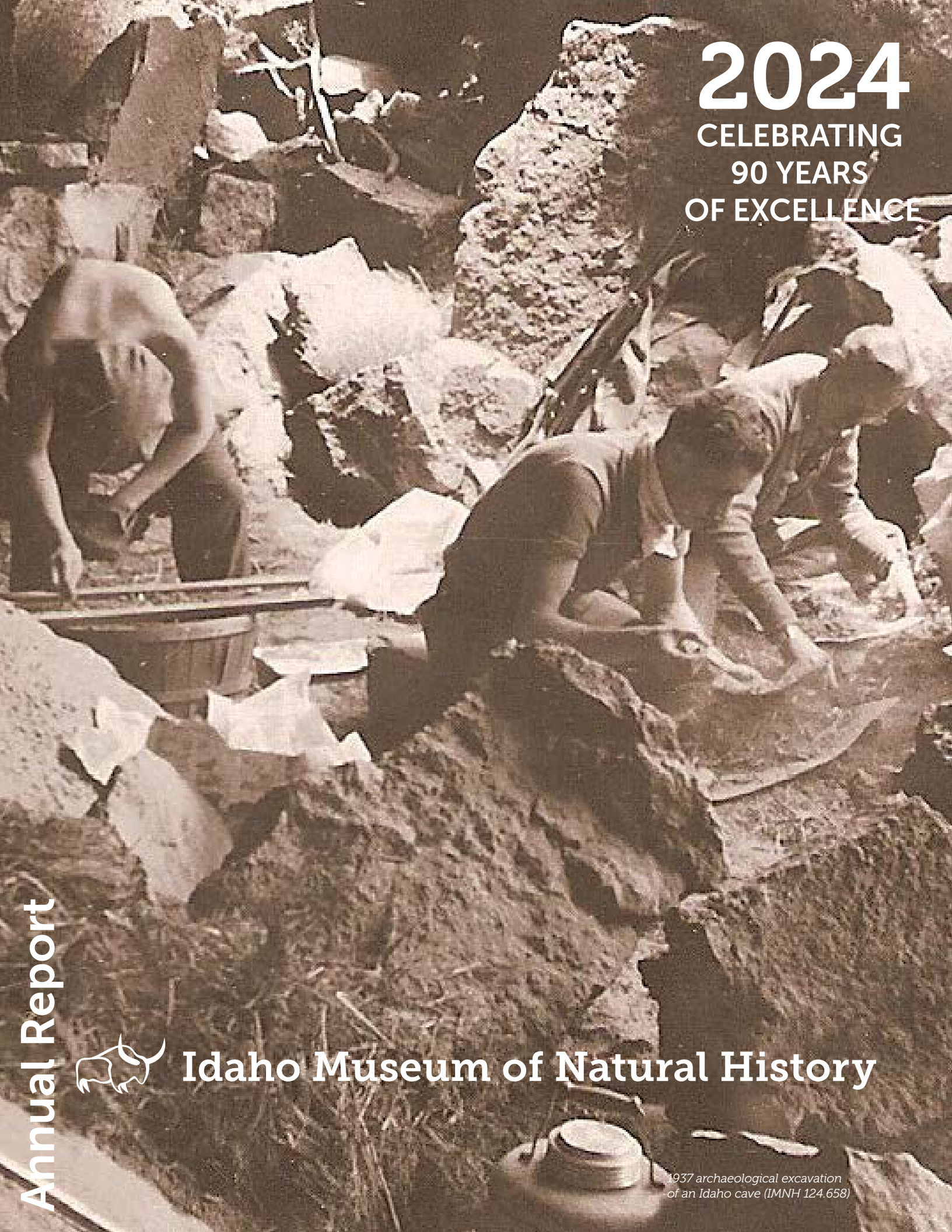

# 2024

## CELEBRATING 90 YEARS OF EXCELLENCE

Annual Report

# Idaho Museum of Natural History

*1937 archaeological excavation of an Idaho cave (IMNH 124.658)*

# IDAHO MUSEUM OF NATURAL HISTORY

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*Crew of Idaho State University and Loyola University Chicago students and professors in eastern Wyoming. "IMNH awarded grant to fund undergraduate paleontology research" on page 24*

# MESSAGE FROM THE DIRECTOR

Welcome to a review of our past year and our prospects for exciting new directions in 2025. We enter our 91st year as Idaho's official museum for telling the story of our state's deep and inspiring history.

Much of this document showcases the flurry of activities we've provided in service of the public, whether it's new research, education programs or events. But you should know that in 2024 our staff and museum board spent quite a lot of time, and effort behind the scenes reflecting on our mission and planning for the future. The result is a new strategic plan that will roll out in the next year. The result of our introspection is an agenda, that we hope, broadens our Museum's impact for the entire State of Idaho as we approach our Centennial in 2034.

Expect to see more education services from our Museum. In 2025, we welcome Tut Tran to our staff as our new Education Specialist who comes to us after years of experience working at Bryce Canyon National Park. We're also adding to our capacity to deliver education to rural parts of Idaho with our new Mobile Museum program. With generous support from the David B Jones Foundation, we are purchasing a van and hiring an educator who will travel across the state, bringing Idaho's history alive for more of our citizens.

There will be more opportunities for the public to get involved and volunteer at the Museum in 2025. We welcome Dr. Indah Huegele to our staff this spring as the new Life Science Collections Manager, who will oversee the Herbarium. Stay tuned for chances to help preserve our outstanding plant collections and join us on collecting trips in the near future.

Thank you for supporting our Museum this year, and we look forward to 90 more years of serving Idaho.

Leif Tapanila

Museum Director



## Serving Our Mission

*Fiscal Year 2024*

EXHIBIT VISITORS
**8,883**

EDUCATIONAL PROGRAMS SERVED
**7,749**
children

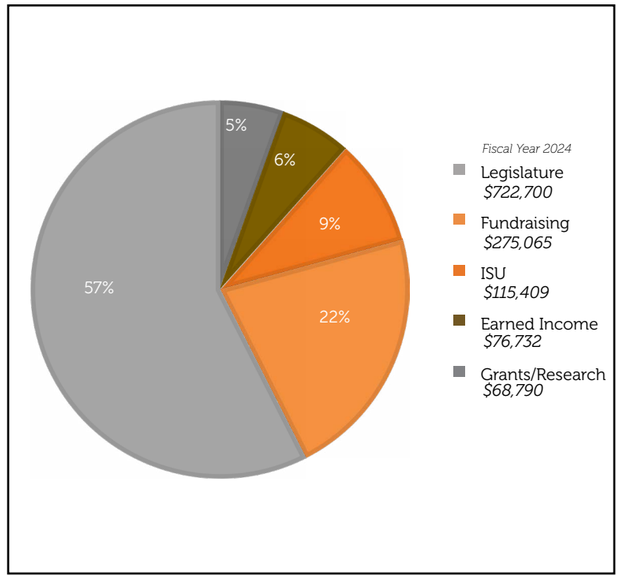
MUSEUM OBJECTS IN COLLECTIONS
**1.5 MILLION**
held in trust

STUDENT INTERNSHIPS
**12,000**
hours

DIGITAL ENGAGEMENT
**1,297,482**

NATURE OF IDAHO RADIO AUDIENCE
**200,000**

## Financial

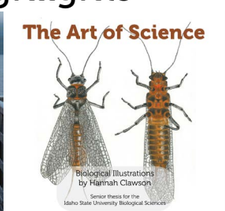


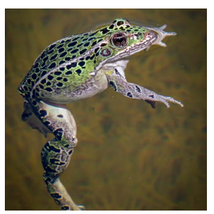

## Education Highlights





## Exhibits Highlights

# IDAHO MUSEUM OF NATURAL HISTORY REACHES A MILESTONE


Southern Idaho Branch Bengal

TIGERS PLAY MONTANA NORMAL SATURDAY

BENGAL SENDS DELEGATES TO LOGAN

VOLUME XV POCATELLO, IDAHO, FRIDAY, JANUARY 25, 1935 Number 15

SOUTHERN BRANCH TO HAVE MUSEUM

*Bengal Delegates Will Attend Press Conference*

PRESS CONFAB HELD AT LOGAN

Cup Will Be Awarded the Best Edited Newspapers in B.M.I.P.A.

TO LEAVE THURSDAY

Wesleyan Orator To Speak In Frazier

SELECTION OF PLEDGES MADE AT MEETING

Drawing Members of Bengal and Wicking Staffs are Honored

COMMITTEE APPOINTED

REV. W. W. BELL

LAND SECURED BY FORESTRY DEPARTMENT

Sessions Boosts Liquor Control

COLLECTIONS ARE STARTED

Committee to Aid in Securing State Sponsorship is Organized

LAIRD IS CHAIRMAN

PRODUCTION TO BE PRESENTED

BELL'S FOREIGN TRAVELS GIVEN

A. GILLESBY IS

Although it is the official 90th anniversary of the Idaho Museum of Natural History (IMNH), faculty of the Idaho Technical Institute (ITI), Pocatello Chamber of Commerce and local amateur collectors began collecting as early as 1916. Their early work laid the foundation for preserving the historical, archaeological, anthropological, and biological history of the region's culture and nature.

In November of 1934 the Museum Committee held its first meeting with the following committee members: Chair Charlton Laird, Linguistics, Marie Hopkins, Paleontologist, Ina Stout, Librarian, Edward F. Rhodenbaugh, Chemistry, Victor E. Jones, Zoology, AM Newton, Public Health, and EO Leonard, Dean of the College of Pharmacy.

## Marie Hopkins, 1934-1966

Marie Hopkins, Idaho's first female paleontologist, was a pioneer in American science. Marie discovered countless fossils and was a devoted mentor for a generation of scientists. She helped uncover our giant bison, Mary Lou, which became the symbol of our Museum.

## Dr. Sven Liljeblad 1939-1969

Dr. Sven Liljeblad, a Swedish researcher, arrived in Pocatello in the 1940s and developed a keen interest in documenting and recording Native American languages in the Idaho and Nevada regions. Through the 1950s, Sven substantially improved the Museum's catalog for its 4,782 artifacts using a state-of-the-art system of 16,000 cross-index cards. He retired from Idaho State College in 1969 as Professor of Sociology.



## Dr. Edson Fichter, 1950-1982

Dr. Edson Fichter, Curator of Mammalogy, was a founding biologist of wildlife conservation. His lasting legacy was securing the Museum's permanent home in the basement of the new library building in 1954. Prof. William Kitaj, Prof. Merrill D. Beal, and Dr. Fichter scraped heavy accumulations of dried mud from the concrete floor, the remaining dust was removed with a vacuum sweeper, and the floor was mopped by a crew of students.

## Cutting Edge Experimental Archaeology, 1969-1974

The Museum has always been on the cutting edge of scientific research. Don Crabtree secured National Science Foundation funding to conduct experimental archaeological field schools at Dierkes Lake in Twin Falls, Idaho. The NSF funds were used to film and publish the experiments for others to use in their research. These videos are invaluable and are accessed weekly on our YouTube channel by experimental archaeologists worldwide.

## Dr. Earl Swanson, 1957-1975

Dr. Earl Swanson was hired as our first director in 1957. Dr. Swanson's networking and advocacy for the Museum was able to expand the Museum's collections throughout the 1960s and 70s. His dedication to the field and the museum helped create the lasting legacy of the recognition of the Museum and federal repository for archaeological and paleontological materials.

## Idaho State's Museum Designated as Idaho's Natural History Museum

On May 5, 1977 with a stroke of a pen Idaho Governor John Evans designated us as the State's natural history museum. In 1986 the State Legislature codified us as the official Museum of Natural History for the State of Idaho.

## DinoMania

Who can forget the craze of DINOMANIA of the 1980s? We hosted the state-of-the-art animatronic dinosaur exhibit multiple times in the 1980s. Life-like, moving, roaring scale-model dinosaurs were central to the exhibit. To this day we have visitors who tell us about visiting this exhibit and the impression it made.

## Tolo Lake Excavations

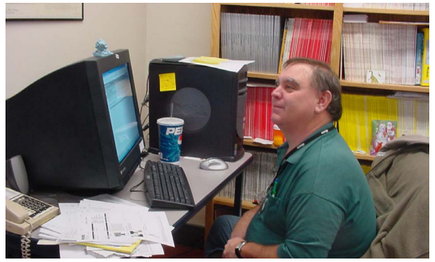
On September 2, 1990 an equipment operator exposed one of the largest known mammoth graveyards in the United States. Days later Dr. William Akersten, Curator of Paleontology, began the excavations with graduate students to recover the fossils. These fossils are housed at the Museum and research continues on this astounding discovery.

## Rebecca Thorne-Ferrel starts Science Trek

Under the direction of Rebecca Thorne-Ferrel the Museum has been at the forefront of STEM education in Idaho. For 30 years Science Trek allowed 3rd-5th graders to explore STEM careers with Idaho State University faculty and students and a sleepover in the gallery.



## Idaho Virtualization Lab Founded



The Idaho Virtualization Lab (IVL) was started by Ralph Chapman in 2004, an innovative idea that Ralph foresaw as the future of Museum research. Today, the IVL is the top in the nation for 3D capture of Museum specimens.

## American Falls and Twin Falls Excavation

Every decade brings new research and field opportunities for ISU Anthropology and Geology students. Under the direction for Dr. Mary Thompson, ISU students excavated a *Bison latifrons,* affectionally known as Jasmine, from American Falls Reservoir's shore.

ISU Anthropology and Geology students also learned to plaster jacketing a mammoth tusk in Kimberly Idaho, under the supervision of Dr. Andy Speer and Dr. Mary Thompson.

## Dinosaurs from the Mountain

In our ninth decade as a Museum we continue the legacy of our founders with research expanding our understanding of our shared natural history. We recently opened the first of its kind exhibit displaying all of Idaho's dinosaurs. Dinosaurs from the Mountain showcases cutting-edge science, hands-on exhibits, and fossils that have never been seen by the general public. We take you back 100 million years to the lush forests of the Wayan Formation where armored plant-eaters, tiny mammals, fox crocodiles, Idaho's state dinosaur *Oryctodromeus*, and *Gigantoraptor* roamed.

# IDAHO MUSEUM OF NATURAL HISTORY RESEARCH

## NEW ANALYSIS BY ISU PALEONTOLOGIST SHEDS LIGHT ON IDAHO'S STATE DINOSAUR

New findings from an Idaho State University paleontologist are answering some questions about Idaho's State Dinosaur and raising a few more.

A new paper published in the Journal of Vertebrate Paleontology details the findings of L.J. Krumenacker, adjunct professor of Geosciences at Idaho State University, affiliate curator at the Idaho Museum of Natural History, and professor of Geology and Biology at the College of Eastern Idaho, and his co-author's work on analyzing hundreds of bones from over a dozen individuala of *Oryctodromeus*. This burrowing dinosaur was about the size of a large dog and roamed ancient Idaho during the Cretaceous Period, and part of what they found was about two-thirds of the animal's length was just its tail.

"Some of the fun of science is when you get new answers, it usually gives you new questions," said Krumenacker. "Why did *Oryctodromeus* have such a long tail? It's not something you'd expect to see in a burrowing dinosaur."

The group's other findings include ossified tendons from among the fossils. Rather than staying pliable like other tendons, ossified tendons have hardened into bone. The tendons are found along the specimens' tails, necks, and backs.

"These tendons would have provided rigidity and support to the animal's spinal column," Krumenacker explained. "With the long tail and these tendons taken into account, how did *Oryctodromeus* turn around in a confined burrow? One hypothesis is that the burrows had separate and/or multiple entrances and exits. Another is they may have lived in burrow colonies like today's groundhogs. Plus, some animals have lots of tendons, and others have none. Does this reflect a difference between the males and females or in the animal's age?"

The additions of the newly found bones from the mountains east of Idaho Falls, Idaho, and south of Lima, Montana now make *Oryctodromeus* one of the most complete specimens from the group of dinos known as the orodromines. These burrowing dinosaurs lived primarily in what is now the United States and Canada but have also been found in South Korea.

"Orodromines are unique for being the first recognized burrowing dinosaurs," Krumenacker said. "They've helped researchers recognize that this may have been a more common lifestyle in small dinosaurs than previously thought."

At the Idaho Museum of Natural History, the *Oryctodromeus* specimens are being digitally scanned by museum staff as part of a United States Forest Service-funded project to digitize all of the dinosaur-age fossils at the IMNH. The 3D scans will be available via Morphosource, "a publicly accessible 3D data repository where subject experts, educators, and the general public can find, view, interact with, and download 3D and 2D media representing physical objects important to the world's natural history, cultural heritage, and scientific collections."

"The fossils we've scanned include dinosaur eggs, teeth, and bones," said Robert Gay, education coordinator at the IMNH. "Over 450 partial or complete bones have been scanned as part of this project, 30 percent of which belong to our state dinosaur *Oryctodromeus*."

The funding also provides a new and updated mounted *Oryctodromeus* skeleton based on the scan data and the latest paper from Krumenacker and his co-authors. The INMH has also produced education kits for the USFS that will be available in select locations throughout Idaho to help educate the public about Idaho's State Dinosaur.

"It is important to conserve and educate about our state dinosaur because it is part of our shared natural heritage here in Idaho," Gay said. "Idaho is the first place in the world that digging dinosaurs have been recognized from, and learning more about them –and their environment– can help unlock a new understanding of our past. The IMNH's mission is to educate the public about Idaho's natural history, and dinosaurs are a gateway to engaging students in the STEM fields."

"I think appreciating any aspect of the natural world leads to people taking better care of it," said Krumenacker. "Whether it's dinosaurs, modern animals and plants, or anything outdoors, an appreciation for things like this leads to better stewardship of a finite and unique planet."

## MUSEUM PALEONTOLOGY STUDENT RESEARCHERS HIT THE ROAD

*IMNH crew at SVP 2024 from left to right: Henry Thomas, Cy Marchant, Ferrania Huang, Brandon Peecook, Brenlee Shipps, Rob Gay, Gary McGaughey, Tobias Babcock, Miriam Fridel, and Anne Fogelsong*

2024 was a hugely prolific year for IMNH paleontology research, especially at academic conferences where students and researchers shared their many new and exciting findings with other paleontologists!

In June, the 12th North American Paleontological Convention was hosted at the University of Michigan. Masters student Henry Thomas presented on mammal relatives from the late Permian period and Paleontology Curator Brandon Peecook presented on our newest exhibit of Idaho's fossils: Dinosaurs from the Mountain, especially on how we built our gigantic oviraptorosaur with Idaho State University students!

In September, the 22nd Palaeontological Society of Southern Africa conference was in the small town of Graaff-Reinet in South Africa. Henry Thomas, PhD candidate Xavier Jenkins, and Dr. Peecook all presented work on Permian-aged animals and ecosystems. A true specialist's dream!

The big show was over Halloween at the 84th Annual Meeting of the Society of Vertebrate Paleontology in Minneapolis. ISU and the IMNH had a whopping nine presentations, showing an impressive range of content! Presenters were undergraduates Anne Fogelsong (dinosaur skeletal mounts), Miriam Fridel (Idaho dinosaur scanning project), and Ferrania Huang (giant Ice Age armadillos from Trinidad); Masters students Henry Thomas (tooth loss in mammal relatives; representation and focus in paleo media) and Tobias Babcock (geography of buzzsaw sharks); PhD student Gary McGaughey (giant ichthyosaurs from Nevada); Dr. Peecook (early evolution of mammals and reptiles), and IMNH Education Manager Rob Gay (museum engagement).

# REVOLUTIONIZING RESEARCH: IDAHO STATE'S RARE INSTRUMENT OPENS NEW FRONTIERS IN SCIENCE

There are three machines of its kind in the world: one is at the Louvre Museum in France, one is at Cranfield University in the United Kingdom, and one is custom built and newly installed right here on the Idaho State University Pocatello campus in the Center for Archaeology, Materials, and Applied Spectroscopy (CAMAS) Lab at the Eames Complex.

Led by Dr. Charles A. Speer, principal investigator and Curator of Anthropology, together with co-principal investigators John Dudgeon, Kathleen Lohse, and Kurt Sundell, ISU secured this machine, called the "Artifact" which is a Large Object Chamber - Laser Ablation - Triple Quadrupole - Inductively Coupled Plasma - Mass Spectrometer or LOC-LA-QQQ-ICP-MS, through a National Science Foundation grant. It's a high-tech mass spectrometer, an Agilent 8900, combined with an incredibly precise Excimer laser. This represents the latest technology available to researchers.

This new tool will change how research is done in many fields like archaeology, biology, environmental science, and forensics. What makes this machine special is that it can analyze tiny traces of almost any material (liquids, solids, gasses). Additionally, for solid samples analysis can be done with microscopic holes thereby opening the way to test priceless artifacts and samples.

For example, it can look at ancient stone tools or mammoth tusks to understand where they came from and how they were used without breaking or harming them. It can also analyze human bones to help identify where someone lived, which could be useful in solving forensic cases, like identifying unknown migrants. Researchers can date rocks, track ancient migrations, and study environmental impacts. Unique to other sampling laser instruments, it can also handle large samples (as big as a small fridge) and test them with incredible precision. Researchers can even use it to check the purity of materials in medicine or food.

With the "Artifact", students and faculty have an unparalleled opportunity to conduct research and learn about the world in new ways. Additionally, students have the opportunity to train on an instrument that will poise them for career opportunities that are in high demand.

Part of the grant includes a three-year graduate assistant program where students will train with Dr. Speer to become technicians qualified to use the complex instrument. Dr. Speer will also use it to teach undergraduate students how these tests are applied in fields like archaeology and anthropology, for example, by bringing his Discovery Archaeology class to the lab during class time to better understand how a high tech lab can solve ancient mysteries.

Dr. Speer explains that this opportunity is especially important for underrepresented groups, such as female, rural, Indigenous, Hispanic, and low-income students who often seek employment beyond academia, yet don't traditionally have access to equipment of this caliber.

"Many of our students come from low-income or marginalized backgrounds, and this kind of opportunity would typically only be available at larger institutions," Dr. Speer says. "It's as cutting-edge as you get. Students have a unique opportunity to train on these instruments. Once these students acquire the lab and instrument skills set, they then become highly valuable to multiple private and public sector companies as laser ablation and mass spectrometry are critical to so many different industries. On top of that, it's hard to find people trained in this niche, high tech area. All of a sudden anthropology graduates can apply for jobs across the spectrum, including the semiconductor industry, which can be highly lucrative."

The instrument is already attracting researchers from outside ISU and fostering collaboration, making ISU a hub for advanced research. Additionally, it will make ISU more competitive for external funding and provide the opportunity for faculty and students to explore research questions previously unattainable in the region.

For Dr. Speer, this achievement is the result of over a decade of effort, marking his third attempt at securing this grant. It's been a long journey, but now it's a reality.

Learn more about this instrument and its capabilities.

# IMNH GETS IN ON THE 200TH ANNIVERSARY OF THE "FIRST" DINOSAURS

*Dr. Brandon Peecook at the famous Crystal Palace in London at the first public display of what a dinosaur might have looked like back in the 1850s. Iguanodon has come a long way.*

The first extinct dinosaur officially 'known' to science is the meat-eater *Megalosaurus bucklandi:* named in 1824. Therefore, 2024 was celebrated the world over as the 200th Anniversary of the first dinosaur! It's startling to imagine a world where no one had ever heard of, or even imagined, a dinosaur before! The first three dinosaurs named were all from England and *Megalosaurus*, *Iguanodon* (1825) and *Hylaeosaurus* (1832) were not put together into a 'new' type of ancient reptile called "Dinosauria" until 1842!

To celebrate this historic occasion the Natural History Museum in London hosted a conference in January featuring all the most cutting-edge science on dinosaurs, 200 years in, with researchers from all over the world. IMNH Curator of Paleontology, Dr. Brandon Peecook gave a presentation on his work in Africa (Zambia) where he and his team are excavating fossils of animals that lived side by side with the first true dinosaurs in the Late Triassic Period.

The story of dinosaur discovery, including Idaho's growing footprint, is always ongoing, and it is wonderful to think of the progress being made by scientists the world over in unraveling the deep stories of Earth's history. Just 200 years ago, no one knew what a dinosaur was, and now we have incredibly detailed scientific debate and discussions about how they lived and evolved.

What kinds of things will paleontologists in the year 2224 know about dinosaurs that we cannot even imagine now?

*Dr. Brandon Peecook in London with the original holotype of Megalosaurus bucklandi, the first dinosaur named by western science in 1824.*



# MUSEUM ADDS GIANT SKELETONS TO NATIONAL 3D COLLECTION

A zoologist is poring over a digital version of the skull of an Arctic wolf from her office in Arizona. Meanwhile, an artist notices the intricate details of a western diamondback on her screen in Vermont. While they're hypothetical, each scenario is now possible thanks to the work of researchers at the IMNH and more than a dozen other institutions.

The project, called openVertebrate—oVert for short—is now home to roughly 13,000 digital specimens from across the animal kingdom. From the smallest lizards to some of the largest mammals in the seas, these specimens are available for anyone—scientist, hobbyist, artist, educator, or otherwise—to view and use online.

"Natural history museums preserve the Earth's record of biodiversity," said Leif Tapanila, director of the Idaho Museum of Natural History and professor of Geosciences at Idaho State University. "So much information is kept locked away in museum collections, so naturally, we're trying to protect it. The oVert project finds a way to make life's biodiversity more accessible to anyone."

Using CT scanners, researchers from institutions including the University of Florida, Cornell University, University of Washington, Harvard University, and others took on the monumental task of digitizing specimens housed in museums around the U.S.

"Museums across the country have remarkable collections, especially of their regional plants and animals, that you might not find elsewhere," Tapanila said. "As a State museum, the Idaho Museum of Natural History focuses on the Intermountain West. So we have an unparalleled sampling of life from our region that you simply can't find anywhere else."

Now digitized, the specimens can be viewed inside and out and see its bones and tissues, without damaging them. Many of these specimens are being preserved using fluid in glass jars, and without the use of scanning technology, researchers would have to reach for a scalpel to get the same view.

"At IMNH, we have a variety of preserved reptiles, amphibians, and fish that are historic samples of life across the State, including the rubber boa, Great Basin rattlesnake, and the Idaho giant salamander," explained Tapanila. "There are times when taking a tissue sample has value, but in general, we try to avoid destructive testing unless it's really necessary. Once that body is digital, the individual organs can be dissected 'virtually' on a computer, protecting the original material for posterity."

But what if the specimen is too big for a CT scan? That's when you call in the experts with the Idaho Virtualization Laboratory. Housed in the IMNH, the IVL is home to "state-of-the-art technology for imaging, virtualization, and simulation of material items, landscapes, and life." Using handheld scanners, the IVL team digitally recreated the skeletons of the largest animals to be.

Search the project at: MorphoSource

# NEW FUNDING SUPPORTS MUSEUM'S TECHNOLOGY FOR STUDENT TRAINING

The IVL  expects major advances this year, thanks to generous funding from Idaho State University (ISU) alumnus Rick Carron.

Carron's funding will support the IVL's purchase of portable scanning equipment and advanced software, strengthening the facility's role as a national leader in training students in digital museum archiving. The IVL creates 3D digital reproductions of real-world objects and artifacts that are made available online to give access for research and education, while protecting the original specimens from potential damage.

Carron is a long-time advocate for educational advancement and technological innovation. "His commitment to students at ISU is really special," said Dr. Leif Tapanila, director of the IMNH. "Staying current with technology is critical to being able to train students and build relevant skills for their future careers. Rick's support will have a significant impact on ISU students from a wide range of programs in the sciences and arts.

Hands-on training has been a vital part of the IVL's mission since it began in 2004 as one of the first digital museum labs in the world. Over that time, dozens of ISU students have trained in the processes of making 3D 'virtual' objects and 3D printing.

Abby Gallegos, recent ISU graduate (Biology, 2024) and IVL career path intern, said "The old graphics card is the current weak point in my software workflows and project creations for the museum and university... leading to diminished use of programs and loss of work due to crashing. Upgrades to our graphics cards would remedy many of the issues I am having as well as increase the output quality of renders, animations and research projects."

Looking ahead, the IVL remains dedicated to exploring new avenues for research, and empowering the next generation of scientists and learners.





# INNOVATION IN MUSEUM EDUCATION

IMNH Education teamed up with the Museum's Idaho Virtualization Lab to help bring natural history into the 21st century. 3D scans of fossils from Bryce Canyon National Park, the Prehistoric Museum at Utah State University Eastern, Grand Staircase-Escalante National Monument, Dinosaur Journey: Museums of Western Colorado, and Dinosaur National Monument were among the key partners this year. 3D scanning not only preserves fossils for the future in the event of a disaster, but also allows new educational materials to be created. By making hands-on 3D models of bones, shells, fish, and artifacts, learners are able to more authentically connect to our natural world and experience things that would normally be out of reach.

3D scanning also helps create new exhibits! This year we were proud to welcome the most accurate reconstruction of Idaho's state dinosaur, *Oryctodromeus*, into our exhibit hall. This new skeleton was entirely printed at the IMNH based on 3D scans of fossils from the USFS Caribou-Targhee National Forest that IMNH staff and ISU students 3D scanned in our lab.

This skeleton model will also be used as the basis for our new traveling Mobile Museum, funded by the David B. Jones Foundation. This mobile branch of the Museum will travel the state to educate students and communities alike about Idaho's amazing fossil resources including our state dinosaur. Look for more information coming in the spring newsletter on this exciting new branch of the Museum. To book the Mobile Museum to your site, please contact Rob Gay,  Education Manager, robertgay@isu.edu

# IDAHO MUSEUM OF NATURAL HISTORY EDUCATION

Robert Gay, Education Manager

In 2024, the Education Department at the IMNH has seen some amazing growth. Two of our former Career Path Interns have landed jobs in their fields thanks, in part, to their training and experience at the Idaho Museum of Natural History. The museum is also bringing a new educator on board in January, expanding our capacity. This will enable us to have a robust spring and summer education program. Stay tuned for announcements on how you can join in our new and exciting offerings!

We saw growth across every measure we tracked. Overall we saw 3% growth in educational program reach, with our greatest growth coming from the Idaho State University (ISU) student body. We doubled the number of counties we were able to serve in 2024; from 7 up to 14. New counties included Ada, Bear Lake, Bonner, Caribou, Elmore, Minidoka, Oneida, and Payette. We held multiple in-person programs in central, western, and northwestern Idaho this year including our first-ever K-12 program in the Idaho panhandle in the Museum's 90 year history. In addition, IMNH educators were invited to speak and provide training in Utah and at an international conference hosted in Minneapolis.

## Education Impact

Idaho School Districts Served

**15 of 138**

Idaho Learners Served

**~8,100**

Number of Programs

**160, on average 3 per week**

People Reached

**3% increase over 2023**



# SUMMER CAMP STUDENTS WITH DISABILITIES CREATE DISPLAYS FOR MUSEUM'S EXHIBIT

A group of summer campers with disabilities have created displays that will teach museum goers about Idaho's water through the ages.

The students at the ISU Academy NExT Camp created four separate dioramas that will be on display for a new exhibit at the Idaho Museum of Natural History called "Waters of the West."

"The idea here is to have these lifelike replicas of what life would have been like back then," said Robert Gay, Education Manager at the Idaho Museum of Natural History. "A dinosaur skeleton tells one story, but seeing dinosaurs hanging out on a riverbank — that's a different story."

NExT, or New and Exciting Transitions, is a camp that provides experiences to students from 14 to 21 that help them transition into college and post-secondary education independently. The camp is run in partnership with ISU and the Idaho Division of Vocational Rehabilitation.

The camp allowed students to stay away from their parents and guardians in the ISU dorms for five days. Joel Bocanegra, the department chair of School Psychology and the co-director for the camp, said that the student campers with "exceptionalities" become more independent over the course of the camp.

"A lot of these youth have never been traveling or been away from home," Bocanegra said. "We try to help that process too so that they can get away for a little bit and become more independent."

Jennifer Gallup, associate professor of Special Education and primary director of the camp, started because she hadn't seen programs that allowed her son, who has autism, to fail and learn.

"At Academy NExT, we allow the students to fail in a safe environment. They get the opportunity to make choices for themselves," Gallup said.

Gallup said that people with disabilities often struggle in the workplace due to a lack of communication and problem-solving skills and the ability to work as a team. The camp emphasizes practicing these three skills through trial and error.

For Tyson Parkhouse, a 14-year-old at Century High School, it was his first time attending the camp and he said that he had an "awesome" time.

"During camp, I made so many new friends, and I worked with so many great staff members and had so many adventures," Tyson said.

*Rob Gay, joined a Girl Scout troop on a snowshoing trip to learn about Idaho's natural wonders.*





# IDAHO MUSEUM OF NATURAL HISTORY EXHIBITIONS

## MUSEUM HOSTS SENIOR STUDENT EXHIBITION

*Yellowstone Cutthroat Trout on display in "The Art of Science."*

We are happy to host the biological illustrations of local stream macroinvertebrates, "The Art of Science" by Hannah Clawson, a senior studying biological sciences under the direction of Dr. Colden Baxter. These illustrations explore organisms found in local riparian ecosystems: Mink Creek, City Creek, and Cherry Springs.

We're delighted to partner on this exhibit and showcase ISU research to our communities," said Leif Tapanila, Museum Director. "These illustrations explore the freshwater ecology and our connections to the world around us."

"My project exists in the space between art and ecology. Spending so much time collecting and observing various species gave me a new perspective on each one" says Clawson. "I want my art to inspire others to take a closer look the next time they go outside."

# IMNH HOSTS GRADUATE STUDENT EXHIBITION

We are thrilled to be hosting a photo-ethnography of the history and culture of Pacific cod fishing in the Shumagin Islands of Alaska.

"There is hope from the sea…" a photo-ethnography of Zack Beal, graduate student of the ISU Department of Anthropology and Languages under the direction of Dr. Kate Reedy, explores the history and culture of Pacific cod fishing in the Shumagin Islands of Alaska.

"We're excited to partner on this exhibit and showcase ISU research to our Idaho communities," Leif Tapanila, museum director. These photographs explore the Aleut  Indigenous fishing communities' connections to the Pacific cod fishing industry and what the decline in cod means for their future."

"Instead of a traditional written thesis, we wanted to create something that has a broader impact," says anthropology professor Kate Reedy. "The exhibit showcases the development of the commercial fishery by Scandinavian and Aleut fishermen in these "Cod Islands," their connection to the ocean and its resources, and the effects of climate change on both fish and the people who depend on them. The exhibit also shows to Idaho communities who is catching their seafood."

The research is supported by the National Science Foundation (NSF) and Navigating the New Arctic Community Office (NNA-CO).

The NNA-CO builds awareness, partnerships, opportunities, and resources for collaboration and equitable knowledge generation within, between, and beyond the research projects funded by the NSF. The office builds capacity in early career researchers and provides unique opportunities to inspire and engage a wide audience toward a more holistic understanding of the Arctic—its natural environment, built environment, and diverse cultures and communities.

Photo exhibition closes at the end of February 2025 and will be relocated to the Aleut fishing community of Sand Point, AK as a permanent exhibition in their community.



# UPDATE TO "THIS IS IDAHO" EXHIBIT INCLUDES MORE SHARKS!

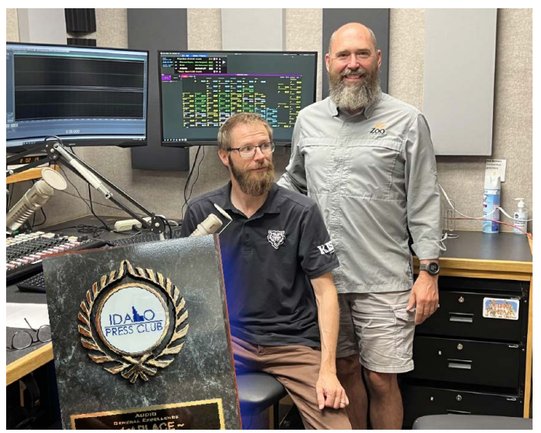
"This is Idaho" explores the wild mosaic of mountains, rivers, and plains offering majestic beauty and scattered resources that shape all who live here. What makes Idaho's land unique? Answer: the *Helicoprion* shark fossils, or buzzsaw sharks, recovered from phosphoria mining.

Step into the world of Idaho's Ancient Phosphoria Sea, stunning fossils, and especially the Helicoprion. This exhibit takes you on a captivating journey through a Phosphoria Sea 270 millions years ago that today is a resource for modern agriculture.

The Western Phosphate Patch in Idaho is one of the world's largest deposits of this precious resource, critcal in making fertilizer for modern agriculture. Working in partnership with the mining industry the Museum houses the largest collection of buzzsaw shark fossils in the world. The phosphate ore, mined from the ancient seafloor sediments, is processed at the Simplot Don Plant in Pocatello.

Additionally, Simplot has donated to our vehicle fleet to help us do more research and to go further with our educational outreach. Look for us on the road!

# NATURE OF IDAHO - AWARDING WINNING




Our radio collaboration with Zoo Idaho completed its 6th year! We had a blast talking about historical highway markers, ashfalls, sage grouse and Sacajawea. We're also keeping our eyes focused on the changes affecting our western environment, from our warming climate to invasive species.

We were thrilled to recieve 1st Place from the Idaho Press Club for General Excellence in Audio.

Tune in to KISU-91.1 FM for Season 7, and catch all episodes on Spotify or kisu.org.

# IMNH AWARDED GRANT TO FUND UNDERGRADUATE PALEONTOLOGY RESEARCH

*Crew of ISU and Loyola University Chicago students and professors gathered around a massive duck-billed dinosaur bone in eastern Wyoming. ISU crew: Dr. Peecook (left), PhD student Gary McGaughey (center, pointing), and undergraduate Cy Marchant (right).*

This summer Paleontology Curator Dr. Brandon Peecook was awarded a grant from the David B. Jones Foundation to take ISU students through the full experience of being a paleontologist: from finding fossils in the field to presenting the work to other scientists at conferences and publications. The grant will run for the next several years and grow the IMNH collections in an important area of paleo!

Fieldwork will take place entirely in eastern Wyoming where rocks of the Lance Formation preserve some of the last dinosaur ecosystems of the Mesozoic, including celebrity animals like *Triceratops* and *Tyrannosaurus*. While the team brought home a couple big dinosaur bits in 2024, the goal of the work is to focus on the many, many 'microfossils' to be found in the Lance. These tiny fossils may not be as impressive as an *Ankylosaurus* tail club, but they'll teach us a lot about this ancient ecosystem. The team has already found tiny bones, pieces of armor, scales, and teeth showing the diversity of little animals: mammals, lizards, snakes, turtles, crocodiles, frogs, salamanders, bony fishes, even freshwater sharks and rays that lived in the woods and waterways where *Tyrannosaurus rex* would take a drink.

The grant also funds student research trips to other museums that hold significant collections of similar fossils: the University of California Museum of Paleontology at Berkeley, the Burke Museum at the University of Washington, the Denver Museum of Nature & Science, and the Smithsonian National Museum of Natural History in DC.



# THANK YOU TO OUR DONORS AND FUNDERS WHO HELPED US RAISE OVER $275,000 IN 2024

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# MEMBERSHIP EASIER THAN EVER

Membership Anywhere

We now offer Digital Membership Cards as the most convenient way to start using your Museum Membership benefits.

Benefits of Membership:

- Free unlimited museum admission
- 10% museum gift shop
- Exclusive event and exhibit invitations
- Subscription to the monthly e-newsletter
- ASTC Travel Passport Program

No more forgetting your Membership card, get the most out of your ASTC Passport when traveling, and convenient renewals. As part of this process we will phase out physical cards over the next year.

# Idaho Museum of Natural History

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Leif Tapanila, Museum Director, Curator of Earth Science
Tabatha Butler, Executive Director of Philanthropy
Amber Tews, Assistant Director of Public Operations, Anthropology Collections Manager

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Teresa Henderson, Event Planner and Store Manager

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Kate Zajanc, Senior Accountant
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