

# 2022

Annual Report



## Connecting People with Their **Planet**



NATIONAL  
MUSEUM *of*  
**NATURAL  
HISTORY**

 Smithsonian



## OUR MISSION:

**Understanding the natural world and our place in it.**



DEAR FRIENDS,

### We live on an amazing planet -

one that is brimming with life, culture, and new natural wonders waiting to be discovered.



While the past few years have been challenging for all of us, it has been heartening to see that many people have used this time to reconnect with nature. To get outside and open their eyes to the beauty of the world around them.

Building this sense of connection to the natural world has been core to the mission of the National Museum of Natural History since we opened our doors in 1910 and it underpins everything we do today.

In 2022, we marked our first full year open to the public since the beginning of the pandemic. We welcomed nearly 4 million people back to the museum and engaged with at least four times that many online. Online or in-person, we aimed to prepare our visitors with the knowledge necessary to be a part of the solution to some of the planet's most pressing concerns.

Our scientists and collections staff were back in force discovering new species, generating a deeper understanding of our world, and caring for our collection of 148 million specimens. We invited the global scientific community back into the museum to access this irreplaceable archive of our planet in support of their research.

We began the process of rebuilding key aspects of our museum community including our fellowship, internship, and volunteer programs. Fostering the next generation of science and museum professionals is among the most important things we do. And our network of volunteers is critical to our success in so many ways, be it in the museum, behind the scenes, or as ambassadors to friends and family.

There is still more work to be done, more ground to be recovered, but the foundation—as it has been throughout the pandemic—remains strong.

Our success is, in no small measure, due to the ongoing support of our partners and individuals like you.

We hope you will enjoy taking a look back at some of our achievements from last year. And we look forward to working together with you to continue to connect people and our planet.

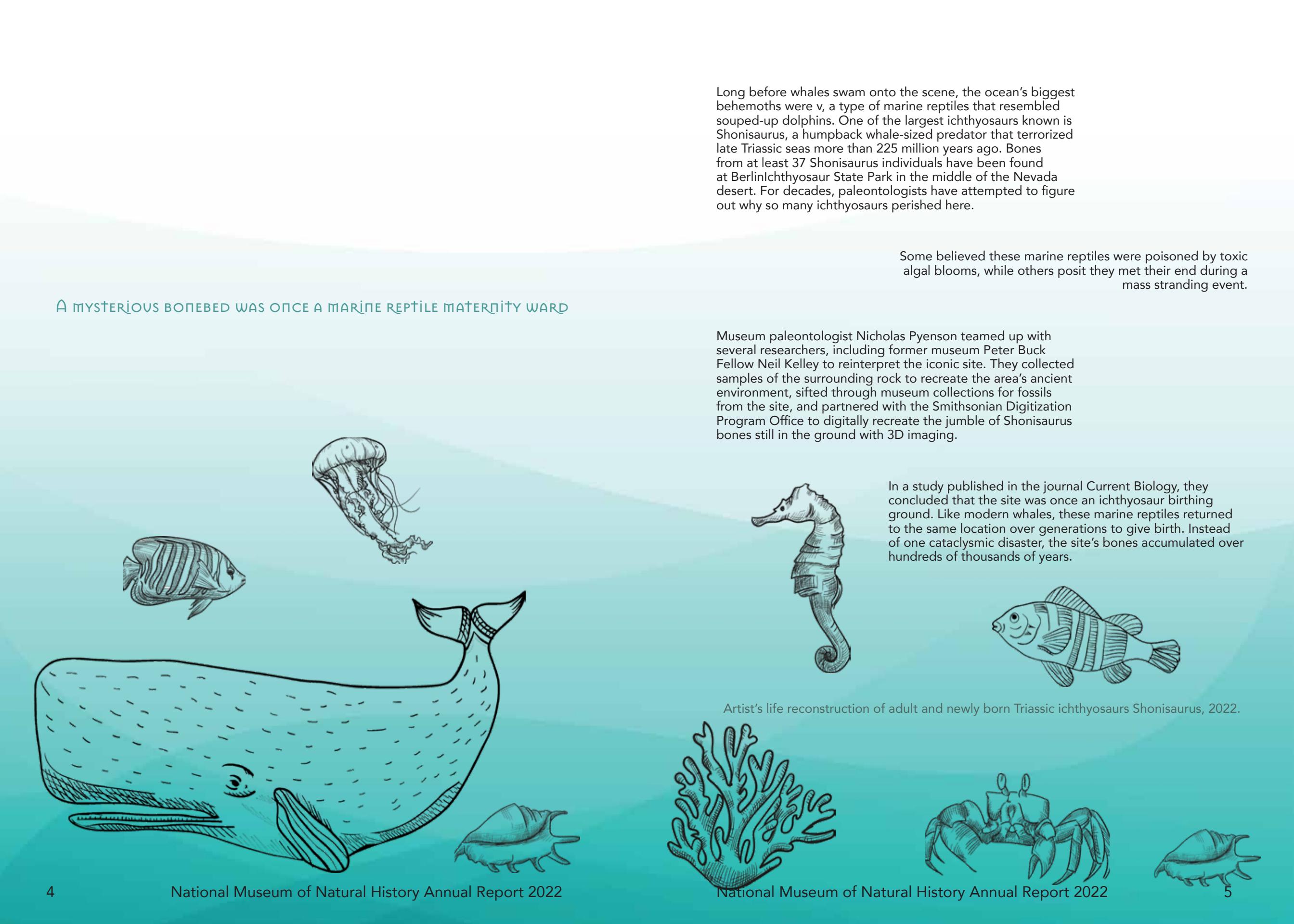
Sincerely,

John Foster

John Foster, Board Chair

Kirk Johnson

Kirk Johnson, Sant Director



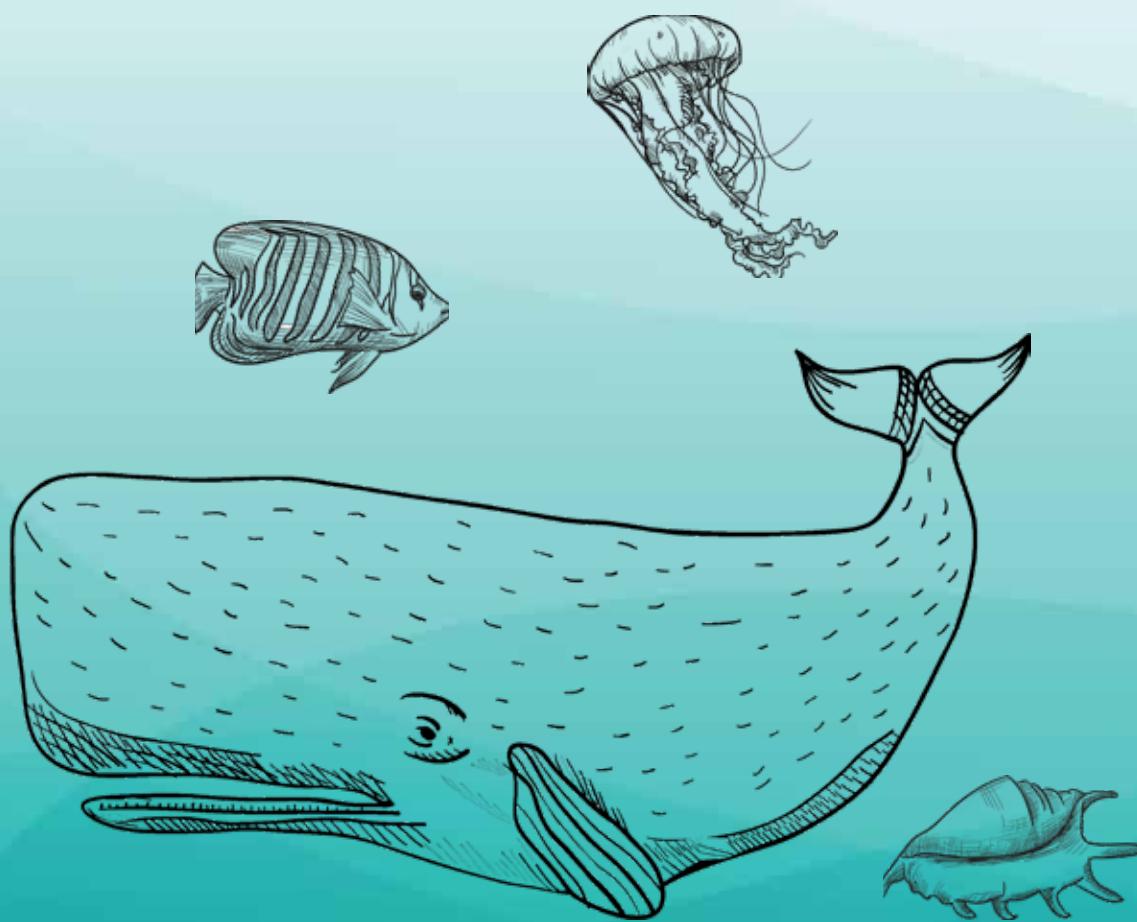
Long before whales swam onto the scene, the ocean's biggest behemoths were v, a type of marine reptiles that resembled souped-up dolphins. One of the largest ichthyosaurs known is *Shonisaurus*, a humpback whale-sized predator that terrorized late Triassic seas more than 225 million years ago. Bones from at least 37 *Shonisaurus* individuals have been found at Berlinlchthyosaur State Park in the middle of the Nevada desert. For decades, paleontologists have attempted to figure out why so many ichthyosaurs perished here.

Some believed these marine reptiles were poisoned by toxic algal blooms, while others posit they met their end during a mass stranding event.

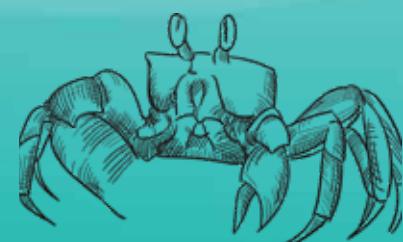
#### A MYSTERIOUS BONEYARD WAS ONCE A MARINE REPTILE MATERNITY WARD

Museum paleontologist Nicholas Pyenson teamed up with several researchers, including former museum Peter Buck Fellow Neil Kelley to reinterpret the iconic site. They collected samples of the surrounding rock to recreate the area's ancient environment, sifted through museum collections for fossils from the site, and partnered with the Smithsonian Digitization Program Office to digitally recreate the jumble of *Shonisaurus* bones still in the ground with 3D imaging.

In a study published in the journal *Current Biology*, they concluded that the site was once an ichthyosaur birthing ground. Like modern whales, these marine reptiles returned to the same location over generations to give birth. Instead of one cataclysmic disaster, the site's bones accumulated over hundreds of thousands of years.



Artist's life reconstruction of adult and newly born Triassic ichthyosaurs *Shonisaurus*, 2022.



# OUR PLACES

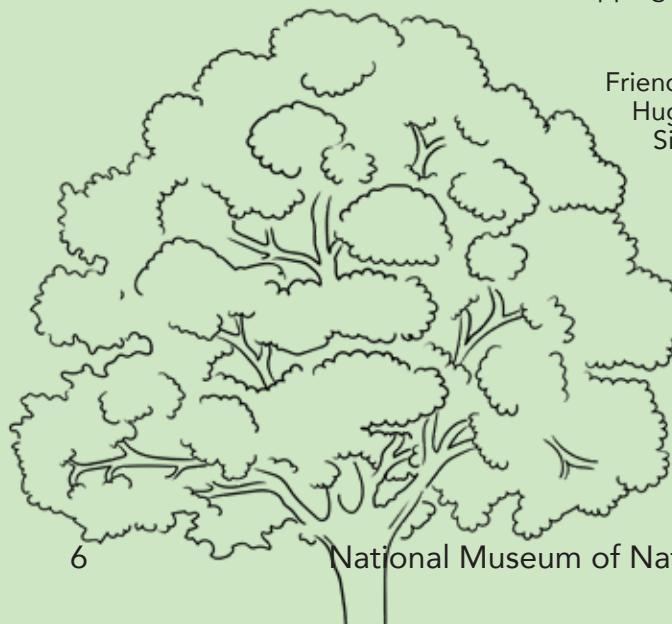
## Exploring the Intersection of People and Nature



In July, the National Museum of Natural History unveiled the new exhibition, Our Places: Connecting People and Nature. The exhibit explores how peoples' experience with nature inspires them to go outside and make a difference, and includes participatory activities that range from identifying local birds and other animals in nature recordings to leaving notes to complement the displays themselves. Visitors will meet dedicated scientists and community members working to protect dynamic environments around the globe, from tropical rainforests and coastal mangroves to local neighborhood greenspaces spread across Washington, D.C.

Our Places highlights how developing a closer connection between people and nature can address many environmental issues. The exhibition's displays highlight efforts to incorporate accessible green spaces in urban communities, reinvigorate barren soil through Indigenous community-led restorative agricultural practices, and sustainably harvest seafood through minority-owned aquaculture programs in the Chesapeake Bay. Personal stories from scientists and local community leaders bring these projects to life and highlight why natural environments are worth protecting. Visitors not only learn about fieldwork in locales like India and Peru, but also get an in-depth look at vital places closer to the Washington area such as the city's Rock Creek Park and Maryland's Eastern Shore.

Many of these local spaces provide natural oases to communities often overlooked by conservation efforts. One example is Kenilworth Aquatic Gardens, the only national park in the country dedicated to aquatic plants like water lilies and lotuses. Nestled near the banks of the Anacostia River in northeast Washington's Kenilworth neighborhood, this mosaic of marshes had been utilized by the Nacotchtank tribe for millennia. In the 1880s, a Civil War veteran and his daughter cultivated the local wetlands into ponds bursting with aquatic plants that are home to animals like beavers, snapping turtles, and blue herons.



Friends of Kenilworth Aquatic Gardens' Zerline Hughes Spruill (with colleague Megan Singleton), NMNH Yeah teen program member Brandon, and Scott Budden of Orchard Point Oysters are among the many voices featured in Our Places.



## SPECIMEN SPOTLIGHT

### NORTHERN GIANT THE 'BUZZIEST' SPECIMEN

Highlighted in Our Places is the historic northern giant hornet "nest zero."

The first northern giant hornet nest discovered in the United States is now on display in Our Places alongside one of the sci-fi inspired suits the team wore and a giant hornet specimen outfitted with a radio transmitter.

As the world's largest species of hornets, northern giant hornets are bound to make headlines when they show up outside of their native range of East Asia. In 2019, the discovery of a giant hornet nest in Washington state stoked fears that so-called "Murder Hornets" were on the loose. While the giant hornets are not threats to humans, these ruthlessly efficient predators, who have a penchant for biting off the heads of bees, are capable of devastating populations of important pollinators.

To quell the impending invasion of these head-chopping hornets, researchers in Washington reached out to Matt Buffington, a Smithsonian-USDA research entomologist who works with the Systematic Entomology Laboratory. Buffington uses the museum's National Insect Collection as a reference to keep tabs on which insects belong in the United States and which are potentially destructive newcomers.

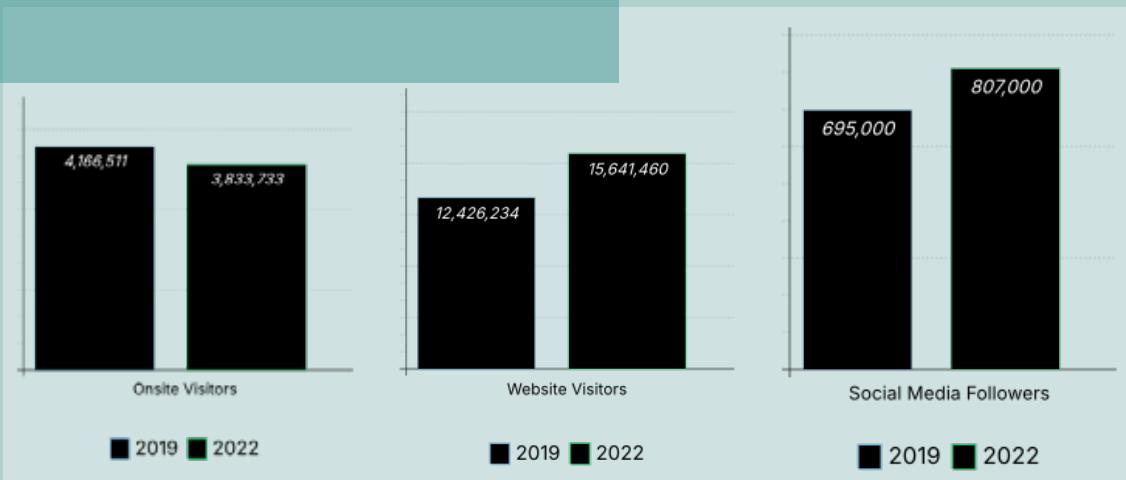
So when two-inch-long, orange and black hornet specimens came his way, he knew he was looking at something unlike any species native to North America. "The insect collection at the Smithsonian provided us with the knowledge to determine what the Asian giant hornet is and why it doesn't belong here," Buffington says. "Because if it did, we would have already encountered it in the collection." So when two-inch-long, orange and black hornet specimens came his way, he knew he was looking at something unlike any species native to North America. "The insect collection at the Smithsonian provided us with the knowledge to determine what the Asian giant hornet is and why it doesn't belong here," Buffington says. "Because if it did, we would have already encountered it in the collection."

After Buffington identified the insect interlopers, his colleagues at the Washington State Department of Agriculture suited up in heavy-duty mesh suits to protect themselves from the giant hornet's quarter-inch stingers and headed into the forest. By attaching a radio transmitter to a hornet, they were able to pinpoint and remove the potentially harmful hornet hive, which eventually ended up in the museum's collection.

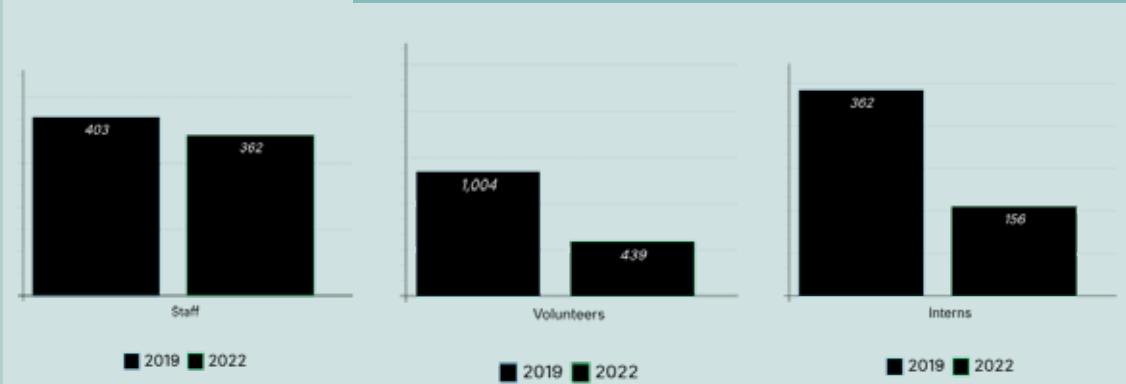
# BY THE NUMBERS

The pandemic changed us all and the museum was no exception. We were closed for **461 days between 2020 and 2021**, yet the work of the museum carried on.

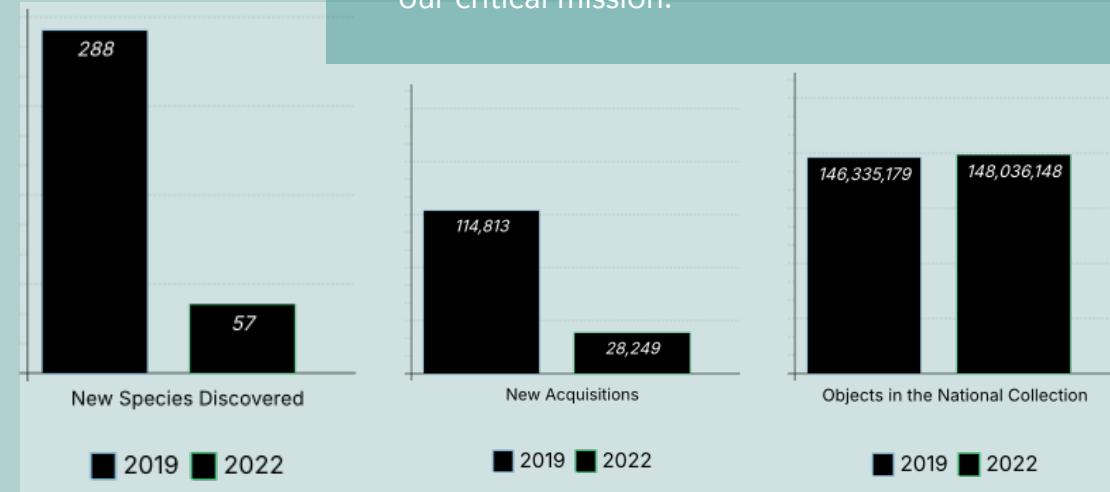
We used our digital platforms to reach our audiences and build new connections.



We continued the important work of caring for our collections and using them as the foundation of our research endeavors.



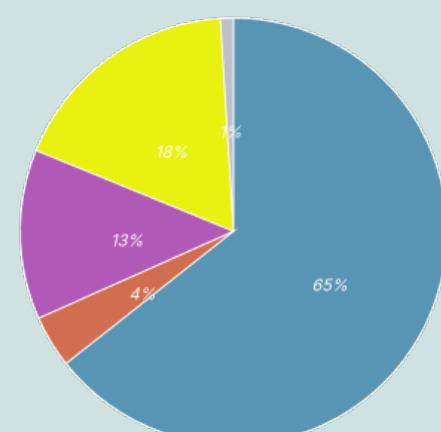
Now, fully operational once again, we are working to rebuild and strengthen our core in support of our critical mission.



## FINANCIAL

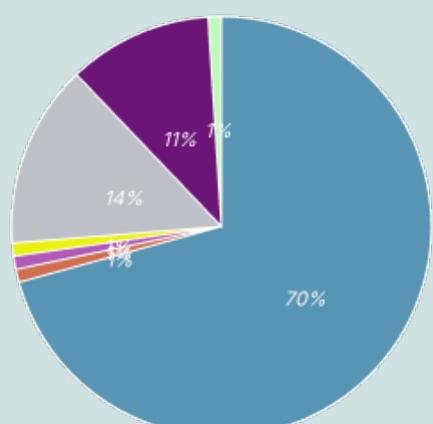
### FY 22 Expenses

\$78.9 Million



### FY 22 Revenue

\$80.3 Million



# NEW Exhibits

## GREAT AMERICAN DIAMONDS

### Did you know that diamonds can be found in the United States?

In June, we unveiled Great American Diamonds, a new exhibit displaying four of the most stunning diamonds ever found in our country.

Some of these gems are record holders, including Colorado's Freedom Diamond, the largest faceted diamond ever to originate in the United States, and Arkansas' Uncle Sam Diamond, an emerald-cut stone fashioned from the largest uncut American diamond ever discovered.

These American diamonds join the Smithsonian's National Gem and Mineral Collection, the world's most visited collection of gems, thanks to gifts by Peter Buck (Uncle Sam Diamond) and Robert E. and Kathy G. Mau (Freedom Diamond).

### #IfThenSheCan — The Exhibit

Some of the brightest minds in science and technology visited the Smithsonian in March. But instead of a one-night lecture circuit, these scientists, who do everything from design rockets to create shark sanctuaries, were stationed at museums around the National Mall in the form of life-sized, 3D-printed sculptures.

Featuring 120 bright orange statues of contemporary female scientists,



#IfThenSheCan – The Exhibit is the largest collection of statues of women ever assembled at a single location at one time and included our very own fossil preparator, Myria Perez.

The exhibit is part of Lyda Hill Philanthropies' IF/THEN initiative that aims to inspire middle school age girls to pursue STEM careers.

Our free Do-It-Yourself (DIY) Exhibits program continues to reach audiences around the world. Designed to be flexible and adaptable, our Do-It-Yourself (DIY) exhibits, can be easily installed in any type of location, from schools to hospitals and libraries to shopping centers. Last year, 175 organizations applied to host one of our three DIY exhibits: Outbreak, Genome, and Dig It!



## BARRO COLORADO / NATURE OF THE BOOK



The museum also opened two new exhibitions developed by our Smithsonian colleagues. Barro Colorado Island 100 Years of Discoveries and Wonder marks a century of research at the Smithsonian Tropical Research Institute in Panama. Smithsonian Libraries and Archives' Nature of the Book examines the innovative use of varied and sometimes surprising natural resources to make books.

Sloths are among the many inhabitants of Panama's Barro Colorado Island.

### Outbreak: Epidemics in a Connected World

After a four-year run, we've closed Outbreak Epidemics in a Connected World.

Opened 18 months before the COVID-19 pandemic, the exhibit explored how pathogens can "jump" from wildlife to humans and cause disease outbreaks that spread internationally.

Visitors were invited to be detectives, joining experts in tracking down and responding to these outbreaks. The museum's DIY version of the exhibit is now on view in an adjacent gallery.



# COLLECTIONS SPOTLIGHT:

In 2022, museum staff were hard at work acquiring, labeling, preserving, and studying specimens that range from pressed plants and pinned butterflies to Martian meteorites and massive whale bones.

Most of this work took place in the labyrinth of cabinets and labs at both the museum and its collections facility in Suitland, Maryland and was essential to maintaining—and growing—the largest natural history collection on Earth.

The museum's Botany Department completed a seven-year effort to digitize the entire United States National Herbarium—one of the world's largest collections of plant material that contains everything from microscopic algae to mammoth palm fronds. Most of the herbarium's specimens are dried plants pressed onto large sheets of paper. To bring this sprawling botanical library online, museum collection staff teamed up with the Smithsonian Digitization Program Office and Picturae, a Dutch digitization company. A conveyor belt was installed to rapidly process the herbarium sheets. As the belt whirred, the sheets passed below a high-speed camera, which snapped pictures of the specimen and its various labels every six seconds.

In total, 3.8 million herbarium sheets made their way across the conveyor belt. By the time the last sheet was photographed in May, the United States Herbarium became the first fully digitized botanical collection in the country. The accomplishment makes this prodigious collection of pressed plants available to outside researchers. It also allowed museum scientists to add 80,000 new taxa into the department's database, rounding out the full breadth of the covered a large swath of western North America during the age of the dinosaurs. "Without this reference collection, we wouldn't have that knowledge of what was living when or what was happening to the seaway," said Kathy Hollis, the museum's Paleobiology collection manager. "The richness of this collection allows us to continue asking and answering questions." collection for the first time. "What I really enjoy is not the specimens we already knew about, but the ones we find by accident," said Sylvia Orli, the Botany Department's digitization manager who spearheaded the effort.

The museum's Department of Paleobiology also capped a monumental move. In 2018, the United States Geological Survey (USGS) agreed to send nearly 1,000 cases packed with fossils to the museum.

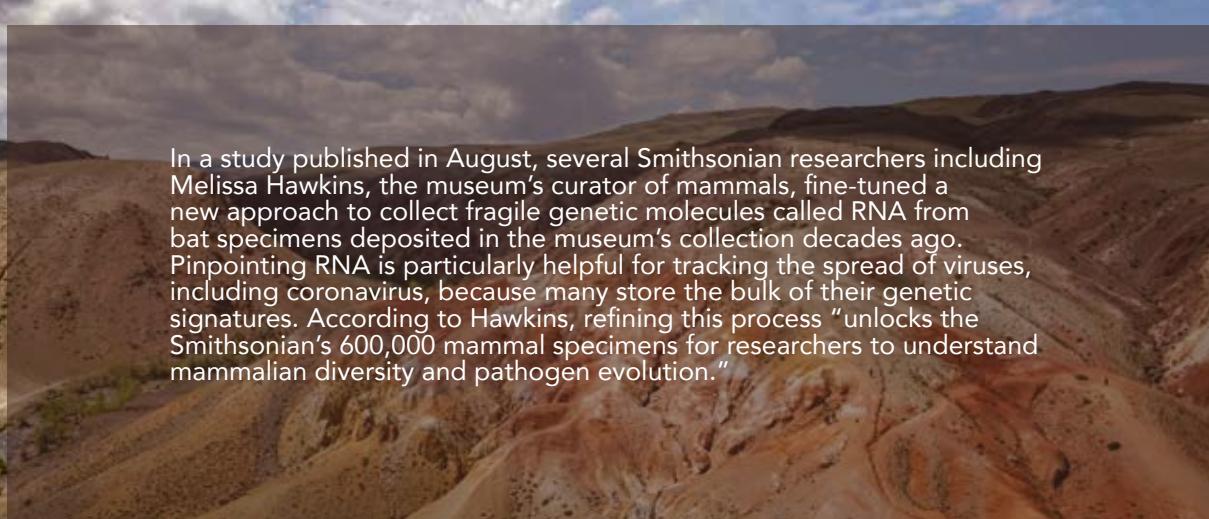
Over the next three years, 23 fully-loaded freight trucks donated by FedEx would make the 1,600 mile journey from a USGS warehouse in Denver, where the fossils had been housed for decades, to the museum's collection facility in Maryland.

In total, the museum's paleobiology team moved some 342,532 pounds of fossils, adding more than 1.5 million new specimens to the museum's collection. Several of these specimens, including the skeleton of a predatory marine reptile called a mosasaur and the tightly-coiled shells of squid-like ammonites, hail from an ancient seaway that

Now that the fossiliferous freight has arrived, collection staff are sifting through the trove and integrating it into the National Fossil Collection. The team is also using the influx of fossils as an opportunity to reorganize the museum's entire fossil collection. The goal of the additional effort, dubbed the Defragmentation Project, is to make the sprawling collection more cohesive and to relocate hundreds of cases of fossil mollusks, sediment cores, and oversized bones from the museum's flood-prone basement. Hollis said of the effort: "We don't just want to preserve the collection as it is. We want to remove any current confusion to make the collection a better resource for scientists."

**"As the museum's chief scientist, I'm a champion of the incredibly valuable role that museum collections play in understanding our world and helping to conserve it. Collections help us both understand the past and inform the future."**

**- REBECCA JOHNSON,**  
Associate Director for Science and Chief Scientist  
at the National Museum of Natural History



In a study published in August, several Smithsonian researchers including Melissa Hawkins, the museum's curator of mammals, fine-tuned a new approach to collect fragile genetic molecules called RNA from bat specimens deposited in the museum's collection decades ago. Pinpointing RNA is particularly helpful for tracking the spread of viruses, including coronavirus, because many store the bulk of their genetic signatures. According to Hawkins, refining this process "unlocks the Smithsonian's 600,000 mammal specimens for researchers to understand mammalian diversity and pathogen evolution."

## BUTTERFLY BOUNTY

In the fall of 2022, Floyd Shockley, the collection manager of the museum's immense insect collection, hit the road to pick up butterfly and moth specimens compiled by collectors around the country. Over the course of twelve days, Shockley drove more than 4,100 miles and passed through 16 states. The bulk of the haul was a cache of Lepidoptera specimens painstakingly collected and curated by a physician in Fresno, California, who donated hundreds of drawers brimming with butterflies and moths to the museum.

## VIRAL CLUES



Pallets of specimen drawers arrive at the museum support center in Suitland, Maryland. The team is now working on adding barcodes and catalog numbers to the new fossils to ensure researchers can easily find them.

The appearance of *Homo erectus* two million years ago appears to be a turning point in human evolution. Unlike older early humans, *Homo erectus* sported a large brain and walked upright. It also appears to have had a taste for meat — eastern Africa is littered with fossil sites brimming with butchered animal bones from the time that *Homo erectus* was walking around.

Scientists have long believed this fondness for flesh influenced *Homo erectus*'s brain size and proportions.

But paleoanthropologist Briana Pobiner, of our Human Origins Program, took a closer look at several of these fossil sites and concluded that their influence is partially due to sampling bias. Paleoanthropologists have paid more attention to sites in this region, missing out on potentially older evidence of human carnivory in other areas. In a paper published in the journal *Proceedings of the National Academy of Sciences*, Pobiner and her team conclude that the human-like traits of *Homo erectus* are likely due to other factors beyond their protein-packed diets.

A 3,100 mile swath of the central Pacific Ocean called the Clarion-Clipperton Zone (CCZ) is home to one of the richest assortments of potato-sized lumps of precious minerals called nodules. These nodules contain rare metals like nickel, copper, and cobalt that are essential to modern technology like cellphones. As a result, this area has become a proposed focus for deep-sea mining.

But the CCZ's submerged mountains, plains, and troughs are also home to a variety of sea creatures, many of which remain undescribed. To discover what resides down here, museum zoologist Stephen Cairns and an international team of researchers deployed a remotely operated vehicle to depths as deep as nearly 17,000 feet to scour the seafloor for life. In a study published in the journal *ZooKeys*, they described 48 different species, including sea cucumbers, basket stars, anemones, and sponges. Thirty-nine of these animals are potentially new to science.

## An ancient human's meat-based diet gets a closer look



## The secret to how mammal ancestors became warm-blooded is in their ear

One of the traits that make mammals so widespread is their warm-bloodedness. Unlike reptiles, who rely on the external temperature to keep them warm, mammals are able to maintain a near-constant body temperature, allowing them to conquer chilly climates.

Artist John Gurche's bronze statue of *Homo erectus* on display in the David H. Koch Hall of Human Origins.

How and when this game-changing trait evolved in the earliest reptile-like mammal ancestors has remained enigmatic. But a team including Peter Buck Deep Time Postdoctoral Fellow Jacqueline Lungmus found a clue to this adaptation's timeline hidden in the fossilized ear canals of early mammals and their kin. These canals contain a fluid called endolymph that aids balance and the viscosity, or runniness, of the fluid is impacted by an animal's internal temperature. Because mammals maintain a high internal temperature, their ear canals have become narrower over time to help them stay balanced. In a study published in the journal *Nature*, the researchers concluded that warm-bloodedness evolved 233 million years ago during the Triassic alongside other mammalian features like whiskers and furs.

## Two newly discovered Amazonian fish are already swimming towards extinction



The Amazon River is brimming with aquatic life, including dolphins, caiman and more than 3,000 species of fish. In a study published in the *Zoological Journal of the Linnean Society*, Sara E. and Bruce B. Collette Postdoctoral Fellow Murilo Pastana and his team identified two new fish species as yet undiscovered in Amazon's aquarium. Both species are roughly an inch-long and belong to a group of fish known as South American darters. One of the species, *Poecilocharax callipterus*, which sports striking red and orange fins, is only found in a single stream. Unfortunately, both species live in a region of the Brazilian frontier experiencing habitat loss due to logging. The researchers fear these two new fish are already at risk of extinction.

## The Smithsonian National Museum of Natural History gratefully acknowledges our steadfast and generous supporters.

### Dedicated Supporters

The Smithsonian extends its gratitude to the individuals, companies, and foundations that made possible numerous activities of the National Museum of Natural History through gifts of \$1,000 or more in 2022.

### \$1 million +

Dr. Peter Buck \*  
Pedro and Carol Cuatrecasas  
John and Laura Foster  
Mr. and Mrs. Paul G. Haaga, Jr.  
Lyda Hill Philanthropies  
The Moraine Foundation  
QUALCOMM Incorporated  
T-Mobile US

### \$500,000 - \$999,999

Anonymous  
The Summit Fund of Washington  
Dr. Coralyn Wright Whitney

### \$100,000 - \$499,999

Anonymous (2)  
Jere and Bonnie Broh-Kahn  
Sandra and Howard Collier  
Jon C. Graff  
Michael and Hannah Mazer  
The Nature Conservancy  
Melanie and Larry Nussdorf  
Ms. Regina Pitaro and Mr. Mario J. Gabelli  
Dr. Mary E. Rice  
John and Ginger Sall  
Roger Sant and Hon. Doris Matsui  
Judi Gillespie Squiers

### \$50,000 - \$999,999

Bank of America  
Barbara and Craig Barrett  
Dr. Peter L. Comanor  
William H. Donner Foundation, Inc.  
Dr. David G. Furth  
Mr. Robert D. Hevey, Jr. and Ms. Constance M. Filling  
Jamestowne Society  
Mr. W. Matt Kelly and Mrs. Jessica D. Mailloux  
Mr. and Mrs. Bob Kolitz  
The Link Foundation  
Ambassador Robert and Julie Mandell  
Mar Fund  
Jane Mitchell and Jeffery Bland  
Estate of Jim Nix  
Parley for the Oceans  
Ms. Elizabeth C. Seastrum  
Shoniya Fund  
Mr. and Mrs. George D. Smith, Jr.

Ms. Naoma J. Tate

### \$5,000 - \$49,999

Anonymous  
Dr. Leslie Aiello  
Dr. Mary Jo Arnoldi and Professor Craig A. Subler  
Rita and Richard C. Ashley  
Mr. and Mrs. Orlando Ayala  
Bard College  
Mr. Luiz Andre Barroso  
The Benevity Community Impact Fund  
Michael and Tricia Berns  
The Honorable Max N. Berry  
Mr. Sam Blyth  
Mr. William H. and Clare Bohnett  
The CIRI Foundation  
Dr. Clayton and Dr. Susan Cook  
Mr. and Mrs. Gordon Crawford  
Philip de Picciotto and Trinka Roecklein  
Dr. Jacqueline E. Dixon and Mr. Timothy Dixon  
Dr. Harold A. Dundee, Ph.D.  
Heidi and John Fahey  
Dr. Kristian Fauchald  
Dr. and Mrs. Darryl L. Felder  
Kathryn Fuller  
Mr. and Mrs. Spencer B. Haber  
Ms. Kathryn N. Harrison  
HHMI Tangled Bank Studios LLC  
Dr. Carter Hill and Dr. Winnie Mann  
Intel Foundation  
Investment Building Group and Operating Companies  
Kirk Johnson and Chase DeForest  
Joseph and Paula Kerger  
Parveen and Parvinderjit Khanuja  
Mr. Gary Knell and Ms. Kim Larson  
Jack and Shanaz Langson  
Dr. Risa Lavizzo-Mourey and Dr. Robert J. Lavizzo-Mourey  
Shirley Loo  
Dr. Sandra J. Lovington and Mr. Edward A. Lovington, Jr.  
Dr. Zhe-Xi Luo  
Mrs. Venka V. Macintyre  
WEM Foundation  
The Malik Family Trust  
Jo and Peter Michalski  
The Ocean Foundation  
Arthur and Linda Pelberg  
Timothy Phillips  
Ms. Jennifer R. Poteat and Mr. Michael B. Staebler  
RDL Family Foundation  
Mrs. Janet Ronnenberg  
Ms. Frances H. Rose  
Crystal and Chris Sacca  
Santa Barbara Foundation  
Sophia Shaw and Art Collins  
Marshall and Ann Turner  
University of Washington

Ms. Valaree Wahler

### \$1,000 - \$4,999

Dr. Gurpal Bhuller  
Ms. Deanne M. Burch  
Robert and Carol Butler  
Dr. Gary Byerly and Dr. Maud Walsh  
Mr. and Mrs. Michael Campbell  
Carnegie Corporation of New York  
Dr. Amrik S. Chattha  
Dr. Baratunde Cola  
Dr. Cady Coleman and Mr. Josh Simpson  
Commonwealth Charitable Fund  
Mr. and Mrs. Mark Ein  
Ms. Gabriela Febres-Cordero  
Mr. and Mrs. Gregg Fedchak  
Ms. Heather Flynn  
Ms. Leah Fried Sedwick  
The Fund for Charitable Giving  
Gem, Lapidary & Mineral Society of Montgomery County, MD  
Dr. Katharine Hayhoe  
Ms. Barbara Hebner  
Dr. Rebecca N. Johnson  
Dr. Tuajuanda C. Jordan  
Erna and Michael Kerst  
Kulwant S. and Amrit K. Dhaliwal Family Trust  
Donald J. and Marcy Leverenz  
Roger and Eleanor Lewis  
Lincoln Community Foundation, Inc.  
Dr. Jane Lubchenco and Dr. Bruce A. Menge  
Ms. Suzanne McIntire  
Dr. Marcia K. McNutt  
Mineralogical Society of the District of Columbia  
Mr. and Mrs. Alan Munro  
Mr. Marvin J. Nakashima  
Allen Neergaard  
Mr. and Mrs. William Nizinski  
C.N. and E. Oliver  
Ms. Joyce E. Ortner  
Concetta Viggiano Parry Foundation  
Mrs. Diana V. Paulus  
Ms. Gail DeBuse Potter  
Qualcomm Matching Grant Program  
The Honorable AlexAnna Salmon  
Vince and Leah Sedwick  
Gail and Jan Sieberts  
The Sikh Spirit Foundation, Inc.  
Dr. Judith Skog and Dr. Laurence E. Skog  
Ms. Betty Soreng  
Mr. and Mrs. Alan Spiegelman  
Waste Pro  
Ms. Anne Weismann and Mr. Benjamin D. Gorton  
Susan R. Wirths

### Leadership Circle

We gratefully acknowledge our Leadership Circle Members whose annual donations support museum needs.

Mr. Matthew Baran  
Mr. and Mrs. Richard Ben-Veniste  
Richard and Eugenia Bodnar  
Bonnie and Jere Broh-Kahn  
Mr. and Mrs. William R. Brown  
Mrs. Janis Buchanan  
Robert and Carol Butler  
Dr. Gary Byerly and Dr. Maud Walsh  
Mr. and Mrs. Michael Campbell  
Mary M. Case and Edward T. Fishwick  
Dr. and Mrs. James C. Cobey  
Dr. Jonathan A. Coddington  
Charles and Candace Cowan  
Philip de Picciotto and Trinka Roecklein  
Mr. William B. Easton and Ms. Janine S. Higgins  
Dean S. Edmonds Foundation  
Cary J. Frieze  
Ms. Carolyn Gecan and Mr. Philip Winters  
Mr. and Mrs. Michael Gill  
Stephen and Mary Gorman  
Ms. A.J. Grant and Ms. Kate Fay  
Mr. and Mrs. Robert J. Haroutunian  
Mr. John Jeppson and Ms. Wendy Benchley  
David and Pat Jernigan  
Kirk Johnson and Chase DeForest  
Dr. Rebecca N. Johnson  
Diane and Michael Jones  
Mr. and Mrs. Algis Kalvaitis  
Erna and Michael Kerst  
Drs. Jurate and Carl Landwehr  
Suzanne and Fred Lepple  
Marcy and Donald Leverenz  
Roger and Eleanor Lewis  
Dr. Sandra J. Lovington and Mr. Edward A. Lovington, Jr.  
Creighton and Vicki Magid  
Hannah and Michael Mazer  
Mr. Michael McCormick  
Mr. Stefan McDonough

Ms. Suzanne McIntire  
Jim and Mary Neal  
Amy Klette Newman Foundation  
Ms. Joyce E. Ortner  
Mrs. Julia G. Perlman  
Barbara Rescher Perry  
Ms. Rachel Pocino  
Mr. and Mrs. Dale J. Precoda  
Presentation Planning, Inc.  
Ms. Sioban Reyes  
Dr. and Mrs. Jerry M. Rice  
Dr. Randi Rubovits-Seitz  
Mr. and Mrs. Alan Rulis  
Cristián Samper, Ph.D. and Ms. Adriana Casas  
Mr. and Mrs. Charles Samuels  
Chrissie and Lex Sant  
Elizabeth C. Seastrum  
Ruth O. Selig  
Mr. and Mrs. Simon Sidamon-Eristoff  
Sylvia and David Silver  
Ms. Betty Soreng  
Ms. Barbara Stauffer and Mr. Brian Maney  
JoAnn Storey  
Mr. and Mrs. Peter A. Sturtevant, Jr.  
Mr. Craig B. Swick and Ms. Ruth R. Pacheco  
Mr. and Mrs. Robert E. Tanner  
Dr. and Mrs. Patrick Taylor  
Mr. and Mrs. Woody Turner  
Mr. and Mrs. Greg A. Walker  
Ms. Katherine Ward  
Mr. Chase Weir  
Ms. Anne Weismann and Mr. Benjamin D. Gorton  
Susan R. Wirths  
Mr. John M. Wood and Ms. Jacqueline Holmes  
Mr. and Mrs. David Wrausmann  
Mr. and Mrs. Harvey Zuckerman \*deceased

**Smithsonian's National Museum of Natural History's Legacy Society**

These generous donors have included the museum in their estate plans.

Abbott Charitable Trust  
Paula and Sheldon Apsell  
Dr. and Mrs. Paul H. Arnaud, Jr.  
Bonnie and Jere Broh-Kahn  
Penelope J. Brook  
Ms. Laura Brouse-Long  
John P. Cahill  
Peter L. Comanor  
Charles and Candace Cowan  
Dr. William H. Crocker  
Pedro and Carol Cuatrecasas  
James and Dorothy Davis  
Carl B. Fausey  
Mary Anne and Richard Hakes  
KD "Jonesy" Hamilton-Jones  
Dr. Robert Hickey  
Robert E. Jackson  
David and Pat Jernigan  
Dr. G. David Johnson and Ms. Ai Nonaka  
Ursula Kelnhofer  
Ann E. Leininger  
Marcy and Donald Leverenz  
David Mason  
Hannah and Michael Mazer  
Mary Shaw McCutcheon  
Scott and Hella McVay  
Jo and Peter Michalski  
Sidney Mobell  
Mr. Marvin J. Nakashima  
Wesley Patterson and Linda Pritchard Patterson  
Gail DeBuse Potter  
Susan Roberts  
Dr. Randi Rubovits-Seitz  
Roger Sant and Hon. Doris Matsui  
Floyd W. and Shannon E. Shockley  
Marcia Sprules  
Judi Gillespie  
Stanley C. Tigner 1996 Trust  
Ms. Jannene Wagner and Mr. Mark Rassier  
Ms. Anne Weismann and Mr. Benjamin D. Gorton  
Mr. Les J. Weinstein  
Ms. Sarah F. Whiting  
Robert Wilkinson  
Mr. and Mrs. Douglas Wolford