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This was a growth year for the Museum. New exhibits including Pow Wow Dancers, the Smithsonian’s Life in A Cubic Foot, and the recent True Colors were admired by a record number of visitors, exceeding pre-pandemic levels. Our education programs inspired over 10,000 youth across the eastern half of the State. And our public events are reaching larger audiences, notably this year the Remembering Bear River film screening and panel discussion that provided a forum for our community to engage with the difficult history of our region.

We also lost valued members of our Bison family. Bill Akersten, long time curator of vertebrate paleontology, was a strong advocate for the importance of museum collections and a dedicated mentor to his students at ISU. Alan Jackson, who directed the Museum in the 90’s, also passed this year. He was instrumental in redesigning our main gallery space and oversaw the first Science Trek, now in its 31st year and the most impactful STEM event in Idaho’s history. Both Bill and Alan exemplified the mission of the Museum and their legacy continues through education programs they helped build.

Our institution, now in its 90th year, has shown its resilience to weather many of life’s storms. A new book collaboration, Hidden Gems, written by students from the College of Business gives a glimpse at the people that helped build the foundations of our Museum and continue to move it forward by staying relevant to the needs of the community.

And so we continue to find ways to better fulfill our mission. This year, look forward to improvements to education resources in our STEM teaching room. We will be adding a new interactive stream table to the Discovery Room, and new display cases to house permanent collections. We’re busy building our next exhibit, Dinosaurs from the Mountain, which is sure to amaze visitors with the giant and bizarre monsters who lived in the mountains of Idaho 100 million years ago. The centerpiece will be a 3D printed dinosaur made in-house with our collaborators at ISU’s College of Technology.

Thank you for supporting the Museum and our community.

Leif Tapanila
Southeastern Idaho has a lot of potential for further discoveries of ancient life from the age of dinosaurs and other times in history,” said Krumenacker. “We have found lots of fossil fragments that show there is a great diversity of ancient dinosaurs and other animals from Idaho left to discover and learn more about.”

Thanks to a discovery by an Idaho State University paleontologist, we’re finding out that one of Tyrannosaurus rex’s ancestors may have been more teeny than terrible.

In a new paper published in the Journal of Paleontology, L.J. Krumenacker, adjunct professor of geosciences at ISU and affiliate curator at the Idaho Museum of Natural History, and his co-authors share the details of a partial femur of a Tyrannosaurus-like dinosaur.

The fossil looks to be from a species similar to Moros intrepidus, a tyrannosaur found in Utah. The specimen is believed to have been at least five-years-old when it died and was not a full-grown adult, according to Krumenacker. “We estimate the animal weighed just over 100 pounds, and even though it was smaller-bodied, this animal would have been an effective predator in its environment,” Krumenacker said. “When I found this fossil, I immediately recognized it as a thigh bone from a carnivorous dinosaur. Carnivores are comparatively rare in most ecosystems, and I knew this animal would be special as so few carnivorous dinosaurs have been found in Idaho.”

The fossil was found in Eastern Idaho’s Bonneville County on land managed by the United States Forest Service. Located in the Caribou Mountains, the rocks are part of the Wayan Formation and consist primarily of mudstone and sandstone formed from ancient rivers.

Currently, the fossil is in North Carolina and is being studied by Krumenacker’s co-author Lindsay Zanno, Associate Research Professor in the Department of Biological Sciences at North Carolina State University. Its permanent home will be back in Pocatello at the IMNH and will be featured as part of upcoming exhibit “Dinosaurs from the Mountain.”

“This new tyrannosaur is a reminder that scientific discovery is ongoing,” said Brandon Peecook, paleontology curator at IMNH and assistant professor of paleobiology at ISU. “We’re excited to showcase the new specimen to the public not only as a cool fossil but also as a source of data for future science into the history of life.”

In 2021, Krumenacker co-authored a paper in Nature that detailed how life in Idaho bounced back after the Permian.
When it comes to fossils, finding any kind of eggs is like striking gold. So when paleontologists find prehistoric turtle eggs, it’s like they’ve found a diamond. Recently, Dr. Ashley Ferguson (ISU Geosciences Ph.D. 2022) and advisor Dr. Leif Tapanila, Geosciences Professor and Director of the IMNH, published their findings on a clutch of 74 million-year-old turtle eggs in the journal Cretaceous Research.

The eggs were originally found in the Grand Staircase-Escalante National Monument in Utah by Dr. Tapanila and colleague Dr. Eric Roberts in 2009 while they were prospecting the area for potential fossil sites.

Fast forward to 2017, and after monitoring the spot to see if Mother Nature would reveal more of the eggs, Ferguson took the eggs on for her research.

“I became really interested in researching eggs during my Master’s studies when I learned about the unique ways some dinosaurs made their nests,” said Ferguson. “Oviraptors, for example, arrange their eggs into a donut shape, with the adult sitting in the center. It made me really curious to learn more about nesting strategies and how eggs and nest structures evolved over time.”

Over the course of two years, Ferguson worked to excavate the eggs, even utilizing a Bureau of Land Management helicopter to fly the block of rock holding the eggs to a waiting pickup truck.

Once the eggs were back in Pocatello, she worked at exposing the eggshells using hand tools like dental picks and chisels. Using an electron microscope, she scanned a thin section of the egg and made a big discovery.

“Our scan showed us the eggs have a lot of unique features and might be a new type of turtle egg,” Ferguson said.

“Paleontologists like to name everything - including fossilized turtle eggs,” said Tapanila. “Because they could be a new species, their name is Testudoolithus tuberi.”

Ferguson also found the pieces of broken eggs were strewn across the whole specimen and something unexpected. Like a detective working a crime scene, Ferguson has been able to put together what may have happened eons ago.

“We saw eggshell fragments covering a hillslope, and we could trace it back to a layer underground,” said Tapanila. “As you can imagine, eggs are really delicate so finding a well-preserved clutch is rare.”

“The eggshells being so spread out is unusual for eggs that hatched since the broken eggs would have stayed in the nest chamber,” Ferguson explained. “It makes sense that predators would eat nests fairly often and we found tyrannosaur teeth with the eggs so it’s entirely possible that a small tyrannosaur dug them up for an easy meal.”
We pride ourselves on giving ISU students hands-on research experiences with real fossils. Those kinds of opportunities are golden for young researchers, so I was thrilled when Maya and Xavier had the chance to expand their knowledge, skill sets, and professional networks in Washington D.C. and South Africa.

"Experiences like this are fantastic and ones that I spent my childhood dreaming of," Jenkins said. "You hear about all of the fossil discoveries in your textbooks, and seeing it in person was truly breathtaking."

Maya Elliott with fossil leaf at Smithsonian National Museum

Meanwhile, Xavier Jenkins, a doctoral student studying biology from Buckeye, Arizona, spent four weeks in South Africa analyzing fossils reptiles that lived more than 250 million years ago in the Permian Period. As part of his doctoral studies, Jenkins has been working in the Museum's Idaho Virtualization Laboratory, studying the evolution of early reptiles using digital scans of the specimens. With support from ISU, he traveled to South African museums to see the fossils in person. While in South Africa, he also joined Jonah Choiniere, professor of comparative paleobiology at the University of the Witwatersrand's Evolutionary Studies Institute, on a dig for the earliest long-necked dinosaurs.

"Experiences like this are fantastic and ones that I spent my childhood dreaming of," Jenkins said. "You hear about all of the fossil discoveries in South Africa, but seeing it in person was truly breathtaking."

Elliott and Jenkins are working with fossil specimens and cutting-edge Nano-CT imaging technology to understand the evolution of early reptiles.

The Idaho Virtualization Lab (IVL) continued a major digitization project making 3D models of large mammals for research and educational communities. Led by director Leif Tapanila with a $175,000 award from NSF, the oMEGA project is creating a virtual zoo of large skeletons, faithfully reproduced using 3D scanning technology. The IVL previously scanned animals at California museums, but progress was halted during the pandemic. This fall, ISU alumni Tim Gomes and Evelyn Vollmer of the IVL spent two months in Boston scanning large mammal skeletons in Harvard's collections. They've added white and black rhinoceros, a manatee, a hippopotamus and a dozen other mammals to the digital collection.

Tim said of the experience, "getting the opportunity to work with the collections at Harvard was great. Our hosts Mark Omura and Madeleine Mullon were awesome and gave us access to scan some rare large mammals for digital collections. I was happy to have met other researchers and scanners from Florida, Oregon, Canada and the Smithsonian."

Next year, the IVL will complete the final models for the project and specimens will be available through the Morphosource website.

The aircraft is on display and it represents Captain Ronald Smith's A-1H The Proud American (Serial Number 52-139738) as it appeared during his SAR mission in June 1972. As part of the 1st Special Operations Squadron, Nakhon Phanom (NKP), Royal Thai Air Force Base, Thailand, Captain Smith was awarded the Air Force Cross for the rescue of a downed F-4 Phantom crewman near a North Vietnamese airfield.
2022 has been a wildly successful year for education here at the Idaho Museum of Natural History, and we couldn’t have done it without the help of our supporters! From the return of Science Trek to the international reception of our 3D printed education materials, we’ve got a lot to brag about this year.

Coming out of the heart of the COVID-19 pandemic, our partnerships are stronger than ever. In 2022, we partnered with 41 different schools, communities, non-profits, homeschool groups, and community organizations across the state to serve over 7,000 students.

We are especially proud of the following partnership programs:

- STEM nights with the Shoshone-Bannock tribes, whose lands the IMNH sits upon
- Pocatello/Chubbuck SD25 ongoing classroom and after-school programming
- Marshall Public Library, monthly Museum at the Library series
- Zoo Idaho and the dynamic Idaho Alive programming this last spring

Without all of our amazing partners, we would not have been able to create unforgettable educational experiences for everyone this year.

In 2022 education staff traveled across the state to educate Idahoans, traveling over 760 miles (one way!) to deliver educational programming.

I presented on the unique work the IMNH is doing with 3D printing in the realm of education to an international audience at the 2022 Society of Vertebrate Paleontology meeting in Toronto, Canada.

Serving a statewide mission as Idaho’s official natural history museum is something the education department takes very seriously. As such, we have worked hard to provide access and break down barriers to learners.

More than 70% of our 2022 educational programs were offered at no cost to participants, and over 90% had a participant cost of less than $5. Our programs are the most affordable in the state, thanks in large part to our generous donors and our state mandate.

I have the opportunity to have Robert Gay and his interns, at Idaho Museum of Natural History come and teach enrichment lessons in our 8 afterschool programs. We have had the opportunity to work with the Idaho Museum of Natural History for a number of years, but last year when Robert took over the program was phenomenal. The learners in the program look forward to the Museum coming and doing lessons once a month. Robert has gone above and beyond to make his educational program engaging and fun but also educational. Every lesson has hands-on components for the learners to participate in. He takes STEM lessons and makes them applicable to Idaho and to the wide variety of ages we serve in our programs. Currently we have kindergarten through fifth grade in each afterschool program. Robert always makes sure he and his interns use the scientific method as a basis for the principals he is teaching. He asks the learners insightful questions to get their critical thinking and analytical minds moving.

Robert has also streamlined the process to schedule educational programs and field trips with his easy online scheduling. Scheduling community partners for our afterschool programs can get tedious and takes quite a bit of time, but it is extremely efficient to schedule 8 programs for a once a month visit from the museum.

It is very obvious that Robert is passionate about STEM and education. His excitement and passion transfers to the learners in the programs.

Sincerely,

Kimberly Hawkins
Director of the Afterschool Program
Pocatello/Chubbuck School District 25
For the first time since 2019, Science Trek returned to the Idaho State University campus in 2022. Featuring an updated format and numerous stations across many of the STEM fields at ISU, students were able to explore and experience science and nature in a hands-on way once again. From robots to problem-solving to fossil-picking, we were happy to help usher this time-honored tradition of youth science back onto campus this year. With the return of Science Trek to campus, we are excited to be engaging the next generation of scientists and informed citizens right here at ISU.

Science Trek 2023 for 3rd - 5th graders is scheduled for May 2023!

This year’s Fall Fossil Fest was bigger and better than ever! With longer operating hours and nearly four times the attendance of 2021, it was one for the record books. Despite the snowy Idaho weather, nearly 200 visitors attended to create art, learn about the latest research, assist with fossil sorting, and much more. The IMNH is proud to showcase the cutting-edge research that is happening at the Museum and on the ISU campus with Idaho’s premier prehistoric-themed event.

We are excited for Fall Fossil Fest 2023 where Idaho dinosaurs will be making their debut!

LECTURES, GLASS CLASSES, AND BEHIND THE SCENES

We partnered with Idaho Fish and Game, Southeast Regional Office, to host free lectures on current projects conducted by Fish and Game. From learning about Mink Creek restoration projects to K-9 investigation, patrons appreciate our local outdoors even more! We also featured affiliate curators and local nature experts to highlight the wonders of Idaho’s natural history.

Gallery attendant and local artist, Melissa Neiers, has been hosting glass making classes. Each class is based upon Idaho nature or seasonal fun! These classes sell out within days of opening. We are excited to continue these classes and will be working with other local artists to create unforgettable museum experiences.

We couldn’t possible put our 1.3 million objects in our collections on display. In order to share all of Idaho’s amazing natural history we are hosting monthly Behind the Scenes. Each month our staff of experts highlights objects or collections we hold in the public’s trust.

The IMNH is proud to showcase the cutting-edge research that is happening at the Museum and on the ISU campus with Idaho’s premier prehistoric-themed event.
Pow Wow Dancers of the Wind River photo exhibition by Dr. Jeb Schenck opened Sept. 10th.

The project is ten years in the making and is still ongoing. The exhibit features unposed images of indigenous dancers with explanations in their own words of the dances or their backgrounds. Many dancers are from Wyoming, Rocky Mountain region, and Canada.

Schenck says “These folks are literally our neighbors and here is an opportunity for non-natives to gain more understanding. Many of the dancers have become friends and have helped me learn about them. This is one of several ways I wanted to give something back. To help celebrate and honor their culture. Their dancing helps to continue their culture and many sacred practices, and these photographs document a part of their culture.”

Schenck taught for 42 years in the Wyoming public schools and for University of Wyoming’s College of Education. He is a consultant and workshop leader in neuro-education, a substitute teacher, an author, and the operator of Schenck Photography. In addition, he is Vice-Chair of the Big Horn Basin Nature and Discovery Center and past co-chair for Smoking Waters Art Guild.

The exhibit was made possible by the generous contribution of Bob and Pam Kennedy.

One of the great advantages about being a student at ISU is the free access to our Museum. Since making the museum free to students in 2018, we’ve seen a big increase in Bengals in our galleries. The Museum is proud to support class visits from a wide range of disciplines, from the sciences, to visual art, communications majors, and disability services. Students gain a broader appreciation for Idaho’s heritage and for some, it becomes a pathway to realize their passion working in a museum as a paid intern.

POW WOW DANCERS OF THE WIND RIVER

IDAHO STATE UNIVERSITY STUDENT VISITS INCREASE

We welcome Martin Blair as ISU’s Vice President for Research and the Museum’s representative to Upper Administration. Blair began his career as a special education teacher. Following that experience, he spent the next two decades at Utah’s University Center for Excellence in Developmental Disabilities, the Center for Persons with Disabilities, the Utah Assistive Technology Program, Utah’s Interagency Outreach Training Initiative, the National Center on Disability and Access to Education, and the Center for Technical Assistance for Excellence in Special Education. In the various positions he held during that time, he was well regarded for his trusting and collaborative relationships with colleagues from a variety of disciplines.

THANK YOU TO OUR DONORS AND FUNDERS WHO HELPED US RAISE OVER $55,000 FOR THE 2022 CALENDAR YEAR
IN MEMORIAM

DR. WILLIAM (BILL) AKERSTEN
1938-2022

"Bill was a dedicated mentor to young paleontologists here in Pocatello."
~Leif Tapanila


Bill, the only child of Henry and Irja Helena (Makela) Akersten, was born on December 11, 1938, in Highland Park, Michigan, and raised in Ashtabula, Ohio, where he acquired his love of the natural world. He graduated from Edgewood High School in Ashtabula, attended the University of Texas Austin as a National Merit Scholar, obtaining his BS and MA degrees in Geology with an emphasis on Vertebrate Paleontology under the guidance of Ernie Lundelius. In 1972, he completed his doctorate on early fossil geomyids (pocket gophers) at the University of Michigan as a student of C.W. Hibbard.

He began his professional career as Project Scientist at the Rancho La Brea Tar Pits in Los Angeles in 1972 where he supervised the scientific excavation and educational programs of the La Brea Tar Pits. He led a field trip for UCLA graduate students to East Azerbaijan Province, Iran, in the mid-70’s. He was instrumental in the exhibit concepts and design of the Page Museum of La Brea Discoveries, which opened in 1977. He later worked as Curator of Pleistocene Mammals at the Los Angeles County of National History where he focused on the Sabertooth cat, before moving to the Idaho Museum of Natural History in 1985. Here he curated the fossil collection, taught classes at Idaho State University, did summer fieldwork collecting fossil remains throughout Idaho, including the Mammoth dig at Tolo Lake near Grangeville, and mentored undergraduate and graduate students in biology, geology, archaeology, and paleontology, until his retirement as Professor Emeritus in 2009. Bill was a life-long member of the Society of Vertebrate Paleontology and an active member of the Western Association of Vertebrate Paleontologists. In 2018, the Museum honored Bill as a Natural History Hero, and in 2019 former student Dr. L.J. Krumenaker named a new species of Cimolodonta, a multituberculate mammal that he found in the Idaho Wayan Formation after Bill: Cimolodon akersteni.

Dr. Leif Tapanila, Museum Director, states “Bill was a dedicated mentor to young paleontologists here in Pocatello. We’re grateful that this endowment will continue his legacy by supporting student research and public awareness of Idaho’s rich history.”

Donations may be made in Bill's memory to the ISU Foundation, Dr. William Akersten Vertebrate Paleontology, 921 S. 8th Avenue, Box 8050, Pocatello, ID 83209
LOOKING AHEAD TO 2023

REMEMBERING BEAR RIVER


MUSEUM HISTORY BOOK

"Hidden Gems: Stories of the Idaho Museum of Natural History" is the product of a unique collaboration between IMNH and the students of Dr. Alex Bolinger’s Collaborative Creativity class at ISU. Eight Idaho State University students came together to take on the ambitious challenge of writing an entire book about IMNH in just three months. The book authors include: Alex Bolinger, Katelyn Baird, Grace Wright, Natalie Hughes, Josh Luker, Shayla Manwill, Maya Peters-Greno, Laura Rizzo, and Daniel Griffith.

Anticipated to hit our bookshelves in late January.

STEM ROOM UPGRADE

Upgrades will include an interactive space for visitors to explore:
- What is a museum?
- How objects are incorporated into the museum’s collections, education, and exhibitions?

AFFILIATIONS AND MEMBERSHIP

Idaho Code, §33-3012, the State Board of Education establishes the Idaho State Museum of Natural History