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Sharing Our Science Stories

By Jon Erlandson, Executive Director

Recently back from Washington, D.C., I’m still glowing from an Institute of Museum and Library Services ceremony where I accepted a 2018 national medal for our museum. The National Medal for Museum and Library Service is the nation’s highest honor given to museums and libraries, and only five museums around the country received the award this year. It’s a terrific accomplishment that should make all of us—staff, volunteers, supporters, and Oregonians in general—extremely proud.

Winning the medal is the direct result of the unique combination of research, education, and collaboration that is the MNCH trademark. We are equally committed to conducting scientific research at sites around the world, and to sharing the results of that research with the University of Oregon community, at public lectures, in popular media, and in schools and libraries across the state.

Thousands of school kids, teachers, and parents visit our museum each year to learn about the deep history of Oregon and the Pacific Northwest, but thousands more face geographic or economic barriers that prevent them from visiting the museum in person. Three years ago, with support from The Donald and Coeta Barker Foundation, we started an educational outreach program that takes the museum on the road, bringing science adventures to schools and libraries across the state and inspiring Oregonians to learn more about the archaeology, geology, history, and paleontology of the amazing land we call home. Last year, our outreach program served nearly 7,000 people and 31 of Oregon’s 36 counties. The IMLS medal recognized the program for making “extraordinary strides towards extending [museum] services to students, families, and educators in Oregon’s underserved rural communities.”

In other good news, thanks to the generosity of our donors over the last three years, we have raised more than $850,000 for the Patricia Krier Education Endowment, which will help sustain our statewide educational outreach programs for many years to come.

Before I sign off, I should mention that this will be the last printed version of Fieldnotes. With the winter edition, we will fully transition to a digital format distributed via email. The shift to digital is an important step in fulfilling our mission of stewardship, education, and sustainability. It will save the museum money, conserve hundreds of pounds of paper per year, and expand access to Fieldnotes for readers around the world. Watch our website for details.

University of Oregon
Museum of Natural and Cultural History

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Ann Craig
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FIELDNOTES
Published by the Museum of Natural and Cultural History
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A New Look for the MNCH

The museum has updated its logo! Echoing the tradition of the tried-and-true MNCH square, the new logo is part of a larger effort to align the look of our exhibits, website, and just about everything else—all the while conveying a spirit of curiosity, exploration, and fun.

Speaking of websites, we’ll be launching a fully redesigned site this fall! In development for a year, the new site will enhance user experience through improved information architecture, expanded content, and dynamic visuals. Stay tuned for details on the launch date.

ON THE COVER: Future scientists investigate the sabertooth salmon and other Oregon fossils in the museum’s collections vault.
Artifacts Go Digital: Expanding Public Access to the History of the Desert West

By Pam Endzweig, Director of Anthropological Collections

The museum is home to a world-class collection of perishable artifacts from the northern reaches of the Great Basin—the high desert and interior drainage extending from eastern Oregon into Idaho, Nevada, California, Utah, and Wyoming. Our collection includes thousands of items, most in remarkably sound condition, preserved by the extreme dryness of high desert caves. Best known are the famous Fort Rock sandals, 10,000-year-old sagebrush bark shoes that remain the world’s oldest known footwear. Other artifacts include basketry, matting, cordage, netting, and wooden objects. Arrows and darts show details of fletching, hafting, and nocking, and foreshafts and knife handles retain evidence of the sinew and mastic that held knives and points in place. Other wooden artifacts include fire drills and hearths, atlatls and bows, snare parts, fire-hardened digging sticks, and framing elements of housing structures known as wickiups.

While many of these pieces have been studied by visiting researchers, and several are on display in our Oregon—Where Past is Present exhibit, their extremely fragile nature requires special conditions for display and preservation. For years, this has meant limited public access to an important record of the West’s Native American history.

That’s why we are delighted to announce the launch of our new Northern Great Basin Archaeological Perishables online catalog—an extensive, searchable database of more than 3,000 artifacts that is now accessible to viewers around the world.

Sedge basketry from Oregon’s Paisley Caves, one of thousands of fragile artifacts now viewable on the museum’s new online catalog.

Made possible with funding from the Bureau of Land Management (BLM) and the museum’s own Sandal Society, this digital resource greatly expands access to the ancient history of the Northern Great Basin for scholars, educators, students, and the wider public—and along with our ever-growing array of web-based galleries, is a major step towards bringing our collections into the digital age.

And it’s more than a basic catalog: In addition to descriptive labels, the site presents information on raw materials, radiocarbon dates, archaeological localities, and images for hundreds of artifacts—many with multiple views per specimen. It’s also a growing resource. As fiber artifacts are dated through an ongoing collaboration between the museum, BLM, Nevada State Museum, and the University of Nevada, Reno, new data will be added to the site.

The catalog’s fiber identifications originated with work by Tom Connolly, the museum’s archaeological research director, in 1984 and 1985 under a grant from the National Science Foundation. With decades of experience studying ancient basketry, Tom continues to play a key role in the evolving database.

I’d also like to recognize the key contributions of Elizabeth Kallenbach, the museum’s anthropological collections manager, who served as project manager for this undertaking; University of Oregon students Samantha McGee and Cheyenne Dickenson, who photographed the artifacts; and Erika Milo, also a UO student, who was responsible for object handling and tracking. Traditional technologies expert Steve Allely identified wood artifacts from Catlow Cave and Roaring Springs Cave, providing information that has never been assembled in such a comprehensive way.

Explore the new catalog at uoregonnaturalhistory.pastperfectonline.com.

VOLUNTEER SPOTLIGHT:

Malinda Blustain

Andover, Massachusetts, Malinda relocated to Eugene two years after her 2012 retirement.

With her technical expertise in textiles, basketry, and pottery, she was perfectly cut out for a volunteer position with our Anthropological Collections team.

Though Malinda had never lived in Oregon, she has family ties to the MNCH. Her father, geologist Howard Straub Stafford, was a UO alum and a lifelong friend to Luther Cressman, the museum’s founding director.

“I have greatly enjoyed seeing photos of my dad as a young man and reading his fieldnotes that are archived here at the MNCH,” she says. “As Pam Endzweig says, I was clearly meant to be here.”
Meet the Mammoths!

By Ann Craig, Director of Exhibitions and Public Programs

Imagine a herd of Columbian mammoths rambling past the museum—family groups with mothers coaxing along their little ones while adult males weighing 10 tons each make giant strides through the courtyard. Do they trumpet like modern elephants? Do the youngsters play in the mud and then scramble to catch up with the adults? What thunderous sounds emanate from their collective footfalls as they make tracks across the land we now call Oregon?

Columbian mammoths once roamed much of western North America, from the Pacific Northwest and south into Mexico. But they and other giant Ice Age mammals all but disappeared by around 13,000 years ago. Most scientists agree that a combination of climate change and hunting by humans contributed to these extinctions. Today, Columbian mammoths remain powerful symbols of the Ice Age, inspiring wonder in people of all ages about our region’s dynamic natural history.

The museum is a place for celebrating this kind of wonder. It’s also a center for scholarship on Oregon’s ancient animals, landscapes, and climate change. For these reasons, we can’t think of a more fitting ambassador to the museum than the mighty Columbian mammoth—and we’re delighted to announce that they’ll soon be coming to life here at the museum. This fall, thanks to generous contributions from many museum supporters, we’ll unveil two life-sized Columbian mammoth sculptures at the northern edge of the Starlin Native Plant Courtyard!

The female, 11 feet tall at her shoulder, would have weighed about 18,000 pounds—about equal to the weight of five Subaru Outback station wagons. Her calf follows close behind in case sabertooth cats or dire wolves are lurking. The pair, surrounded by native grasses and shrubs that recreate their ancient habitat, will stand as monuments to Oregon’s amazing natural history and welcome visitors from around the community and around the world.

We’re also sure they’ll become a premier photo spot for the hundreds of K-12 classes that visit our museum each year.

The sculptures were created by renowned paleo-artist Gary Staab. The sculptor behind our famous sabertooth salmon, Staab has created works ranging from life-sized dinosaurs outside the Denver Museum of Science and Nature to the forensic reconstruction of ancient humans at the University of Chicago. You can meet Staab and join him for a mammoth sculpting workshop in October; check our program guide for details.

An extension of our indoor exhibits, the mammoth sculptures reflect ongoing research by museum scientists. Last year, Condon Fossil Collection Director Greg Retallack published findings from a 2014 field survey that revealed over a hundred Columbian mammoth footprints spread across the volcanic soil at Oregon’s Fossil Lake. This fossil trackway, dated to about 43,000 years ago, tells a touching story about mammoth families: its patterns suggest that a limping adult female was tended by two concerned juveniles as the herd journeyed across the lake bed. Complex social systems and deep family bonds are observed among modern African elephants; the mammoth trackway suggests their ancient relatives were not so different.

We hope you and your family will join us in celebrating the new sculptures and the ways that they inspire curiosity, inquiry, and awe. We are deeply grateful to the members, donors, scientists, artists, educators, engineers, landscape architects, and contractors who worked together to make this installation possible.

Sheldon “Camperships” Support Scientists of the Future

The museum extends its gratitude to Craig and Elisabeth Sheldon for their generous gift of scholarships to MNCH summer camps. Covering the participation fees of two children each year, the “camperships” are the continuation of a relationship with the museum that began nearly 40 years ago, when Craig studied under former MNCH Executive Director Mel Aikens as a PhD student. “The museum provided Craig with years of support as a grad student,” Elisabeth said, and today, the Sheltons are proud to make an annual gift that helps kids access exciting summer science experiences at the museum.
Making Science Public

By Tom Connolly, Director of Archaeological Research

We generally think of a museum as a place—a public space in which objects and ideas are examined, interpreted, and discussed. The Museum of Natural and Cultural History is one such place, offering a rich array of exhibits and community events each year.

But our museum is as much an engine of scientific field research as it is a public space. A look behind the scenes reveals the state’s most active archaeological research organization—one that travels to sites throughout Oregon and beyond. We partner with state and federal agencies, city and county governments, engineering firms, and utility companies to locate, study, and document cultural resources across the Pacific Northwest. From public works projects like bridge and road repairs to private construction endeavors, we are on the scene to help safeguard our collective heritage.

The museum is also a center for scholarship on the First Americans and early human migration. Recent work in this area by MNCH archaeologists includes the radiocarbon dating of ancient basketry from museum collections, studies of the historical ecology of California’s Channel Islands, and our summer field schools in Oregon’s Northern Great Basin, where University of Oregon students gain professional skills while working on some of North America’s earliest cultural sites.

Whether we’re unraveling mysteries about the continent’s earliest inhabitants or uncovering the realities of more recent history, our field research reveals important stories about the past, helps us understand how our modern culture has been shaped, and provides needed perspective on adapting to our changing world.

How do we share these stories and engage our many audiences to fulfill the museum’s mission of enhancing knowledge and inspiring stewardship?

For starters, we publish widely. Over the last few years, our research efforts have resulted in dozens of publications in national and international journals ranging from Science and American Antiquity to the Journal of Archaeological Science and the Journal of Vertebrate Paleontology, as well as numerous book chapters.

As a cultural resource management organization, the museum shares its findings through technical reports—producing around 50 to 60 each year—that become permanent public resources, preserving and communicating important stories about Oregon’s diverse cultural history.

We are also active in sharing our work with colleagues at professional conferences and with the public at a wide range of venues. This past year, our research staff addressed more than 2,200 people at public talks throughout the state, as well as in Washington and California. We also regularly assist in heritage protection training programs organized by state agencies for law enforcement personnel and cultural resource managers.

We are especially committed to sharing our work with you, our museum family. At the MNCH, research archaeologists regularly team with public programs staff to develop and present content for our visitors and members. It’s one of the truly special aspects of our museum: We are both an engine of research and a place where that research goes public, helping to build our shared understanding and inspire thoughtful conversations about our world—past, present, and future. We look forward to continuing the conversation with you.

Erlandson Reveals Story of 10,000-year-old Tuqan Man

MNCH Executive Director Jon Erlandson and partners recently went public with the story of 10,000-year-old Tuqan Man, the remains of a Native American man discovered in 2005 on California’s Channel Islands.

Tuqan Man, named after the Chumash Indian name for San Miguel Island, predates by 1,000 years the famous Kennewick Man from the Columbia River area. Erlandson and former PhD student Todd Braje identified the remains while working on San Miguel Island. Exposed by erosion caused by historical overgrazing, the bones were at risk of being lost unless stakeholders acted quickly. Erlandson and the National Park Service consulted with Chumash Tribal members, deciding together to complete an excavation to preserve and study the remains.

The scientific team determined that Tuqan Man had a significant cultural relationship to the maritime people who settled the Channel Islands at least 13,000 years ago. The Chumash Tribe was granted custody of the remains, and last month, the Santa Ynez Band of Chumash Indians returned them to a final resting site on San Miguel Island.

Artifacts dating back more than 9,000 years were found in a shell midden overlying Tuqan Man’s original burial site.

“This was a wonderful case of cooperation between scientists and Native American Tribal members” Erlandson said, “and I’m delighted to see Tuqan Man finally returned home.”
Fossils and Their Stories

By Edward Davis, Manager of the Condon Fossil Collection

Every fossil tells a story. For Thomas Condon, the University of Oregon’s first science professor and the founder of our paleontological collection, the whole point of collecting fossils was to gather and share the stories behind them. Condon amassed a collection of fossils not simply for personal interest, but because he could use them to teach others about the history of life. Legend has it that he was reprimanded by university administration for his refusal to assign a textbook for his class on paleontology. No book, he insisted, could equal the narrative available in the fossils and rocks that came from nature itself. He also gave eloquent lectures on paleontology while standing on Oregon’s beaches, often using fossil specimens found that day to illustrate his points.

We emulate Professor Condon’s approach with the storytelling we do in the Condon Collection today. We use specimens from the collection as part of our teaching of undergraduate courses here at the UO. We also use these specimens when we tell science stories to our museum’s summer campers and to the K-12 students who visit the UO to learn about college life. Condon Collection director Greg Retallack and I have led several field trips for the museum, taking folks out to see the rocks and fossils of the Oregon Coast or into the Cascade Range to learn about the history of volcanism while standing among ancient lava flows.

Collaborating with the museum’s public programs division, we also offer public talks, sharing our fossils’ fascinating stories with audiences on campus and around the state. One especially popular talk series happens each February, in celebration of Charles Darwin’s birthday. The Darwin Conversations are free to the public and feature the work of UO and visiting researchers on topics in evolution, ecology, and conservation. At this year’s Darwin Conversations, I gave a talk on Oregon’s giant sabertooth salmon; my colleague Kerin Claeson, a paleontologist at the Philadelphia College of Osteopathic Medicine and my collaborator on the giant salmon research, presented her work on Antarctic fossil fish. If you missed the live talks but want to hear the stories we shared, check out the video archive on the museum’s Facebook page (@oregonnaturalhistory).

The public talks are geared toward adults, but we also work with younger audiences at the museum. We were delighted to help host a recent family day, Giants at the Museum. One of our graduate students, Kellum Tate-Jones, produced a number of fun and collectible trading cards featuring museum giants like the mighty sabertooth salmon and Harlan’s ground sloth, and we hosted a table of touchable specimens including Tusko the elephant, a mammoth femur, and a blue whale vertebra.

We are also continuing our NSF-funded effort to photograph all of the Cenozoic fossil invertebrates from our collection and post those photographs on our searchable, online database. We secured additional funds from the Bureau of Land Management to photograph vertebrate specimens from their lands as well, so we now have four to six undergraduate students working on this project at any given time. Consequently, we now have well over 16,000 photographed specimens and have just added storage space to accommodate the growing image bank.

Whether talking to children and adults, preparing museum exhibits, or working to expand our digital resources for audiences around the world, the staff of the Condon Fossil Collection is proud to follow in our founder’s tradition of learning, sharing, and stewarding the amazing stories that fossils have to tell.

Explore the Condon Collection database at paleo.uoregon.edu.
Last spring, the Institute of Museum and Library Services selected the MNCH as a winner of a 2018 National Medal for Museum and Library Service. Nominated for the medal by Oregon’s U.S. Representative Peter DeFazio and Senator Ron Wyden, the museum is among 10 winning museums and libraries and is the sole West Coast recipient. The honor recognizes the ways that we serve the state of Oregon, with special focus on our statewide educational outreach program. The program, which traveled to K-8 classrooms and public libraries in 31 counties last year, brings fossils, artifacts, and lively science lessons to communities across Oregon. The lessons emphasize inquiry-based learning, investigation of objects from the museum’s teaching collections, and new perspectives stemming from research at the museum and the wider UO.

“This award is a well-deserved honor, not only for the museum’s incredible exhibits but also its cutting-edge research, quality education programming and its standing as a valuable community resource,” DeFazio said. “I applaud the museum for their recognition and will continue to push for federal resources to help further their exceptional work.”

Jon Erlandson, the museum’s executive director, and Jami Young, a school librarian with the Central Point School District, accepted the award on behalf of the museum at a ceremony at the U.S. Institute of Peace in Washington, D.C., on May 24.

Central Point is among the Oregon school districts that have used the museum’s outreach program since its inception in 2015. “The museum’s impacts on our students have been nothing short of amazing,” Young said. “I’ve seen the programs ignite a passion for science among struggling readers and other children who are going through the motions at school, helping them transform into inquisitive, motivated students.”

You may have seen recent UO graduate Clara Gorman giving tours in our exhibit halls, but as the newest museum educator for our summer library outreach program, she now has a statewide presence. From West Linn to Weston, Clara traveled to all corners of Oregon during the summer, bringing the museum’s interactive Oregon Rocks! geology program to kids and communities that might not otherwise be able to participate in museum learning experiences.

“Working for the museum has allowed me to pursue my personal and academic interest in museum studies in a direct way,” says Gorman, “It has provided me with valuable training and a particular skill set that will be useful throughout my career.” That career is off to a great start. Clara graduated this spring from the Robert D. Clark Honors College with a major in history and a focus on Indigenous studies. She plans to pursue a PhD that blends Indigenous Peoples’ history with museum studies. “Ultimately, my goal is to work at either the American Museum of Natural History in New York City or at the Smithsonian National Museum of the American Indian as a historical researcher and Tribal liaison, working to ensure that Native history is recorded and portrayed to the public in an accurate and respectful way.”
A Voyage to the Smithsonian

One of our largest artifacts recently found a new home at the Smithsonian Institution. Late last summer, a 27-foot umiak was carefully loaded by museum staff and volunteers and transported—amidst solar eclipse traffic and raging wildfires—3,000 miles across the country.

An umiak is a Northern Arctic boat crafted from animal skin stretched over a wooden frame. One such boat was part of the large collection we adopted from the Jensen Arctic Museum at Western Oregon University (WOU) in 2013. Paul H. Jensen, the WOU museum’s founder, had acquired the boat in the 1960s when he circumnavigated St. Lawrence Island with a crew of locals. He flew it home to Oregon and eventually placed the umiak on prominent display at his museum. There it remained until the museum’s closure five years ago, when it was moved to temporary storage at the Oregon Historical Society.

The umiak is of a style unique to St. Lawrence Island, which is east of Alaska in the Bering Sea. Its walrus hide cover was made in the 1960s by local women who split and sewed the skins. The frame was made sometime after the 1920s and equipped with a central well for an outboard motor. The umiak is in astonishingly good condition, as the skins typically deteriorate and must be replaced within two to three years. It may be the oldest intact walrus-hide cover in any collection.

Because the museum currently lacks the space to house this huge artifact, we reached out to several other Western institutions, including the Kativik Cultural Center in Nome, Alaska, in an effort to find a new home for the umiak. With no takers in the region, MNCH executive director Jon Erlandson reached out to his former PhD student Torben Rick, who now chairs the anthropology department at the Smithsonian’s National Museum of Natural History. Rick confirmed that he and his staff would be delighted to add the umiak to the Smithsonian’s collection of indigenous watercraft from around the world.