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16

*Newsletter*

**2025**  
*Volume 3*

# 21 16

*Newsletter*

**2025**  
**Volume 3**



Thanks to you, our mission to protect wildlife is strengthened every day. Together we've been able to create meaningful change and preserve the health and beauty of the natural world for future generations.

In the following pages, we're thrilled for you to explore how we're caring for critically endangered Fijian iguanas that recently arrived at the San Diego Zoo, what we've learned about our elephant herd's reaction to the April earthquake, and how protecting plants around the world is critical to ensure all life can thrive on Earth, among other powerful stories of conservation.

Your role in these successes cannot be overstated. Your support, enthusiasm, and passion make every step forward possible.

Together for wildlife,

A handwritten signature in black ink that reads "Shawn Dixon". The signature is fluid and cursive, written in a professional style.

**Shawn Dixon**

Interim President and Chief Executive Officer  
San Diego Zoo Wildlife Alliance



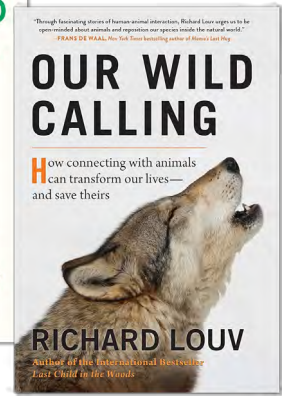
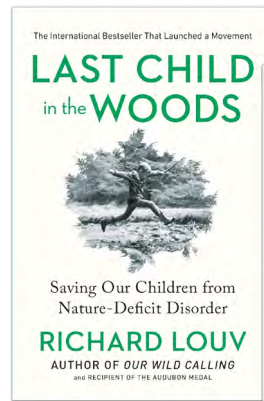
SAN DIEGO ZOO WILDLIFE ALLIANCE



TWENTY-ONE SIXTEEN ADVISORS

# 2116 ADVISORS ANNUAL GATHERING 2025: NATURE, CONNECTION, AND THE NEXT GENERATION

Save the date for  
**SEPTEMBER 21**



Best-selling books written by Richard Louv.

We welcome you to join us for your third 2116 Advisors Annual Gathering on Sunday, September 21, 2025. We are honored to recognize you and your tireless commitment to San Diego Zoo Wildlife Alliance with this exclusive event.

The day will begin with a private tour of the San Diego Zoo's Denny Sanford Wildlife Explorers Basecamp, followed by a delicious brunch. We will then present a conversation with renowned journalist and nature advocate

Richard Louv, author of the best-selling books *Last Child in the Woods* and *Our Wild Calling*. He will be joined by Lisa Biasillo, our vice president of education, to explore the values that shape our education programs: fostering curiosity, deepening connections with wildlife, and inspiring people to cultivate meaningful relationships with the natural world. Together they'll reflect on how these connections can transform not only individual lives, but also our collective future.

## RSVP

If you haven't already RSVPed, please reach out to Erin Decker at [edecker@sdzwa.org](mailto:edecker@sdzwa.org) or (619) 685-3213 by September 5 to reserve your spot.

We can't wait to see you there!

**Sunday**  
**September 21, 2025**  
**9 a.m. – 2 p.m.**  
**San Diego Zoo**



## FROZEN ZOO® FIRSTS

Our Frozen Zoo has once again made history. We recently banked a Nuttall's scrub oak, marking the first time a plant has ever been cryopreserved. This accomplishment, which you can read more about on page 28, is one of many milestones this irreplaceable genetic treasury has seen since the first samples were collected 50 years ago. With every cell line we bank, the Frozen Zoo gives hope to endangered species around the world and helps us secure the future for wildlife and the ecosystems we share.

As we celebrate the 50th anniversary of the Frozen Zoo and look toward its next breakthrough, take a look at a few of the other firsts we've achieved along the way.



**1995**

First bird cells banked:  
painted stork



**2000**

First reptile cells banked:  
Pacific coast rattlesnake



**2004**

First cells from an extinct  
species banked: po'ouli,  
a Hawaiian honeycreeper



**2006**

First amphibian cells banked:  
African clawed frog



**2007**

First fish cells banked:  
rainbow trout



SAN DIEGO ZOO WILDLIFE ALLIANCE

TWENTY-ONE SIXTEEN ADVISORS

## 2116 ADVISOR SPOTLIGHT

### *Dianne Bashor*

San Diego Zoo Wildlife Alliance is proud to recognize Dianne Bashor for her remarkable dedication and decades of heartfelt support.



For more than 40 years, Dianne has stood as a passionate advocate and cherished member of our family. Alongside her late husband Jim, Dianne's philanthropic leadership has left an indelible mark on our mission and on the San Diego Zoo itself.

One of their transformative contributions with greatest impact is **WILD Heroes**. This program welcomes local armed forces service members and

their families to enjoy Zoo visits, fostering healing, connection, and community as they transition to civilian life. Thanks to Dianne and Jim's endowment, this unique initiative will continue for generations to come. In addition, **Dianne's generosity ensures active duty military will have free access to the San Diego Zoo and Safari Park in perpetuity**—a profound expression of gratitude for those who serve, and a

testament to her belief in the restorative power of nature.

Her extraordinary commitment to our organization is reflected in the naming of **Bashor Bridge**, the Zoo's central thoroughfare and connection point for guests exploring our grounds. This lasting tribute honors the Bashors' vision of a more accessible and inspiring Zoo for all.

**Dianne is also a devoted fixture of our R•I•T•Z fundraising gala.**

She is a regular table host, and she rallies support for meaningful initiatives while creating unforgettable memories for all who attend. With her signature warmth, elegance, and enthusiasm, she helps elevate the event year after year.

**Dianne Bashor's generosity and passion for our organization have touched countless lives.**

We are deeply grateful for her enduring support and the lasting joy she brings to our guests and community.

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## HUB HIGHLIGHT



# Standing Tall for Giraffe Populations

Found on page 20



## MEDIA HIGHLIGHTS

### Our mission to create a world where all life thrives continues to make news.

From a beloved event right here in San Diego to a breathtaking rescue mission spanning three continents, our work is capturing hearts and headlines both near and far. You can find out more as you read through this issue.

Our social media accounts are making a splash! Capitalizing on a popular recent fairy-themed meme, a video of a hippo swimming balletically at the Zoo has gone viral, amassing **5 million views** across our platforms. This graceful grazer has helped us reach **805.7 million total views** so far this year. We're always on the lookout for the latest trends, reaching new audiences in fun and engaging ways.

The July/August issue of the Journal is all about **coexistence and our efforts around the world to ensure wildlife, ecosystems, and people live in harmony.**

Packed with inspiring stories about jaguars in Peru, elephants in Kenya, and more, this edition shines a light on how we're teaming up with partners and communities to build a sustainable future for all.



### SAN DIEGO ZOO WILDLIFE ALLIANCE JOURNAL

JULY/AUG 2025

COEXISTING WITH WILDLIFE around the world



# — HERE'S WHAT'S HAPPENING — ACROSS THE ALLIANCE



## Allies in Conservation

*When wildlife thrives, all life thrives*

### **Two leading wildlife parks**

We are a global conservation organization uniquely positioned with two leading wildlife parks: the San Diego Zoo and San Diego Zoo Safari Park. More than 5.5 million guests from around the world join us each year to connect with wildlife and the natural world we share. It's a life-changing experience that stays with each ally long after they leave. Our global reach extends even further, touching one billion people in 150 countries each year through our social media and communication platforms.

### **San Diego Zoo**

San Diego Zoo  
**Safari Park**

### **Eight global hubs**

As a conservation alliance, we partner with other experts and communities in eight strategic regions worldwide: our Conservation Hubs. By uniting our strengths, expertise, and resources in these rich, biodiverse hotspots, we have a greater impact as we work together to safeguard the future of the planet, its wildlife, and the ecosystems we all share. Because when wildlife thrives, all life thrives.

**AFRICAN FOREST**

**AMAZONIA**

**ASIA**

**AUSTRALIAN FOREST**

**OCEANS**

**PACIFIC ISLANDS**

**SAVANNA**

**SOUTHWEST**

# Collaborate

## AT THE SAN DIEGO ZOO

### LITTLE CUBS GET A BIG INTRODUCTION

Every wildlife birth is worthy of attention, but two new sloth bears at the Zoo got the star treatment. First-time mother Shala recently welcomed the cubs, and we celebrated their debut with a social media poll to choose their names. More than 11,000 votes poured in from excited wildlife allies around the globe, who helped us spread the word about the pair's big arrival to even more people.

And that was just the beginning, as **"Good Morning America" then announced the winning names live on television.** Anchor Michael Strahan broke the news from their New York City studio: the male cub was named Kumar, meaning prince, and the female was named Shehani, meaning magic, shining, and regal.



*Kumar and Shehani exploring their habitat at the San Diego Zoo.*

Because of our partnership with "Good Morning America," **millions of viewers were able to connect with the furry family and learn about the conservation work we do every day to protect this threatened species in their native Asian habitats.** Following their

moment in the spotlight, Kumar and Shehani are happily exploring their world and learning important life skills from their mom. Be sure to catch a glimpse yourself along Upper Center Street the next time you're at the Zoo.

## MAKING NEWS

"Good Morning America" isn't the only place these little cubs made a name for themselves.





*The Safari Park is a U.S. Fish and Wildlife Plant Rescue Center for succulents, cycads, orchids, and more.*

### **A PRESTIGIOUS AWARD FOR A UNIQUE PARTNERSHIP**

When you think of detectives, you might picture Sherlock Holmes or the cast of a gripping TV drama. However, some of the most committed crime-fighters aren't fictional characters — they're scientists investigating human threats to animals. For more than 30 years, we've proudly contributed our expertise to help these super sleuths create a safer world for wildlife.

The National Fish and Wildlife Forensics Laboratory, part of the U.S. Fish and Wildlife Service, uses advanced science and technology to solve cases of illegal wildlife trafficking and poaching. When an incident occurs, the lab gathers physical evidence that can link the

crime to those responsible. That's where we come in. By providing the lab high-quality samples, such as feathers or bones, to use as references, we add critical context to strengthen their findings.



To date we've shared 1,200 specimens with our partners, bolstering their work on numerous cases.

In recognition of these joint efforts, **the Forensics Laboratory honored San Diego Zoo Wildlife Alliance with their first-ever Coin of Excellence.** This award symbolizes our successful ongoing relationship and our shared mission of safeguarding wildlife. Partnerships like these are vital in ensuring the health and survival of countless species, and it doesn't take a magnifying glass or night-vision goggles to see the difference we can make together.

*We've cared for many animals rescued from the illegal pet trade, including critically endangered spider monkeys.*

# Innovate



*A desert tortoise hatchling.*

## STUDYING THE EFFECTS OF TEMPERATURE ON TORTOISES

For most tortoises, sex is determined by the temperature their eggs are incubated at before they hatch. Warmer weather produces females, while cooler temperatures produce males. This is true for critically endangered Mojave desert tortoises found here in the Southwest. To maintain a healthy and sustainable population

of this species, it's vital that the temperatures of their native ecosystems remain in balance.

We're working to better understand the relationship between temperature and offspring sex so we can protect these tortoises. Previous research has identified a consistent temperature range that produces a 50:50 ratio of males and females in managed care.

However, it's critical to study egg clutches in native habitats to learn how populations are impacted by naturally occurring temperature variations. Our teams collaborated with The Living Desert Zoo and Gardens in Palm Desert, California, to analyze two years' worth of data, including the number and sex of tortoises hatched under various conditions. We discovered nest temperatures fluctuate significantly, particularly during the sensitive period when sex is determined.

These insights help shine a light on how variables like heatwaves and climate instability are impacting the population ratios for these reptiles. **Maintaining healthy proportions of male and female offspring is essential to protecting desert tortoises, and this research will guide next steps to secure the future for the species.** Thanks to these efforts, we're another "slow and steady" step closer to doing so.

**AT THE FROZEN ZOO****A FAST NEW TOOL FOR BIOBANKING**

Ever since our biobanking efforts began 50 years ago with the Frozen Zoo, we've employed the latest technologies to save endangered species. Biodiversity loss has been a rapidly increasing threat, so time is always of the essence as we collect and preserve samples that can protect wildlife across the globe.

We recently took another step forward by implementing an exciting new sample inventory

system. **This innovative system is helping us more easily track and review our cryopreserved collection, and with millions of samples in our Wildlife Biodiversity Bank, it's making a big difference.** The program has already increased the efficiency and capacity of our teams, supercharging their ability to do this crucial conservation work.

It's also now easier than ever to share the essential resources of the Frozen Zoo. This is especially important as we help develop a decentralized global network for

biobanking capacity. Quick transfers of samples and information will benefit everyone's efforts, and the more we can share our findings, the more we can do to protect and care for the wildlife that need us the most.

This isn't just a sample inventory system: **it's a vital communications tool fostering teamwork and collaboration.** In the race to safeguard endangered species, every moment counts, and with this powerful new program, harnessing our biobanking resources is faster than ever before.



*Preserving samples at the Frozen Zoo.*

# Inspire



Food, Wine & Brew celebration at the San Diego Zoo.

## AT THE SAN DIEGO ZOO

### CHEERS TO FOOD, WINE & BREW

**Food, Wine & Brew made its tasty return to the San Diego Zoo.** Taking place this year on a new date in late spring, the event brought the same excitement, flavors, and celebration for conservation that guests have always loved. Not even a little rain could tamp down the party atmosphere!

Attendees enjoyed exploring the Zoo while savoring delicious bites from local restaurants and sipping on some of the region's finest wines, craft brews, spirits, and more. Also returning this year was the Conservation Stage, where guests heard stories from our incredible wildlife care experts, connected with wildlife ambassadors, and learned how we can all make a difference for conservation.

**Every dollar raised helps support the work we do through our eight Conservation Hubs across the globe, advancing our efforts to save, protect, and care for species at risk.** From delectable dishes to inspiring wildlife encounters, Food, Wine & Brew 2025 gave guests a taste of our mission that we know will keep them coming back for more.

## MAKING NEWS

This exciting annual event once again captured headlines throughout San Diego.





Amazing Wildlife hosted by Rick Schwartz and Marco Wendt.

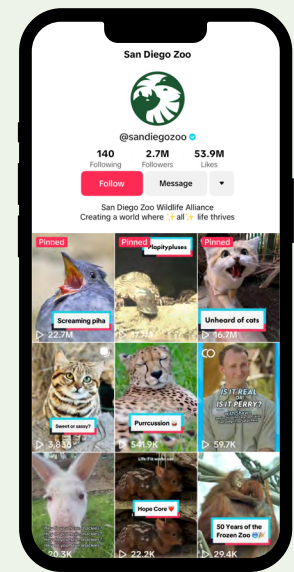
**DIGITAL STORIES THAT INSPIRE ACTION**

Sharing our mission is essential to creating a world where all life thrives. By reaching new audiences, we can amplify our impact and drive meaningful change even further. One way we do this is through our award-winning podcast, *Amazing Wildlife*.

Hosted by Rick Schwartz and Marco Wendt, **the podcast has returned for an exciting fourth season, continuing to inspire and educate listeners across the globe about the wonders of the natural world.** Rick and Marco connect with experts to uncover fascinating insights about species

like flamingos and meerkats, while exploring groundbreaking initiatives like the Frozen Zoo. To hear these episodes and more, you can find *Amazing Wildlife* on the iHeartRadio app, Apple Podcasts, or your favorite podcast platform.

These compelling stories highlight the scope and significance of our conservation work both in San Diego and around the world. **Through *Amazing Wildlife*, we're bringing our mission to a global stage, showcasing our innovation and inspiring listeners to become allies for wildlife and the ecosystems we all share.**



**A BIG WIN AT THE WEBBYS**

*Amazing Wildlife* isn't our only digital award winner! Recently our social media team took home the "Internet's highest honor," a Webby Award, which honors excellence in major media. We were proud to take first in the Social – Animals category. Congratulations to all involved!

*We share our mission with 2.7 million followers on Tik Tok every day.*

# Thrive



Click to  
watch video

## AT THE SAFARI PARK

### ELEPHANT HERD STAND UNITED DURING EARTHQUAKE

Wildlife around the world exhibit remarkable behaviors in response to natural phenomena. Elephants in particular possess an extraordinary ability known as seismic communication, allowing them to “hear” through their foot pads by detecting vibrations and sounds through the ground. This unique adaptation proved crucial for the elephants at the San Diego Zoo Safari Park when an earthquake struck earlier this year.

On April 14, 2025, a 5.2 magnitude earthquake shook Southern California. In an instinctive and coordinated response, the elephant herd immediately formed an



“alert circle.” The adults gathered closely together, facing outward to scan for danger, while the youngest members waited safely positioned in the center of the group. As the tremors subsided, the herd continued to assess their surroundings, looking for any signs of additional threat.

Elephants experience earthquakes in native habitats, and they use alert circles to keep the herd safe from other threats too, including

predators. **This natural response helped elephants Ndlula, Zuli, Mkhaya, Umngani, and Khosi communicate effectively to protect the herd—especially their most vulnerable members.**

All wildlife we care for were safe, and they soon returned to business as usual. Their remarkable response showcases the sophisticated ways nature equips animals to survive and thrive in a dynamic and unpredictable world.

Did you catch this  
mega-viral moment  
on social media?

The heartwarming  
encounter has racked  
up more than  
18.3 million views  
across our platforms.

## MAKING NEWS

These prepared pachyderms went viral, receiving notices in some of the biggest outlets in the country.

The  
New York  
Times

CBS  
NEWS

TODAY

The  
Washington  
Post

abc  
WORLD  
NEWS  
TONIGHT

GOOD  
MORNING  
AMERICA  
abc

Los  
Angeles  
Times

AT THE SAFARI PARK

**GROWING OUR  
BROWSE PROGRAM**

Our horticulturists are true experts in the art of growing browse, the essential plant materials that nourish the wildlife we care for. They know what to plant, how to nurture, and when to harvest to ensure the healthiest growth and highest quality nutrition. Our teams work diligently to meet the needs of all species by also regularly reevaluating our cultivation methods.

**Recently we completed two major expansions at our 30-acre browse farm at the Safari Park.** To further vary the diet of giant pandas at the San Diego Zoo, we planted two new types of bamboo for them to enjoy. These additions not only enhance their dietary options but help strengthen the sustainability of our long-term supply. We also planted 220 additional acacia trees as a part of our Milky Way Browse Farm project. This initiative expands choices for herbivores at the

Safari Park, including giraffes, elephants, and okapi.

These efforts highlight our commitment to ensuring wildlife thrive. **By continuously expanding and refining our browse program, we can guarantee sustainable, high-quality nutrition, meeting the unique needs of each unique species.**

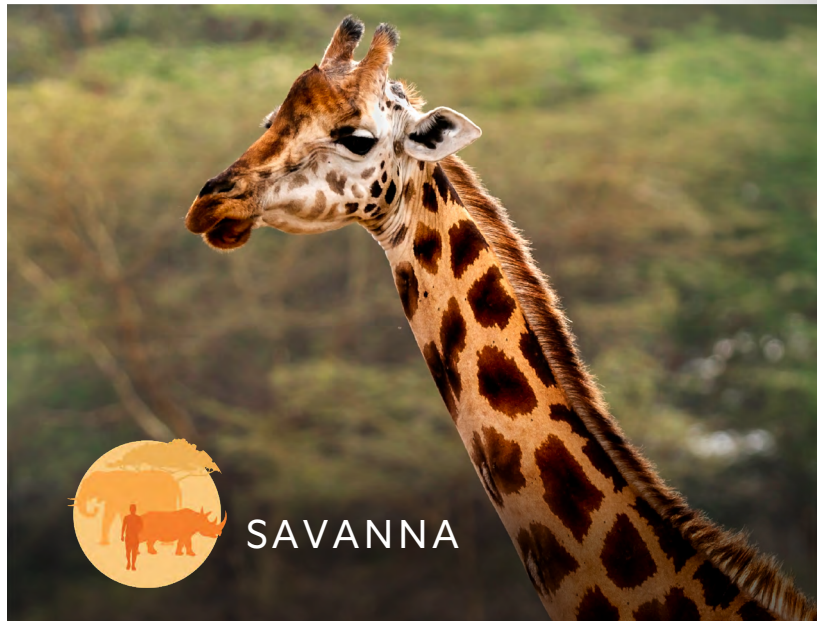
*Milky Way Browse Farm.*



# CONSERVATION HUBS



PACIFIC ISLANDS



SAVANNA



ASIA



SOUTHWEST



Click tile to  
jump to hub

## Eight Global Hubs

Our eight Conservation Hubs around the world represent biodiverse regions where we can best apply our expertise and where we are currently most invested. Our goal is to make the greatest impact for wildlife, local communities, and ecosystems. With teams on the ground, these Hubs also help us build on new and existing alliances to increase the scope of our work.





*Fiji iguanas' unique coloring makes them particularly vulnerable to the illegal reptile trade.*

# An International Rescue Mission

*Teaming up to save wildlife from illegal trafficking*



## AT THE SAN DIEGO ZOO

While they are known for their vibrant green and blue scales, Fiji iguanas stand out for more than just their appearance. They are seed dispersers vital to the health of plants across their tropical forest habitats. And because they are critically endangered, every individual of this species is crucial to both their global population and their delicately balanced ecosystems.

**For 60 years, we've partnered with Fiji to care for these resplendent reptiles.** In the 1990s, a collaborative conservation breeding program was established at the Zoo, and today we care for the largest and most successful colony outside of their native island habitats. In fact, because of this trusted relationship, every Fiji iguana at institutions accredited by the Association of Zoos & Aquariums (AZA) has come from the San Diego Zoo, and we



*Our teams across the organization came together to assess the rescued reptiles.*

collaborate closely with colleagues on their care.

As we continue working to safeguard the future of Fiji's national treasures, our expertise and partnerships equip us to respond in an emergency. **So when Spanish authorities rescued eight Fiji iguanas from traffickers, we mobilized an international team to act.** Alongside experts from Fiji, Spain, and the U.S., we coordinated a meticulous plan to safely bring the iguanas to the San Diego Zoo. On arrival, our teams

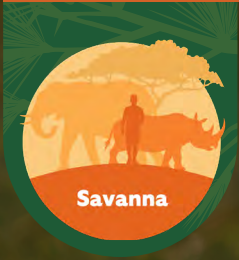
provided health examinations and determined what care they'd need moving forward. We even began routine genetic testing to determine the individuals' origins, allowing us to both better understand them and create specialized plans to ensure they thrive.

**Collaborative and comprehensive action like this is possible when we harness our decades of collective expertise.** Caring for wildlife means the world to us, and for these iguanas, the world united to care for them.

## MAKING NEWS

News sources across our region helped share the story of these resilient iguanas.





# Standing Tall for Giraffe Populations

*Collaborating on new protections for an unforgettable species*

Patterned with patches in earth-colored hues, giraffes can easily camouflage themselves within their grassy savanna habitats—despite being the tallest mammal on Earth. Yet they haven't been able to hide from the growing challenges threatening their survival. Habitat loss and diminishing resources have left populations vulnerable, leading to a steady decline across their native ecosystems. **Protecting these iconic wildlife is no small feat and requires coordinated efforts from a wide network of our teams.**

Recently our researchers, wildlife care specialists, and other teams collaborated to support a proposal to list giraffes under the Endangered Species Act. This critical designation would provide official protections to help safeguard giraffes, preserving their role in sustaining biodiversity for their populations and their ecosystems.

We also contributed to discussions about updated giraffe classifications. Based on genetic and evolutionary evidence, the proposed reclassification

recognizes giraffes as four distinct species rather than one species with nine subspecies. This development would help tailor conservation strategies to address the unique needs of each species, ensuring more effective efforts both here in the U.S. and in Africa.

**Our teams collaborate with each other and with partner organizations to exchange knowledge, refine strategies, and align efforts to drive meaningful and lasting impact.** We are all committed to ensuring giraffes thrive, towering over the savanna for generations to come.

*We are always looking for new ways to ensure the future for species like giraffes.*



## OCEANS CONSERVATION HUB



## A Huge Step Forward

*Studying penguin feet helps advance conservation efforts*



*African penguins on a sandy beach in Cape Town, South Africa.*

Each individual living in a group—whether part of a herd, troop, or even a pride—is important to the community's overall health and harmony. This is true for African penguins, where differences in individuals' ages can influence group dynamics including social structures and population trends. Because of this, understanding age distribution can be key to successfully implementing conservation approaches for this

critically endangered species.

Our teams collaborated to support the development of an innovative approach that identifies age ranges of African penguins. Using images of penguins from the San Diego Zoo, **experts discovered it's possible to determine how old a penguin is based on the pigment of their feet**, with darker shades indicating older individuals. With this information, researchers

developed a noninvasive tool to help estimate the age structure of colonies in native habitat from a distance.

**Developing novel approaches like this can enhance the scope of conservation solutions.** With this resource, experts will use age structure to guide the most effective strategies for specific populations. Now that's putting your best foot forward.



## A Whale of a Win

*Marine mammal cell line added to the Frozen Zoo is one of few for its species*

### AT THE FROZEN ZOO

Fin whales are truly larger than life—they're the second largest mammal on the planet, to be exact. Despite the powerful attention they command across their deep ocean ecosystems, fin whales face significant threats, including climate instability, habitat loss, and commercial whaling. Yet there's

still hope for this species: with the help of our Frozen Zoo, we're working to protect fin whales today to ensure they can thrive in the future.

In an exciting milestone, **our experts recently established a new fin whale cell line in the Frozen Zoo.** This marks just the second

fin whale sample we've banked using advanced cryopreservation techniques, and it's among only a few others of the same species banked throughout the U.S. This addition helps safeguard the genetic diversity of fin whales, which is vital to increasing their chance of long-term survival.

Just like fin whales hold a powerful place in their ecosystems, the Frozen Zoo is equally powerful in protecting them. We're taking essential steps to ensure stability for fin whales by preserving the species' genetic material in the Frozen Zoo now. With every new addition to this collection, we're creating a bigger impact for fin whales in waters worldwide.



*Fin whale cryopreserved samples. (Photo credit: NMFS Permit 22306)*





# Protecting Species from the Ground Up

## *How studying eucalyptus trees helps inform koala conservation*

Koalas, one of Australia's most iconic species, are deeply dependent on another iconic symbol of the continent: eucalyptus trees. These towering plants grow lush, deep-green leaves and are essential to the survival of koalas, serving as both their habitat and primary food source.

Unfortunately eucalyptus forest ecosystems are under increasing threat. Bushfires, intensified by climate instability and habitat fragmentation, pose one of their greatest dangers. With koalas listed as a vulnerable species,

these threats only amplify the risks the marsupials face. Protecting koalas is therefore intertwined with protecting their habitats.

**Our partners at Science for Wildlife conduct regular koala and habitat surveys in the Greater Blue Mountains Heritage Area in southeastern Australia.** These efforts include identifying and mapping nearly 100 eucalyptus species, a challenging task that requires experts to meticulously examine each individual's bark, leaves, flowers, buds, and fruit.

They also monitor where koalas live and how they're using their environments, which provides critical insights into the types of eucalyptus most important to koalas.

**This research supports effective conservation strategies for key plants and habitats, fostering a healthy and sustainable home for koalas.** By safeguarding eucalyptus trees, we can help ensure a brighter future for koalas and the ecosystems that help them thrive.

*A koala resting in a lush eucalyptus tree.*

## ASIA CONSERVATION HUB



## A Flourishing Relationship

*How bamboo conservation benefits the pandas that rely on it*



### AT THE SAN DIEGO ZOO

It's impossible to imagine giant pandas without bamboo. After all, this hardy grass constitutes nearly their entire diet and fills their native forest habitats, intertwining the health of both plant and animal. As we join our partners in China to find powerful, lasting conservation solutions for pandas, we also explore the critical role bamboo plays in these efforts. Guided by our decades of expertise, we dedicate six acres

of our expansive browse farm to bamboo, growing 135 species in total. With the arrival of Xin Bao and Yun Chuan at the Zoo's Denny Sanford Panda Ridge, we have redoubled our efforts to identify which species these bears prefer, which of them grow sustainably, and which thrive in our climate. We even regularly test soil and leaf material to ensure optimum nutrition for the bears. Our world-class horticulture team

*Yun Chuan enjoying tasty bamboo.*

works year-round to ensure an ample and healthy supply for the pandas we care for, and what we learn here helps inform long-term conservation decisions.

**By aligning our efforts with giant pandas and bamboo alike, we're not just protecting both species—we're nourishing their entire ecosystem.** It's a relationship that proves great things grow together.

# Breathtaking Bamboo

Bamboo is the fastest growing plant in the world. One species can grow three feet per day—that's a millimeter a minute!

Some species of bamboo grow only a few inches tall, while others tower at over 100 feet.

We provide Xin Bao and Yun Chuan a total of 90 pounds of bamboo a day, which our teams hand-harvest and bundle for them.

Bamboo only produces new growth in the spring, when thin groves erupt with nearly 10,000 shoots almost overnight. We mix these tasty young shoots with mature bamboo to provide the best nutritional mix to Xin Bao and Yun Chuan, just like pandas eat in native habitat.

## SOUTHWEST CONSERVATION HUB



# Planting Seeds for the Future

*A breakthrough for biobanking protects the future of an exceptional species*



Ruby Iacuanello, Research Associate in Plant Conservation, San Diego Zoo Wildlife Alliance.

## AT THE FROZEN ZOO

Our Wildlife Biodiversity Bank's Native Plant Gene Bank contains millions of preserved plant seeds and tissues, representing an astonishing variety of plant species. However, oak trees offer a unique challenge to biobanking. Oaks are "exceptional species," meaning their acorns cannot be preserved using traditional seed banking methods. So how can we



preserve these species in our Frozen Zoo and protect their future?

A breakthrough in plant biobanking has led to a new milestone. After years of study and effort, our teams banked cells from 18 genetically unique, endangered Nuttall's scrub oak embryos. This marks the first plant specimens added to the nitrogen tanks of our Frozen Zoo. This cryopreserving technique is the most effective way to preserve oak trees, and these cells can be thawed and propagated

into whole trees when they're needed.

**With over 100 oak species worldwide classified as vulnerable or endangered, this is a significant advancement for oak conservation.** It also sets the stage for expanding similar techniques to other tree species facing conservation challenges. With each discovery and innovation, the Frozen Zoo is planting seeds of hope for wildlife everywhere.

Banked Nuttall's scrub oak cells at the Frozen Zoo.

# A Mighty Effort for a Mighty Oak

## *Championing the collective to restore an endangered local species*

It often takes a community to save, protect, and care for threatened species, including those like the Engelmann oak tree. One fifth of oaks found in the U.S. are faced with extinction, and the Engelmann, despite being native to Southern California and Baja Mexico, is now only found in San Diego County. Thankfully local residents from the young to young at heart are eager to increase the population of this species in one of its native ranges.

Groups from across the region assisted with an Engelmann oak planting event at the Viejas Community and nearby Viejas Resort in Alpine, California. First our team prepared the soil by digging and pre-watering holes for 100 trees donated by a partner. Then some unexpected volunteers stepped in to finish the job. Students from local elementary and middle schools collaborated with our experts to plant the saplings, playing a key role in

this project while experiencing the broader importance of conservation firsthand.

**These newly planted trees will help restore the species to the habitats where they once thrived and will further our goal of protecting them for future generations.** Neighbors and resort guests alike will enjoy these oaks for years to come, allowing them to grow alongside the communities dedicated to preserving them.



*Our team planting trees to help restore the Engelmann oak.*



## AMAZONIA CONSERVATION HUB



## The Heartbeat of Progress

*New medical technology is changing what is possible for wildlife in Peru*

What if you could hold the future of wildlife care in the palm of your hand? Imagine devices as small as a smartphone, and just as powerful, capable of assisting professionals both in veterinary facilities and in the field. These innovative tools are becoming a reality, revolutionizing the way experts address the health of the world's most vulnerable species.

**This new technology is already making medical care easier than ever for two conservation partners in Peru.** Our partners at Amazon Shelter and Taricaya Ecoreserve treat animals rescued from illegal trafficking that may need veterinary medical care. To support these populations and continue finding new ways

to offer the best care possible in these remote locations, our partners identified the need for more sophisticated yet easy-to-use anesthesia tools.

We collaborated with them to test the Vetcorder, a portable device designed for noninvasive monitoring during medical procedures. The Vetcorder is placed on a paw pad, ear, or skin flap to track vital signs such as heart rate, oxygen levels, and blood flow. It also beeps whenever a heart rate is detected, delivering continuous insights while working with animals that may be under anesthesia for the first time. Compact, energy-efficient, and user-friendly, this tool increases the shelters' capacity to provide

reliable healthcare quickly and effectively.

**The Vetcorder has already proven to be a great success, providing high-quality care to Peruvian wildlife.** We are now working with the shelters and the local veterinary school to improve diagnostic pathology support. This will also promote banking of biological samples, increase knowledge of infectious diseases, and inform disease risks as animals are reintroduced into their habitats. That's a tremendous amount of progress for wildlife care in the region, all because of this new device. Sometimes it's the smallest tools that make the biggest impact.





*Macaw perching on a branch  
in the Amazon rainforest.*

## AFRICAN FOREST CONSERVATION HUB



# The Future Is in Their Hands

*Two students are charting a course for conversation in Africa*



*Njuma River in the Ebo forest, Cameroon.*

The field of conservation is continuously evolving, and young visionaries are at the forefront of this progress. With fresh perspectives and a commitment to protecting our planet, these emerging leaders are shaping the future of our efforts worldwide. When we create pathways for them to engage in meaningful work, we help ensure wildlife and ecosystems everywhere will be in capable, passionate hands for generations to come.

**Our teams in Cameroon's Ebo forest have launched a studentship program to support local university students pursuing careers in conservation.**

The first two recipients of this grant, Espérance Atemkeng and Vicky Mbougo, will receive everything they need to succeed: monthly stipends, reliable internet, and high-quality workspaces. Most importantly, they will collaborate with our teams and community partners to amplify efforts in the region with their insights and findings.

Their research is critical to deepening our understanding of Ebo forest's unparalleled biodiversity. Second in size only to the Amazon, this tropical forest is home to countless endangered species, plays a vital role in climate regulation, and supports the

livelihoods of local communities. By centering their studies in this region, Espérance and Vicky will help safeguard the larger tapestry of life on Earth.

**Supporting dedicated change-makers today ensures they are equipped to address the conservation challenges of tomorrow.** With this studentship, we are helping preserve the irreplaceable Ebo forest and investing in a brighter, more sustainable future for wildlife, communities, and the ecosystems they share.

## Meet the Students



### **ESPÉRANCE ATEMKENG**

is studying the behavior and conservation of guenons in the Ebo forest. These monkeys act as vital seed dispersers and pollinators, but they can be elusive and hard to document, making Espérance's research particularly valuable to our collective understanding of them and their rich ecosystems.



### **VICKY MBOUGO**

is assessing the effectiveness of community-managed trail cameras and mammal surveys. The people living in and around the Ebo forest know this region and its wildlife best, so Vicky's work with them will enhance an already robust program to care for animals thriving in the forest.



*Thank you for your support  
in making everything we do possible.*



The 2116 Advisors is a distinguished advisory group named in recognition of San Diego Zoo Wildlife Alliance's centennial legacy and its bold vision for the century ahead. These respected allies provide insight, advocacy, and support to help achieve lasting impact for wildlife and the planet.

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