species.

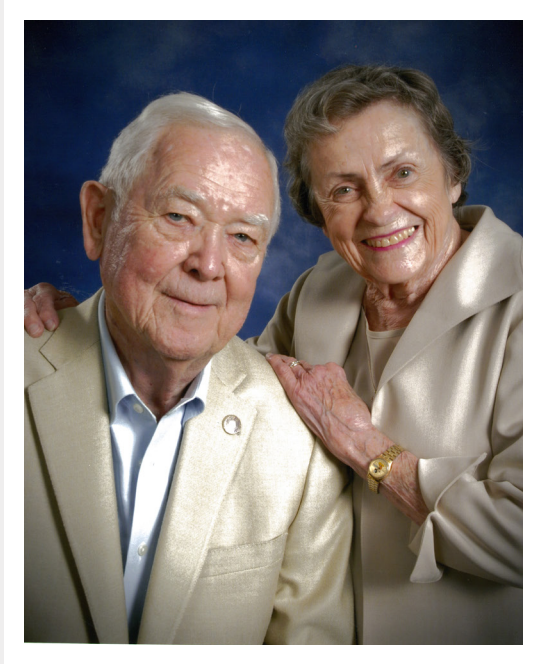
Ohio Spiderwort *Tradescantia ohioensis*
The Ohio spiderwort's purple flowers have three petals that persist well into the summer. They grow in clusters atop erect blue-green stems with long thin leaves and are frequent landing pads for flying pollinators.

Looking Forward

This spring, Horticulture staff will conduct their annual survey of Nature Boardwalk's 100+ quadrants to identify the plant species, and their quantities, at each site.

“The survey will help us continue to make informed decisions on where and what to plant,” adds horticulturist Aly Burgess, who joined the zoo in early 2019. “We will also do a soil test around the prairie to determine what plants will thrive in what areas, which will help us transform the landscape over time in a way that benefits the overall ecosystem.”

“Our work at Nature Boardwalk reflects Lincoln Park Zoo's approach to everything,” says horticulturist Megan McCawley, who joined the zoo in early 2018. “It's a reflection of our scientific-based approach to care and conservation.” ■



Roxelyn and Richard Pepper

Longtime Zoo Members

Thanks to a transformational \$15 million gift from the Pepper family, Lincoln Park Zoo has broken ground on Pepper Family Wildlife Center.

What does Lincoln Park Zoo mean to you?

Roxelyn: We were both born in Chicago and have been coming to Lincoln Park Zoo all our lives. We've been involved with the zoo as members since 1979, and our children and grandchildren have been there a lot over the years. It's simply a great place to visit.

Why were you drawn to support the zoo?

Richard: Our company, Pepper Construction, started working at the zoo as a contractor nearly 20 years ago. We have a really good relationship with the zoo and we're getting into our twilight years, so we thought we should give back in another way. Plus, we have 18 grandchildren and 16 great grandchildren, and we thought that if we were able to name the new center, all of them would go there and say, "Hey, look what grandma and grandpa did."

What parts of the zoo has Pepper Construction worked on?

Richard: Regenstein Center for African Apes, Nature Boardwalk, Regenstein Macaque Forest, Robert and Mayari Pritzker Penguin Cove, Walter Family Arctic Tundra, and now Pepper Family Wildlife Center.

Have any of those projects stood out to you?

Richard: Nature Boardwalk was a challenge to build and have come out properly, but it just fits in so well at the zoo. It's filled with vegetation and it's so peaceful.

Roxelyn: It's growing up, and it seems to get more beautiful every year.

Richard: And now we're working on the new center. It's going to be a spectacular place for spectators to see the lions moving and running around up close.

Do you have a favorite part about the zoo?

Roxelyn: I have a niece who grew up in another city and has three children but has never taken them to their local zoo because it costs too much money. Lincoln Park Zoo offers a great experience for kids and adults, and they don't even have to pay to visit. It's just such a wonderful place.

Photo by Aaron Magaña



Jverson Jenkins

17-year-old
Douglass 18
Participant

Through the Douglass 18 program, young people from North Lawndale have spent the past two years building and creating nature-based art installations to improve a miniature golf course in the community. Their designs highlight the

local bird species that thrive in the area, injecting this revitalized recreational space with an opportunity for learning.

What skills have you learned while working on the golf course?

Over the past two years, we've been designing our holes and using papier-mâché, string, tape, saws, and other materials to build our birds. Before this project, I wasn't using these materials and I didn't know how to make designs, but now I feel like I'm a good builder.

What was the inspiration for the hole you designed?

My birds are the northern cardinal, Baltimore oriole, and black-crowned night heron. I really just wanted to show people what they eat and what they do and how they sleep. At first, I didn't know how to do that, but then Eric [Hotchkiss, the lead teaching artist for Douglass 18,] and I brainstormed some ideas and I did some more research. For the Baltimore oriole hole, I built some dark-color fruits, because that's what they eat.

Are you looking forward to seeing your idea come to life?

Yes I am. This project has meant a lot to me. I pushed myself really hard. Eric and my teammates never let me give up. If I ever said I couldn't do it, they told me I could, and it came true.

Once the golf course is finished, how will it impact your community?

I think our group is going to bring a lot of smiles to a lot of people's faces. Happiness.

Stay tuned for information on the golf course opening.

Julie Somor

Chair of the Green Team; Conservation & Science Coordinator

What is the Green Team?

It's Lincoln Park Zoo's internal committee that helps make the zoo greener by operationalizing sustainability and empowering our staff and volunteers to create successful behavior change. We have a member from almost all the zoo's departments, which brings a lot of different perspectives to the table.

What have you been working on recently?

We recently finished our Sustainability Plan, which is more about the zoo's institutional priorities but is also the framework for the Green Team's next steps. It gives us direction on what we should try to accomplish and helps the rest of the staff see how these goals fit into their various roles—that this isn't about the Green Team working to change things; it's about all of us working together to make the zoo more sustainable.

We also just wrapped up our Palm Oil Audit Report, which will help us reduce the amount of unsustainable palm oil used at the zoo. That included taking inventory of over 1,200 products, evaluating each for the presence of palm oil, and investigating the sustainability of their production.

What have you been able to accomplish in the past?

The Green Team spearheaded a single-use plastic audit to get a complete picture of all the single-use plastic used at the zoo, even after phasing out the use of plastic straws. We zeroed in on three of our top 10 most used items and took action to reduce plastic lids, plastic garbage bags, and plastic to-go food containers and are continuing to implement recommendations that came out of it.

What's your favorite part about the Green Team?

It's exciting to encourage change and to feel like we're contributing to the zoo's mission in this very unique way. Sometimes it's tough to feel like your little behaviors, like using a reusable water bottle, are affecting something as big as wildlife conservation, but they really do make an impact because they add up over time, especially when our entire staff is involved. ■

—Chris Pullam



Photo by Lisa Miller



Green Tree Python

Chondropython viridis

Sporting a striking color, green tree pythons are quite the master of disguise. Their vivid green color, with a broken vertebral stripe of white or dull yellow and scattered spots, helps them blend almost completely into the trees and surprise prey of all sorts.

This species spends most of its time high up in the trees, and a strong, prehensile tail enables it to eat while hanging from a branch. Green tree pythons are constrictors, coiling their bodies

tighter around their prey with each exhale. Once their prey suffocates, they swallow it whole.

From lemon yellow to red or even blue, hatchlings can come in an array of colors. As the species matures, its skin transforms into a bright green.

Try to spot the zoo's elusive green tree python at Regenstein Small Mammal-Reptile House. ■

—Sabrina Cynova

VIRTUAL

Upcoming Virtual Events

The zoo may be closed, but there are still many ways to connect with animals, nature, and zoo experts. Check out one of the new virtual events below and visit lpzoo.org/events for more information and new listings.

**Saturdays, May 16 and 30,
at 10 a.m.**

Virtual Meet-and-Greet with a
Lincoln Park Zoo Animal

Saturdays, May 9 and 23, at 10 a.m.

Virtual History Tour of Lincoln Park
Zoo with Adam Selzer of Mysterious
Chicago

**Thursdays, May 7, 14, 21, and 28,
at 5:30 p.m.**

Beer & Conservation: A Virtual Happy
Hour with Lincoln Park Zoo

Sundays, May 10 and 24, at 10 a.m.

Virtual Breakfast with the Animals:
Great Apes & Primates

Sunday, June 28, at 9:30 a.m.

Virtual Zoomba at the Zoo

