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Newsletter

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SHAWN DIXON
President and CEO

As 2025 comes to a close, I am deeply honored to officially step into the role of president and CEO of San Diego Zoo Wildlife Alliance. This opportunity is a privilege, and I am inspired every day by the incredible work of our teams and the support of our San Diego community.

This year has been filled with progress and promise, made possible by the dedication of thousands of guests, members, and supporters like you. I hope that celebrating the Alliance's accomplishments, breakthroughs, and conservation efforts has been as meaningful to you as it has been to us.

In this final newsletter of the year, we reflect on some of the key moments that defined 2025: the celebrations of R•I•T•Z and California Panda Day, special births at the San Diego Zoo and San Diego Zoo Safari Park, the return of iconic species to our care, and the innovations driving conservation forward to protect wildlife and their habitats.

On behalf of the entire San Diego Zoo Wildlife Alliance team, thank you for your steadfast support and commitment to our mission. Your partnership is at the heart of everything we do, and together, we are creating a world where all life thrives.

Together for wildlife,

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

Shawn Dixon
President and CEO
San Diego Zoo Wildlife Alliance



SAN DIEGO ZOO WILDLIFE ALLIANCE



TWENTY-ONE SIXTEEN ADVISORS

CELEBRATING R·I·T·Z 2025

As summer sizzled, we turned up the cool factor with R·I·T·Z 2025, a spectacular evening honoring the 50th anniversary of our groundbreaking Frozen Zoo®.



Over 700 guests arrived decked out in their frozen finest, ready to revel in San Diego's favorite party. The evening began with cocktails and bites on Front Street, followed by a sumptuous three-course dinner in the Zoofari Party Area, and finally dancing under the stars. Our family of donors once again made this an electrifying night we won't soon forget.

Most importantly, the event benefitted our groundbreaking Frozen Zoo, an irreplaceable genetic repository securing the future of wildlife worldwide.

Over the past 50 years, the Frozen Zoo has played a pivotal role in protecting endangered species, and thanks to the generosity of our supporters, its impact will continue for generations to come.

Thanks a lot to everyone who joined us this year at R·I·T·Z—your support makes it all possible!



MAKING NEWS

San Diego's biggest party also made a big splash with the press.





SAN DIEGO ZOO WILDLIFE ALLIANCE



TWENTY-ONE SIXTEEN ADVISORS

2116 ADVISORS ANNUAL GATHERING

Nature, Connection, and the Next Generation



2116 Advisors Annual Gathering speakers included Richard Louv, Shawn Dixon, and Lisa Biasillo.

Thank you to everyone who joined us for the 2116 Advisors Annual Gathering in September.

This exclusive brunch event offered an inspiring glimpse into the profound impact we can achieve together when we unite for nature.

Guests were captivated by a conversation between renowned journalist and nature advocate

Richard Louv and our own Vice President of Education Lisa Biasillo. They explored his concept of “nature deficit disorder,” how our education programs are addressing these challenges, and how we can all incorporate nature into our daily lives. Attendees also experienced our mission firsthand with private tours of the San Diego Zoo’s Denny Sanford

Wildlife Explorers Basecamp and an up-close wildlife encounter.

As a special gift, those in attendance received butterfly-friendly milkweed plants grown by students in our Native Biodiversity Corps. It was the perfect way to bring home a piece of the transformative education initiatives made possible by your support.



SAN DIEGO ZOO WILDLIFE ALLIANCE



TWENTY-ONE SIXTEEN ADVISORS



Thank you for all you do as a 2116 Advisor. Today and every day, your dedication is helping create a world where all life thrives.





SAN DIEGO ZOO WILDLIFE ALLIANCE



TWENTY-ONE SIXTEEN ADVISORS

THE NEXT CHAPTER FOR THE FROZEN ZOO

Over the past year, as we've celebrated our Frozen Zoo's 50th anniversary, we've given you an inside look at its remarkable history and the immense potential it holds for wildlife conservation. By preserving cell lines and the irreplaceable genetic diversity they hold, this history-making

resource has helped protect countless endangered species around the world. And with each new innovation, our teams have expanded their efforts, safeguarding samples from wildlife species they'd previously been unable to bank, from birds to fish and now even plants.

As we close 2025, **we're already looking toward the Frozen Zoo's next 50 years.** Building on a half century of momentum, we've committed ourselves to ambitious goals that will further revolutionize what is possible for wildlife and the ecosystems we share.



Our Commitments for the Future:

We will build on our decades of expertise and collaboration to lead the biobanking of **all endangered species worldwide by 2075.**

The Arnold and Mabel Beckman Center for Conservation Research will grow in its role as **an unprecedented hub of global biobanking** and a unique venue of education and teamwork.

In collaboration with partners in Hawai'i, Kenya, Peru, and Vietnam, we will help establish **four new frozen zoo facilities**, empowering global scientists to protect an incredible array of native species.

With five decades of experience, passion, and unwavering dedication to protecting life on our planet, we're more prepared than ever to tackle the conservation challenges of tomorrow. Together with partners around the world, and valued allies like you, the potential of our cryopreservation efforts is nearly limitless. 50 years in, the Frozen Zoo is just getting started. **Thank you for making it all possible.**



Scan this code to discover more and share with others.



SAN DIEGO ZOO WILDLIFE ALLIANCE

TWENTY-ONE SIXTEEN ADVISORS

2116 ADVISOR SPOTLIGHT

Elizabeth and Peter Shoemaker

San Diego Zoo Wildlife Alliance is proud to honor Elizabeth and Peter Shoemaker for their longstanding support, vibrant leadership, and multigenerational commitment to conservation.



Elizabeth and Peter Shoemaker (left) and Betty Jo (BJ) Williams (right).

The Shoemakers' connection to the San Diego Zoo runs deep.

Elizabeth Shoemaker's mother, Betty Jo (BJ) Williams, was a former trustee and board chair who played a pivotal role in bringing giant pandas to San Diego nearly 30 years ago. BJ and her husband Hal instilled a love for wildlife and nature in their three children, including Elizabeth, during countless family visits to the Zoo.

That bond only deepened over time. Elizabeth and Peter were married in a joyful celebration at the Zoo amid some of the wildlife they love—just one example of how intricately the Zoo is woven into their lives. Together, they've passed this passion

to their own three children, making Zoo visits a family tradition.

Since BJ's passing in 2022, her legacy has continued to live on through a transformative gift to the Frozen Zoo. In her honor, Marlys Houck's position as Elizabeth J.F. Williams Endowed Curator of the Frozen Zoo is named, marking the cornerstone of the Frozen Zoo's 50th anniversary campaign.

Elizabeth has carried her mother's torch with heart and purpose. She served as a member of the former San Diego Zoo Global Foundation Board and was a driving force on the Denny Sanford Elephant Valley task force. **The Shoemakers' generous**

support of Elephant Valley—particularly of the elephants' watering hole and Mkutano Park—reflects a passion for creating powerful and immersive guest experiences. They've also been key supporters of education and conservation science efforts, helping bring critical research to life at the Arnold and Mabel Beckman Center for Conservation Research.

Elizabeth and Peter continue to inspire those around them and uplift the work we do around the world. Their kindness, generosity, and enduring belief in San Diego Zoo Wildlife Alliance's mission are a gift to our community and to wildlife everywhere.

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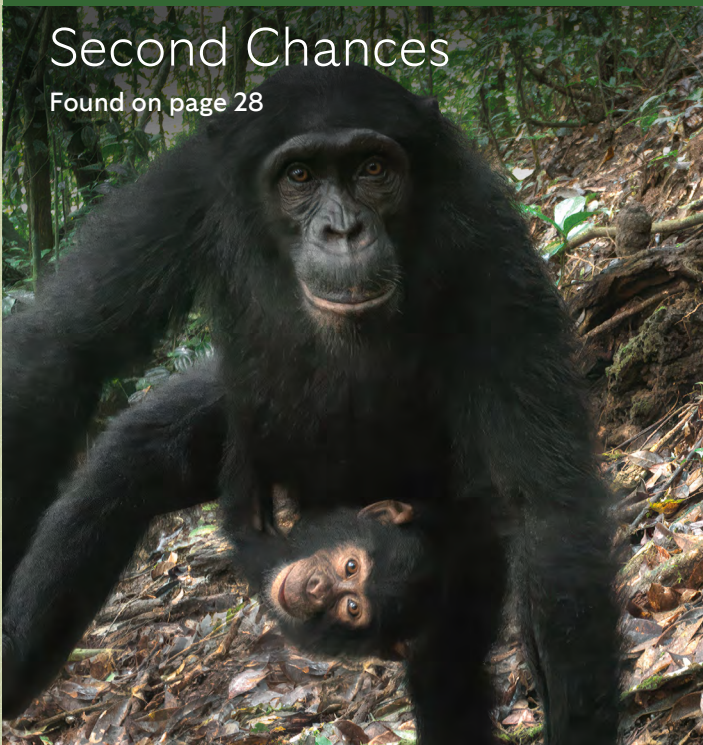
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HUB HIGHLIGHT

Second Chances

Found on page 28



SHARE THE EXCITEMENT

Throughout the issue, you'll find QR codes to discover more about these amazing stories and share them with your networks. Just point your cell phone's camera at the QR code, then click the link that pops up on the screen. You'll find exciting stories, social media posts, videos, and more. As trusted 2116 Advisors, your voice matters, and each story you share propels our mission of creating a world where all life thrives.



Scan this code to discover more and share with others.



MEDIA HIGHLIGHTS

Our vital conservation efforts are multifaceted and far-reaching, and so is the media attention they receive. Special events at the Zoo, exciting wildlife births, and partnerships across the Pacific all recently caught the attention of the press and helped us share our mission. You can discover more about those stories as you read through these pages.

This year we've teamed up with some of YouTube's most popular educational accounts to film episodes in our parks. Disney Channel, Dr. Seuss, ABCmouse, and Mutual of Omaha's Wild Kingdom all explore the important ways our teams protect and care for wildlife. The channels have a combined 13.4 million subscribers, helping us reach countless new, young audiences with our mission. They've also contributed to our **1.36 billion total social media views** so far this year.

The Journal is taking readers on **journeys across California and into the new year.** Two new issues explore our state's incredible biodiversity and how we're helping safeguard it, while also going behind the scenes with the orangutans we have the honor of caring for at the Zoo. Plus, the 2026 calendar features the elephants you'll connect with when the Safari Park's Denny Sanford Elephant Valley opens early next year.

SAN DIEGO ZOO WILDLIFE ALLIANCE JOURNAL



SEP/OCT 2025

THE GOLDEN STATE
California's Precious Biodiversity



NOV/DEC 2025

A BRIGHT TOMORROW
Orangutan group grows and our 2026 calendar



Scan this code to discover more and share with others.



— 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



Art installation on the new Safari Park Plaza at Frontwave Arena.

AT THE SAFARI PARK

ENTERING A NEW ARENA

Our mission every day is to create a world where all life thrives, and we do this in diverse mediums and, sometimes, in unexpected ways. Recently, we expressed this vision through a truly unique form: **an art installation on the new Safari Park Plaza at Frontwave Arena.**

Located at the entrance of this Oceanside, California, sports venue, the project was devised by the

Safari Park's horticulture team to highlight our Savanna Conservation Hub. The arrangement features a captivating sculpture of adult and juvenile giraffes connecting, their iconic brown patches replaced with see-through spots that offer a glimpse of the plaza beyond. This thoughtful design is complemented by botanicals and interpretative signage, crafting a space that's as educational as it is moving.

Debuting just in time for the new San Diego Clippers' basketball season, **this immersive installation offers a fresh and creative way to champion the conservation work we do every day.** It allows us to connect with thousands of visitors each year—many we might not reach otherwise—inspiring them to become allies for wildlife right alongside us.

“

There is a notable energy of kindness and empathy that runs through not only administrative staff but all staff at the Zoo, creating a wonderful environment for all guests.

— KultureCity Auditor

”



Headphone Zone at the San Diego Zoo.

AT THE SAN DIEGO ZOO

FOSTERING INCLUSION

Joyful groups of families and friends hurry toward Urban Jungle, eager to connect with giraffes. At the same time, the enticing aroma of snacks and sweets drifts in the air along Front Street. And in the distance, the roar of a big cat can be heard ringing throughout Tiger Trail.

The San Diego Zoo is a vibrant and dynamic gateway to connect with wildlife and conservation education. But for individuals living with invisible disabilities like autism or PTSD, the bustling crowds, strong smells, and loud sounds can be

overwhelming—or even physically painful. That’s why we’re deeply committed to ensuring the Zoo remains welcoming for all, and one way we achieve this is through our collaboration with KultureCity.

KultureCity is the world’s leading nonprofit organization dedicated to sensory accessibility and acceptance. Through their Sensory Inclusive certification program, **we provide resources and accommodations that ensure our spaces are welcoming throughout our two parks, each and every day.** This includes

complimentary sensory bags containing fidget tools, conversation cards for easy communication, and other helpful items, as well as signage that alerts guests to quiet places for respite and high-traffic areas where they may want to use noise-reducing headphones. During KultureCity’s recent annual site audit, the Zoo proudly earned a score of 98 out of 100.

We lean on the expertise of partners like KultureCity to continually improve how we meet the needs of our guests. This relationship ensures the Zoo is a place where everyone feels welcome, because when they do, they can better connect with wildlife, our mission, and one another.



Complimentary sensory bag that includes conversation cards, noise-reducing headphones, and more.

Innovate

EYES IN THE SKY

While many associate parrots with tropical regions, thick-billed parrots thrive in the pine forests of northern Mexico. Their woodland ecosystem, however, is unfortunately under increased threat from wildfires. In the 2025 fire season alone, the state of Chihuahua saw flames consume 82,000 square miles—an area larger than San Diego—including key nesting habitat for these endangered parrots.

Thankfully we and our partners in Mexico were prepared with a powerful new firefighting tool: satellite imagery. Near-real-time data enabled us to direct local fire crews to critical areas of the blaze and monitor its spread, protecting nesting sites most at risk. Without this insight, the remaining old-growth trees vital to sustaining parrot populations would have been imperiled.



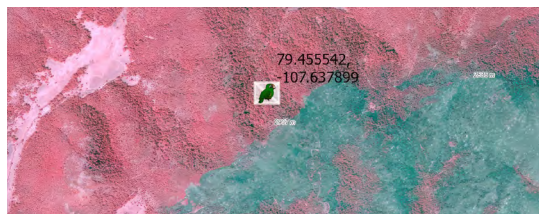
Thick-billed parrot thriving in its woodland ecosystem.

Because of this innovative new approach, **we saved the vast majority of thick-billed parrot nests from harm.** Satellite technology will inform conservation

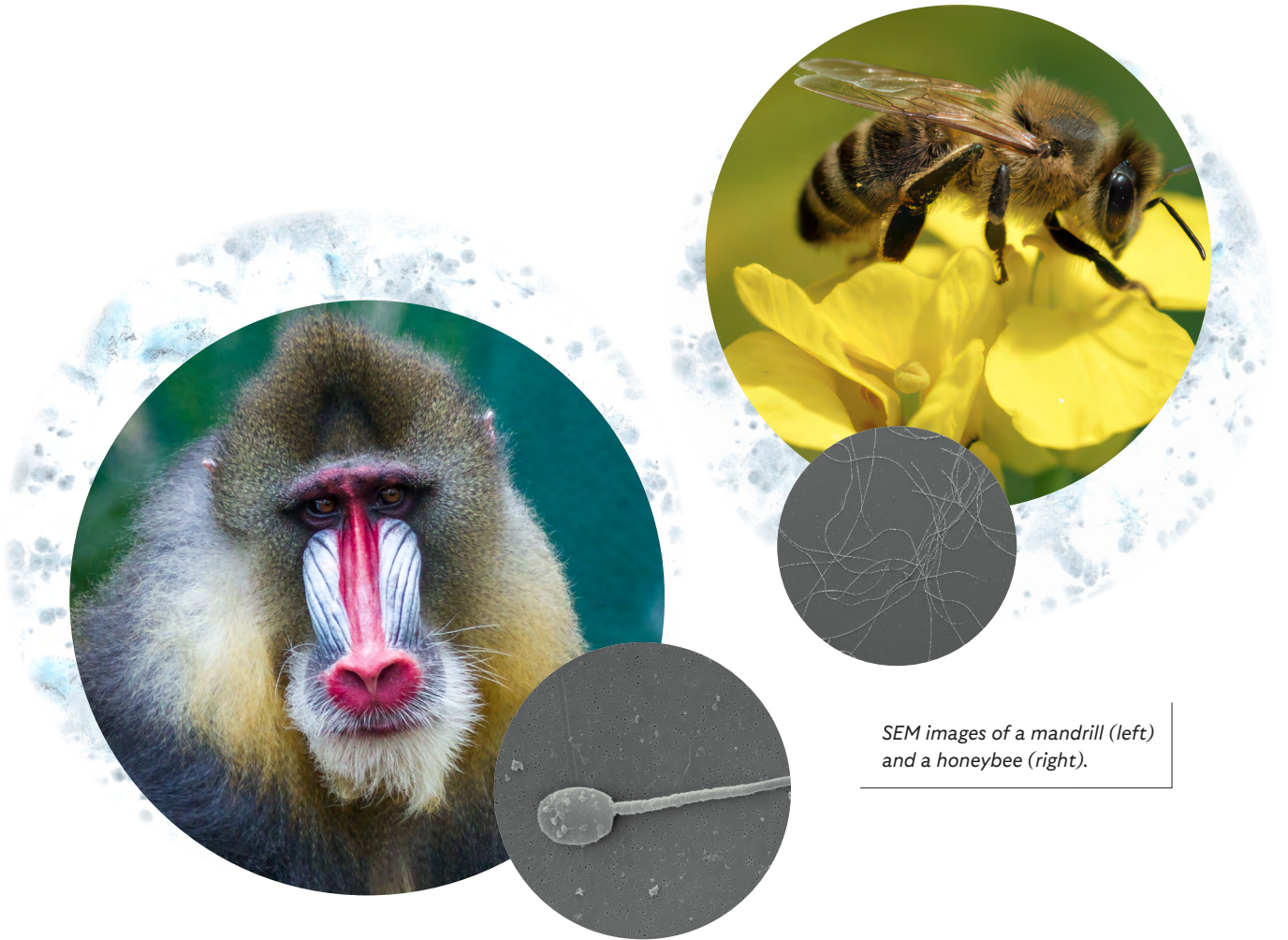
efforts in future crises as well. In the meantime, these resilient birds are safely flying through their native forests once again, soaring higher than any flames ever could.

Satellite imagery of northern Mexico forests.

[Photo Credit: Planet]



Scan this code to discover more and share with others.



SEM images of a mandrill (left) and a honeybee (right).

PICTURING THE FUTURE OF CONSERVATION

Imagine peering into a world so small you can't see it with the naked eye, yet so vital it holds the power to save entire species. Our Sperm Atlas has been unlocking these secrets since 2009, one microscopic photo at a time.

This groundbreaking resource catalogs the astonishing diversity of sperm characteristics across the

animal kingdom. It's the world's first free, online database of its kind, sharing data that can fuel the next chapter of conservation breakthroughs.

The Sperm Atlas recently celebrated a new addition: images from over 150 species captured by scanning electron microscope (SEM). These high-magnification pictures, created in partnership with San Diego

State University and University of California, Irvine, offer stunning clarity and intricate detail, providing scientists a fresh perspective on the building blocks of life.

By expanding and innovating this rich repository, we're inspiring a new generation of researchers, educators, and students to discover its potential. Together we're zooming in on what's possible for the future of conservation science.

[SEM Photo Credit: Dr. Ingrid Niesman, Director of the Electron Microscope facility at San Diego State University]

Inspire

AT THE SAN DIEGO ZOO

THE POWER OF PANDAS

When we first announced Yun Chuan and Xin Bao would be the first giant pandas to arrive in the U.S. in 21 years, a wave of excitement rippled from San Diego to China and all around the world. This year we once again celebrated that joy with **the anniversary of California Panda Day**, commemorating the duo’s debut at the San Diego Zoo along with the opening of Denny Sanford Panda Ridge.

While thousands of Zoo visitors joined us to mark the milestone, **one group of special guests made the day even more meaningful: families from Ronald McDonald House Charities.** San Diego’s Ronald McDonald House provides a “home away from home” for children being treated for serious, often life-threatening conditions at local hospitals. Together at a



California Panda Day on August 8 at the Zoo.

special early-morning event, these VIPs enjoyed a delightful breakfast, adventured on an exclusive tour of Panda Ridge, and collected festive panda ears and themed pins. They even snapped photos with costumed character Bamboo the panda, capturing unforgettable memories.

This unique experience offered Ronald McDonald House families a chance to bond with one another in a fun and uplifting environment while engaging with the magnificence of Yun Chuan and

Xin Bao. **It was a perfect morning to recognize what incredible impact the bear pair have already made in just one short year, including the powerful connections they help foster.**

With each and every guest that visits Panda Ridge, these pandas are inspiring the next generation of allies to advocate for their species and the ecosystems they rely on—and they’re bringing boundless joy while they do it.



Scan this code to discover more and share with others.

MAKING NEWS

News sources from across the region also helped us celebrate this pan-tastic occasion.



AT THE ZOO AND SAFARI PARK

AN ABUNDANCE OF AWARDS

While our conservation work isn't driven by recognition, we're always honored when we receive it. Awards serve as a testament to the trust our partners and the public place in our efforts. And as we connect people with wildlife locally and protect species globally, the diversity of these accolades reflects the breadth and depth of all we do.

Here are just a few of the honors we've recently garnered.

We won the **Association of Zoos and Aquariums's North American Conservation Award** for exceptional efforts protecting Pacific pocket mice, desert tortoises, burrowing owls, and more through our Southwest Conservation Hub.



As accredited botanic gardens and level IV arboretums, the San Diego Zoo and Safari Park received the **American Public Garden Association's Garden Excellence Award** for preserving biological diversity, demonstrating sustainable gardening practices, and educating the public about plants and gardens.



[Photo Credit: Norman Lee]

Dr. Debra M. Shier, our Brown Endowed Director of Recovery Ecology, received the **Animal Behavior Society's Conservation Behavior Award**, recognizing more than 20 years of outstanding contributions to the fields of animal behavior and conservation science.

We won **PRWeek's Purpose Award for Nonprofit of the Year** for sharing with audiences our conservation mission through authentic, powerful storytelling.

And for the third year in a row, our event venues received recognition as some of the best in the region: **Wedding Wire's Couples' Choice Award** and **The Knot's Best of Weddings Award**.

Thrive

AT THE ZOO AND SAFARI PARK

BABY BOOM

Every animal born at the Zoo and Safari Park is cause for celebration. Each little one—from joeys to cubs, hatchlings to calves—helps increase global populations and allows us to deepen collective understanding of how

to protect and care for their species. **Recently, three of these remarkable arrivals captured the attention of allies from across the country.**



Hamadryas baboon Defari (left), De Brazza's monkey Lulua (middle), and Père David's deer fawn (right).

For the first time since 2019, the Zoo welcomed an infant **hamadryas baboon, Defari**, and soon thereafter, Geleela was born as well. Their births support the baboons' Species Survival Plan, a program dedicated to ensuring their long-term sustainability.

Also at the Zoo is **Lulua, a De Brazza's monkey** already known for bouncing from hammock to hammock at the Monkey Trails habitat. Lulua will remain close to mom Lillie for the first year while also learning to navigate their troop's dynamics from big brother Kasai.

At the Safari Park, we welcomed a male **Père David's deer fawn** for the first time in 22 years. After bonding with his mother, he now keeps up with the rest of the herd on the savanna. **His arrival is a significant milestone for the population of his species, which has been extinct in native habitats since 1939.**



Scan this code to discover more and share with others.

MAKING NEWS

These youngsters caught the eyes of media outlets from coast to coast.



AT THE SAFARI PARK

PLANTING ROOTS

The longer wildlife live, the more they witness the passage of time. The saguaro cactus, for instance, can live up to 200 years, standing as a steadfast observer of centuries of change. Over the course of its long life, it also becomes a living symbol of the Southwest's history and an enduring reminder of nature's splendor.

Recently, we provided a new home for one of these prestigious plants. Thanks to a donation from a faithful supporter of many years, **a saguaro more than 100 years old was**

successfully transferred to the Safari Park, where it will thrive in the Old World Succulent Garden. It now resides among a lush landscape of plants native to our region and from around the world, and at 15 feet tall, it's a stunning focal point for our guests. Best of all, it strengthens our commitment to preserving diverse flora and securing their future.

This saguaro also represents a long legacy of generosity. It was once cared for by sisters Ellen Browning Scripps Davis and Josephine Stedem Scripps, who were

incredible philanthropists during their lives and helped shape many of San Diego's cultural institutions. In fact, Ellen is considered the first donor to the San Diego Zoo, so adding the plant to our garden is a remarkable honor and a full-circle moment.

As its long and storied journey continues, **this cactus has now become a part of our history**. It will continue to stand triumphant, inspiring us with its fortitude and growing alongside us for many more years to come.

Saguaro thriving with other cacti and succulents at the Safari Park.



CONSERVATION HUBS



AUSTRALIAN FOREST



ASIA



AFRICAN FOREST



OCEANS



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 scale our work.



SOUTHWEST



PACIFIC ISLANDS



SAVANNA



AMAZONIA

AUSTRALIAN FOREST CONSERVATION HUB



A Fan-TAS-tic Return

Welcoming Tasmanian devils back to the Zoo

AT THE SAN DIEGO ZOO

A feisty, high-pitched scream pierces the air. Then a dramatic sneeze follows. These distinctive sounds echoing from Conrad Prebys Australian Outback are just a few of the signs **Tasmanian devils have returned to the San Diego Zoo for the first time since 2023.**

Three-year-old brothers Flotsam and Jetsam recently arrived from Aussie Ark, a leading conservation partner based in New South Wales, Australia. Now that they've settled into their dynamic habitat, guests have had the extraordinary opportunity to connect with this duo and gain a deeper understanding of all we're doing to help protect Tasmanian devils everywhere.

Originally from the island state of Tasmania, this carnivorous marsupial species is renowned for powerful jaws, eerie growls, and spirited behavior. And as nocturnal scavengers, they play a vital role in ecosystems by cleaning up animal remains. Their survival, however, is at risk due to disease, competition for resources, and human-wildlife coexistence challenges. These mounting pressures have led to Tasmanian devils being classified as endangered.

Ongoing initiatives are fortunately offering hope for this iconic ambassador of Australian wildlife. We inspire visitors to care about Tasmanian devils at the Zoo, and we also work globally to protect them

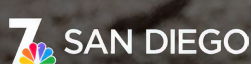
and their native habitats through our Australian Forest Conservation Hub. Our partnerships are key to facilitating the exchange of critical knowledge that spans the Pacific Ocean.

Thanks to these collective efforts, Tasmanian devil populations are beginning to recover. **Flotsam and Jetsam's arrival marks both a significant milestone and a compelling testament to the impact of collaborative conservation.** During your next visit to the Zoo, be sure to connect with the pair at Australian Outback and discover more about how we're working to safeguard unique wildlife like them for generations to come.

Tasmanian devil Flotsam thriving at the San Diego Zoo.

MAKING NEWS

We weren't the only ones saying g'day to Flotsam and Jetsam.





Scan this code to
discover more and
share with others.

ASIA CONSERVATION HUB



All in the Tiniest Details

Sharing expertise to amplify impact in Java



Javan leopard in the tropical rainforest of Java, Indonesia.

[Credit: Philippe Clement]

Long white whiskers frame the dark, spotted face of a Javan leopard, its piercing eyes radiating focus and power. These striking features are matched only by the leopard's striking significance in the region. As the sole apex predator on the island of Java, this critical cat plays a vital role in maintaining ecological balance. And culturally, some Javan communities revere it as a figure of prosperity and a guardian of the forests.

Unfortunately Javan leopards are threatened by challenges to human-wildlife coexistence as well as the devastating impacts of habitat loss and fragmentation. Once thriving

across Java and adjacent small islands, this magnificent species is now endangered, with just a few hundred remaining in native ranges. We're collaborating with partners to identify conservation tactics that will preserve the future for these leopards.

We recently conducted a genome sequencing training at Universitas Gadjah Mada in Indonesia, where students and researchers are working to develop a reference genome for Javan leopards. This template serves as an "instruction manual" of sorts for understanding wildlife. Our training session introduced their

teams to advanced technology essential for high-quality genome assembly. With this guide in hand, experts will be empowered to explore the species' genetic health, adaptation, and conservation needs in greater depth.

The more we learn about Javan leopards, the better equipped we are to determine what strategies could be most effective to safeguard them.

Through collaboration, we're supporting local capacity for genomic conservation research, protecting wildlife like these iconic and influential big cats with cutting-edge approaches.

Save It for Later

Embryos of critically endangered horses preserved in the Frozen Zoo for the first time

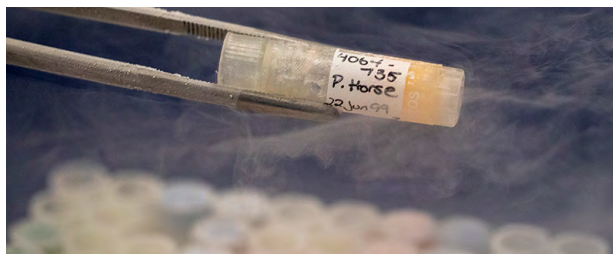
AT THE FROZEN ZOO

Przewalski's horses stand as a powerful symbol of resilience. Once abundant across grassy landscapes, this remarkable species started to disappear before finally becoming extinct in native habitats by the 1980s.

However, through the tireless collaboration and dedication of partners worldwide, their global population has been on the rise thanks to milestone recovery and conservation breeding programs. These feats have helped experts reintroduce individuals into native habitat and begin to restore critical genetic diversity to ensure healthy, thriving populations.

Safeguarding Przewalski's horses demands ongoing innovation, and our teams are continuing to leverage the groundbreaking resources of our Frozen Zoo to support this vital effort.

Cryopreserved samples of the Przewalski's horse.



Przewalski's horses grazing across grassy landscapes.

We recently collected six oocytes (eggs) from a female Przewalski's horse at the Safari Park. After four of the six eggs successfully matured, our team fertilized them to increase the likelihood of effective development. Of those, two progressed into advanced-stage embryos. These valuable samples are now cryopreserved and represent **the first Przewalski's horse embryos in the Frozen Zoo**, marking another

significant moment for the species' preservation.

This achievement ensures **the embryos will be available for potential reproductive efforts to further boost the species' genetic diversity**. Initiatives like these play a crucial role in fostering sustainable populations, giving Przewalski's horses hope for a long, bright future. Together with partners, we remain steadfast in our commitment to do whatever it takes to make that a reality.



Scan this code to discover more and share with others.

*Western spadefoot toad
emerging to breed.*



SOUTHWEST CONSERVATION HUB



Jumping for Joy

Protecting critical toad habitats in our Biodiversity Reserve

AT THE SAFARI PARK

Though western spadefoot toads spend most of the year tucked away in underground burrows, they aren't necessarily shy. They're simply awaiting the ideal conditions of a rainy or humid night so they can emerge and breed. During late winter and into spring, the toads lay their eggs in vernal ponds, temporary pools that fill with seasonal rains and then eventually dry up. These ponds are essential for eggs to hatch into tadpoles and then grow into froglets.

The San Diego Zoo Safari Park's dynamic, nearly 1,000-acre Biodiversity Reserve provides a home to a vast array of native wildlife, including the western spadefoot toad. Rising

temperatures, however, have made it more difficult for their pools to retain liquid. This problem was exacerbated in the Reserve's two ponds by the presence of invasive plant species including stinknet, which soaked up some of the remaining water.

Over the past year, **our experts teamed up with a group of dedicated community volunteers in the Reserve to protect the ponds these toads rely on.** First they hand-pulled the invasive plants from the area, which helped maintain water levels and improved overall habitat quality. Then, to boost the ponds' longevity, our teams added supplementary water and even used nearby silt to

"plaster" the bottom of the pools to reduce their permeability and drainage. And finally, two new ponds were built for the frogs, providing fertile new spots for them to breed and lay eggs.

In just a few short months, we've already seen tremendous results from this teamwork.

Last year 300 eggs successfully morphed into baby frogs in our ponds. That number soared to 800 this year, an overwhelming sign of the project's success. Thanks to our coalition of experts and volunteers, these spadefoots will emerge even stronger next season and will continue to leap toward a thriving future.



San Diego Zoo Safari Park
Biodiversity Reserve.



Scan this code to discover more and share with others.

PACIFIC ISLANDS CONSERVATION HUB



Answers for the ‘Akeke‘e

Study reveals welcome news for critically endangered birds

AT THE FROZEN ZOO

A vibrant flash swoops through the air as a Hawaiian honeycreeper navigates the lush, misty forests of the islands. Admired for their vivid plumage, petite size, and distinctive songs, honeycreepers once comprised nearly 60 iconic species. Today only 17 remain, many of which are in rapid decline.

This includes the critically endangered ‘akeke‘e, which has faced losses of an astounding 99+% in the past two decades, primarily due to avian malaria. Rising temperatures have allowed invasive mosquitos, the carriers of the disease, to spread higher into the mountains, leaving little to no refuge for honeycreepers, which lack immunity.

Thankfully there’s now renewed hope for them. **A new scientific study, led by our teams and research partners, offers a unique lens for understanding the unprecedented extinction crisis of Hawaiian forest birds.**

We uncovered significant insights by examining their genetic makeup. Encouragingly, surviving populations retain a high level of biological diversity, offering a foundation for sustainable recovery. These findings also determined that while the window to save the ‘akeke‘e is quickly closing, there’s still enough time to act.

Current initiatives to control mosquitos are underway. And in our Frozen Zoo, experts are

preserving the living cells of remaining ‘akeke‘e as a vital backup measure. This endeavor also offers opportunities to discover further genetic and evolutionary information.

Thanks to our longstanding and collaborative partnerships, **we can delve deeper into conservation efforts for the ‘akeke‘e, revealing invaluable information that was previously out of reach.**

The more we learn about these incredible birds, and all Hawaiian honeycreeper species, the greater our chances of protecting them from extinction—ensuring they can grace their forest homes with color and song well into the future.

‘Akeke‘e perched in a Hawaiian forest.

[Photo Credit: Jim Denny]

MAKING NEWS

The news of this study soared across headlines.









Second Chances

Protecting wildlife from illegal trade together

A bright-eyed, dark-haired chimpanzee infant wiggles impatiently as its mother meticulously grooms its coat. This little one is eager to chase around the other members of its troop. Meanwhile, a radiated tortoise moves steadily across the ground of its native forest habitat, scanning for fruits and grasses to eat. For now, life carries on as usual for these species and many others in their lush African ecosystem. However, a threat is lurking around the corner, putting their idyllic existence at risk.

The illegal wildlife trade is a global, multibillion-dollar industry that takes advantage of a wide range of species, using them for pets, food, clothing, and more. High demand for these items poses a particular risk to the survival of endangered

species because of their already diminished populations. To help, we collaborate with experts worldwide who are devoted to saving, protecting, and caring for impacted wildlife.

We proudly partner with the Limbe Wildlife Centre (LWC) in Cameroon, which rescues and rehabilitates animals affected by illegal bushmeat and pet trades throughout the region.

We've worked with LWC since 2007, assisting them with in-kind donations including vehicles and building materials for habitats. This year, we further strengthened our robust relationship by providing direct funding.

Our support will bolster staffing and advance the organization's latest initiatives. These plans

include reintroducing several African grey parrot flocks and expanding habitats for the dwarf crocodiles, turtles, and guenons in their care. Staff will also continue engaging in local education and outreach programs to help foster understanding and appreciation for local wildlife—themes and strategies that are the root of all our work in this region.

Together we can achieve more for Cameroonian wildlife, including the chimpanzees, tortoises, and others that rely on their habitats and healthy populations to thrive. Through our partnership, LWC can further their capacity for the expert work they already do, in areas they know best, to protect these species and give them a flourishing future.

A tender moment between a mother chimpanzee and her baby, caught on one of our trail cameras.

OCEANS CONSERVATION HUB



On Wings of Hope

New discoveries shed light on how plastic affects wildlife



A northern fulmar flying above the sea.

[Photo Credit: Getty Images]

The water glimmers as light reflects off an object bobbing on the waves. At a quick glance, it looks like an animal breaking through the surface, but this floating entity isn't actually wildlife thriving in its native habitat. It's a piece of plastic drifting with the current.

The presence of plastic in our oceans, along with its harmful effects, are not new revelations. Yet it can still be startling to realize how something so small can have profound consequences. **That's why we're deepening our understanding of how plastic**

interferes with wildlife in ways not previously known.

We recently published a study in the journal *Environmental Pollution* that explores how plastic affects northern fulmars, a seabird species found in the northern Atlantic and Pacific Oceans. The study, in collaboration with partners at University of California, Santa Cruz, revealed that ingested plastic can release chemicals capable of endocrine disruption. This phenomenon impairs fertility, development, and behavior, ultimately posing a serious threat

to northern fulmars and the ecosystems that rely on them. Notably, this study marks the first species-specific evidence of such impacts in a wild seabird.

While these findings are concerning, **insights provide conservationists with valuable guidance that can inspire and inform efforts to protect northern fulmars and other species.** Together with experts, we'll continue looking for ways to use the power of science to safeguard wildlife from man-made predators lurking in the ocean.

How to Help Kelp

Combining expertise to recover California coasts

AT THE SAFARI PARK

A sea lion glides effortlessly just below the ocean's surface before gently twirling and swimming deeper, skillfully weaving through its dense kelp forest habitat. This incredible species is one of many that rely on kelp for food, shelter, and a balanced ecosystem.

Unfortunately kelp forests worldwide are shrinking due to overfishing and warming ocean temperatures. To revive kelp forests off the coast of San Diego, and

protect the wildlife that depend on them, we're teaming up with experts at Scripps Institute of Oceanography (SIO).

Combining our expertise in biodiversity banking at the Frozen Zoo with SIO's research and data, **we're developing protocols to freeze kelp reproductive cells.**

This innovative approach allows us to secure the current genetic diversity of kelp and reintroduce it later when needed. Early studies

have shown promising results, and we're committed to refining these protocols until thawed kelp cells can successfully reproduce and live in local waters.

This critical work will help us support SIO in restoring San Diego kelp forests in an entirely new way. Together, we can ensure these ocean ecosystems continue to sustain the abundance of life that counts on them not only to survive, but thrive.



Beneath the waves, a sea lion navigates the dense kelp forest.

[Photo Credit: Michael Ziegler]

SAVANNA CONSERVATION HUB



Strands of Success

New DNA techniques are transforming cheetah conservation efforts

Within each tiny strand of DNA lies the vast blueprint of life itself. The information it holds is both vital and staggering, and there's always more for us to discover. Now, from these invaluable genetic resources, we've found an innovative new way to protect species on the savanna.

DNA sequences and genes contain biomarkers, indicators that correspond to biological characteristics. While it's relatively simple to determine the sex of cheetahs in our care, it's much harder to do so noninvasively in the field—but it's crucial to conservation efforts.

Our team has now successfully identified biomarkers for age and sex in cheetahs, an exciting development helping us better understand these vulnerable big cats and how best to safeguard them. Rather than broadly classifying an individual cheetah's age when we don't know it, we can now narrow down the number, a precision that helps fine-tune our conservation and care strategies. And if we're able to ascertain these biomarkers from trace DNA samples, such as feces, we could safely assess the age and sex ratios of entire populations in native habitats.

Biomarkers are also informing cheetah healthcare. By pinpointing DNA indicators for liver disease, we can detect issues early and provide preventative care. For a species that has seen severe population decline in the past century, life-saving measures like this make a meaningful difference.

Together, biomarker techniques are revealing holistic conservation possibilities and revolutionizing cheetah care.

We're even developing tools for use directly in the field and identifying similar biomarkers in tigers and lions. More and more is possible every day with these cellular samples, showcasing the extraordinary might of the smallest strands of DNA.

Cheetah resting gracefully on the African savanna.







Innovation in the Amazon

Advanced robotic technology is helping protect wildlife in Peru



Endangered spider monkeys cling to the treetops in the Amazonian forest.

AT THE SAFARI PARK

Sleek, sharp lines of metal and glass may seem out of place amid the lush, boundless shapes and textures of the rainforest. These contrasting elements, however, are important to the work we do in Peru. As we witness every day, technology holds the power to protect wildlife and the ecosystems we share.

At Los Amigos Biological Station, our partners have been putting cutting-edge cryopreservation technology to use, collecting thousands of blood and tissue samples from native species. Their efforts represent the sweeping diversity of the region's wildlife, including mammals, amphibians,

birds, and even fungi. This high volume of samples, however, also requires a high volume of processing and storage capacity, which is limited in their lab.

Now robotic technology is revolutionizing these conservation efforts. **We collaborated with our partners to integrate an advanced automated system into their operations.** First it processed 5,700 various biological samples and converted them into high-quality DNA fit for long-term preservation. Then it consolidated them into just 384 cell culture plates, reducing the samples' storage footprint to just one-tenth

of their original size. The machine's remarkable efficiency has helped maximize the lab's freezer space while increasing the time staff have to collect and protect new samples.

Leveraging automation marks a major leap forward for biobanking in Peru. As we begin to help establish frozen zoos in key locations worldwide, equipment like this contributes to their lasting foundation of success. Now more than ever, the strength of steel and the resilience of nature are working together to safeguard ecosystems in Peru and around the world.





*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, guidance, and support to help achieve lasting impact for wildlife and the planet.

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