



UNIVERSITY OF ALASKA
MUSEUM OF THE NORTH

FY2012
annual report

72,912
total attendance

12
free events

2,803
attendance
at free events

47,278
new specimens

511
new accessions

137
outgoing loans

MUSEUM PROFESSIONAL STAFF

Carol Diebel, Museum Director

Administration

Barbara Ellanna, Fiscal Professional
Hollis J. Gillespie, Executive Officer
Emilie Nelson, Executive Assistant
Linda Sheldon, Fiscal Technician

Alaska Center for Documentary Film

Leonard Kamerling, Curator*

Archaeology

Jeff Rasic, Acting Curator
James Whitney, Collection Manager
Scott Shirar, Research Archaeologist
Sam Coffman, Archaeology Technician
Lori Hansen, Curatorial Assistant
Tristan Walsh, Curatorial Assistant

Aquatics

Andres Lopez, Curator*

Earth Sciences

Patrick Druckenmiller, Curator*
Julie Rousseau, Collection Manager

Education

Jennifer Arseneau, Education & Public Programs Manager
Maité Agopian, Museum Educator
Chris Cannon, Special Projects
Peggy Hetman, School & Community Liaison

Entomology

Derek Sikes, Curator*

Ethnology and History

Molly Lee, Curator Emerita*
Angela Linn, Senior Collection Manager

Genomic Resources

Kyndall Hildebrandt, Collection Manager

Fine Arts

Mareca Guthrie, Curator*

Herbarium

Steffi Ickert-Bond, Curator*
Jordan Metzgar, Collection Manager
Dave F. Murray, Curator Emeritus
Carolyn Parker, Research Professional

Mammalogy

Link Olson, Curator*
Brandy Jacobsen, Collection Manager
Aren Gunderson, Collection Manager
Dusty McDonald, Programmer

Operations

Kevin May, Manager

Ornithology

Kevin Winker, Curator*
Jack Withrow, Collection Manager

Production Unit

Roger Topp, Head of Production
Steve Bouta, Coordinator of Exhibitions & Design
Theresa Bakker, Media Coordinator
Tamara Martz, Exhibit & Graphic Designer

Visitor Services

Daniel David, Manager & Retail Buyer
Janet Thompson, Assistant Manager & Tour Coordinator
Jake Sirevaag, Supervisor

* UAF faculty holding joint appointment

Museum Advisory Council

Linda Anderson
Jane Behlke
Michael Burns
Michael Cook
Mary Jane Fate
A. Lanterman
James Lund
Robert Magee
Sherry Modrow
Grace Schaible
Therese Sharp
Joseph Usibelli
Richard Wien
Nadine Winters

Friends of the UA Museum

Board Members
Helen Atkinson
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Jackie Goering
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David Norton
Lee O'Hare
Bill Stroecker
Ellen Whitcher



MISSION

The University of Alaska Museum of the North, located on the Fairbanks campus, is the only museum in the state with a tripartite mission of research, teaching and collecting. The museum's botanical, geological, zoological, and cultural collections, primarily from Alaska and the Circumpolar North, form the basis for understanding the local as well as the global past, present and future. Through collection-based research, teaching and public programs, the museum shares its knowledge and collections with local, national and international audiences of all ages and backgrounds.

COVER, LEFT TO RIGHT FROM THE TOP: *Crab Spider* by James Stugart (Tamara Martz). Feniak clay disk (Scott Shirar). *Coccinella transversoguttata* (Derek Sikes). Hadrosaur phalanx specimens (Julie Rousseau). Hoary marmot (Suzy Peurach). *Winter Lake, 2011* by Sara Tabbert (UA2011-002-001). Kolmakovsky blockhouse (Theresa Bakker). Maasai villagers (Alexandra Kamerling). *Egretta sacra* (Kyle Campbell). RUSALCA 2012. *Eriophorum scheuchzeri* (Robert Bond).

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Editor: Theresa Bakker
Designer: Tamara Martz
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The University of Alaska Museum of the North is accredited by the American Alliance of Museums.



FY12 Overview	Public Outreach	Research & Collections	Selected Publications	Development & Membership	Donors of Record	Gifts to the Collections	Financial Summary	Grants & Contracts
5	6	22	66	69	70	71	72	73

From the Museum

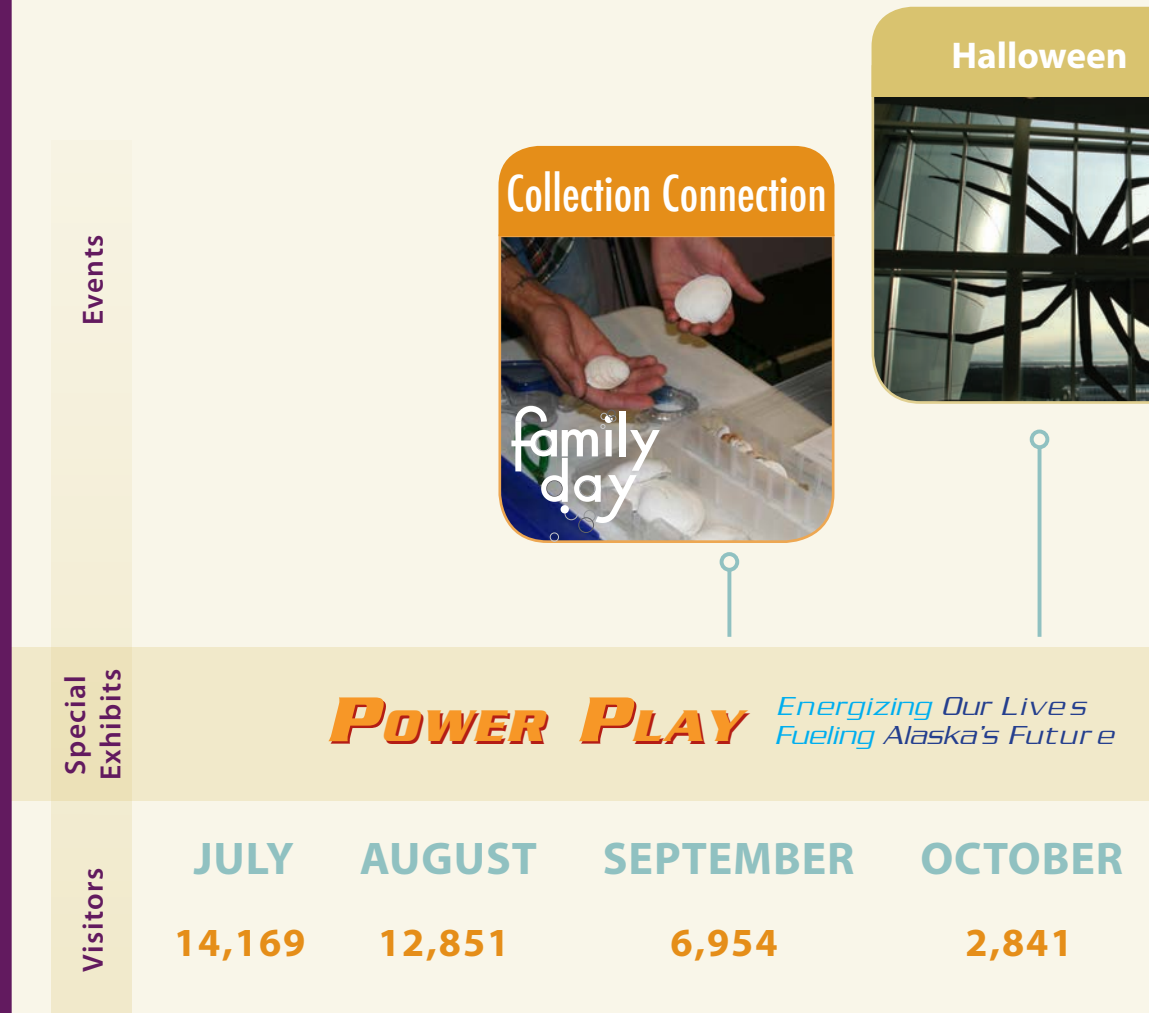
It is with great pleasure that we, the faculty and staff of the University of Alaska Museum of the North, present our annual report for FY 2012. Within, we see challenges met and developments both groundbreaking and typical for a year in the life of a university museum.

But take a good look. This is an annual report we are proud of. The document represents a significant redesign, along with a rethinking of what an annual report should be and do. We think it presents the incredible diversity of our museum programs, the risks we've taken, and the adventures we've begun. We hope it is useful, but also enjoyable to read – presenting an accurate picture of not just where the museum has been, but where we are going.

Annual reports are often published well after the events described and can never give a perfect account of the present day. Just so, the UA Museum of the North has already come a long way in the months since the span of this report. We already have new programs, exhibits, and collections in production. So, we hope you will not only enjoy this report on recent events but that you'll stop by soon.

Come talk to us about what is happening NOW at the UA Museum of the North.

F Y 2 0 1 2 | Public Point of View Overview



Artisan Expo & Sale



Art



Leggy!



Archaeology



Open House & Military Appreciation



Energy



Chocolate Bash



Changing Alaska
exhibit opens

Leggy! Live Spiders
& Their Relatives

ART IN THE MAKING

NOVEMBER

2,124

DECEMBER

2,558

JANUARY

2,235

FEBRUARY

3,969

MARCH

5,934

APRIL

2,911

MAY

5,100

JUNE

11,236



Education and Public Programs

Education and Public Programs

TRANSITIONS AND ADDITIONS

Education and Public Programs had an exciting year of transitions and firsts for the staff. **Jennifer Arseneau**, former education program leader, became department manager and welcomed a son in 2011. Outreach Specialist **Chris Cannon** added new destinations and more cargo to his travel while showcasing the planetarium and i-Globe around the state. School & Community Liaison **Peggy Hetman** led the effort for our first ever Educators' Night at the museum. **Maité Agopian**, former docent and department volunteer, joined the staff in December 2011 as part-time museum educator and helped launch the Museum Kits program.

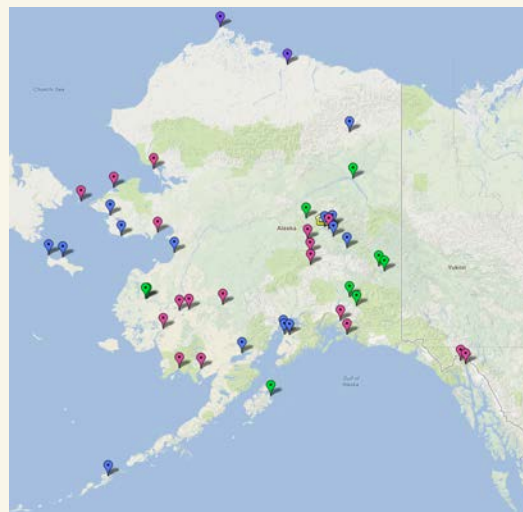
The department played a strong role in the narrative and interactive design of the museum's special exhibits, *Power Play*, *Leggy!*, and *Art in the Making*. Along with dedicated volunteers, the education department reached more than 3900 students through field trips and a homeschool day at the museum, showed over 2100 people the portable planetarium or iGlobe, tripled our outgoing loans, welcomed over 1090 visitors during Family Days, and participated in a variety of special events.

PREVIOUS PAGE: Parents and children enjoy printmaking activities together during Art Family Day.



PLANETARIUM AND iGLOBE

Beginning in 2009, a grant from NASA enabled UAF educators to travel to rural communities with a digital portable planetarium. The grant expired in January 2012, but was approved to operate for an additional year. In FY12 educators gave presentations in Minto, Tok, Tetlin, Fort Yukon and Fairbanks. Over the life of the grant, educators presented to more than 16,000 students, teachers, and community members across a diverse range of communities.



◆ 2008 ◆ 2009 ◆ 2010 ◆ 2011



LEFT TO RIGHT: Patrick Joyce helping students into the portable planetarium during a visit to Tetlin. Outreach Specialist Chris Cannon transports the iGlobe during an outreach visit to Nome.

In addition, the museum has joined a new outreach program on the topic of climate change, also supported by a NASA grant. It features a portable spherical projector called an iGlobe, which projects real data over the planet as time-lapse animations produced at UAMN. With this technology, students can view such phenomena as sea ice retreat, global temperature fluctuations, bird and mammal migrations, and carbon and nitrogen cycles, which will help them better understand our dynamic and changing planet. UAMN is partnered on the project with the Anchorage Museum and Kenai Challenger Center. In FY12, educators traveled to Glennallen, Kenny Lake, Nome and Nenana with the iGlobe.

LEFT: Thanks to funding from NASA, UAMN educators took UAF's portable planetarium to more than 40 Alaskan communities.

Education and Public Programs



ABOVE: Docent Marcella Hill shares dolls with students during a Directed Discovery. Hill has been volunteering with the museum since 1999.

MUSEUM DOCENT PROGRAM TURNS 30

Each semester for 30 years, Fairbanks school children have settled down in front of a docent to learn the secrets of the museum. The lessons they absorb from the collections and exhibits are a result of a legacy of teamwork between local teachers and the museum's education staff.

Terry Dickey was the museum's education director when the guided school tours program began in the spring of 1981.

"We met with teachers who helped us design topics that matched learning outcomes with classroom objectives," Dickey said. "They knew that students learn in different ways and offered valuable suggestions about using hands-on objects, storytelling, and activities."

After years of collaboration, the museum today features a core of volunteers who serve as docents. They are a major strength of the program, says Jennifer Arseneau, the museum's education and public programs manager.

"These dedicated volunteers have a passion for learning and sharing the joy of discovery with kids. It's a real pleasure to work with them and see the unique assets each docent brings to the program. The interaction with multiple docents makes our program unique. Kids interact with several adults, all passionate about museums and discovery."

People with a variety of interests and backgrounds have joined the team. All it takes is a willingness to commit to the museum and take part in one of two yearly training sessions. This week, the education department is preparing the next docent class, something School and Community Liaison Peggy Hetman says is vital to educating our community.

"We're very fortunate to have the UA Museum of the North in our backyard. It's the place to ask an expert and learn about Alaska's diversity of people, animals, and land. Whether visiting with family, participating in Family Day programs or other special events, such as Halloween or the open house, the museum has something for everyone."

More than 386 Fairbanksans have been museum docents, including Denali Elementary School Principal Tim Doran, Amy Iutzi, director of the Alaska Adult Education Association, and Jennifer Jolis, CTC culinary arts program assistant professor. Almost 72,000 elementary school students have participated in guided field trips since the program's inception.



Field trips proudly
sponsored by



Nolin Ainsworth
Bill Barnes
Michael Berrie
Maggie Billington
Vera Boyarsky
Claire Byer

Pat Cariati
Leigh Anne Cox
Maria Gavora
Barbara Gorman
Jamie Hallberg
Marcella Hill

Charles Hilton
Katie Moeller
Genevieve Perreault
Maria Sagasti
Leslie Swenson
Abbey Tsigonis

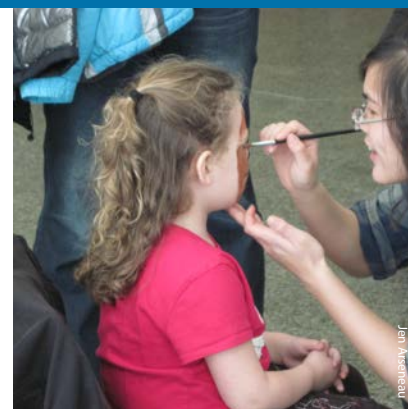
FY12 DOCENTS

VOLUNTEERS MAKE MUSEUM PROGRAMS POSSIBLE

In FY12, docents, family day assistants and other education volunteers donated:

1596
Volunteer Hours

Education and Public Programs



151
attendees

COLLECTION CONNECTION

September 17, 2011

Visitors saw specimens from the museum's collections and asked questions about their own.

139
attendees

POWER PLAY/ENERGY

November 12, 2011

Guests explored the special exhibit *Power Play* and found out how much energy it takes to power their lives.

Co-presented by Alaska Center for Energy & Power.

220
attendees

ARCHAEOLOGY

December 10, 2011

Families dug in the dirt for treasures and explored real artifacts and tools.

In collaboration with UAMN Archaeology and presented with help from: Bureau of Land Management, Center for Environmental Management of Military Lands, Fairbanks Childrens' Museum, National Park Service, Watershed 8th graders

247
attendees

ART

February 18, 2012

Visitors met local artists and got their faces painted by UAF art students.

Included demonstrations by painter Vladimir Zhikhartsev and printmaker Karinna Gomez. In collaboration with UAMN Fine Arts.

339
attendees

LEGGY!

March 24, 2012

Guests explored the special exhibit and made a UV light to get insect "sight."

In collaboration with UAMN Entomology.

BELOW LEFT TO RIGHT: Entomology Curator Derek Sikes shows off the museum's collections at Family Day. Visitors dig in the dirt at the Archaeology Family Day.



LET'S PLAY AND LEARN TOGETHER

The museum's Family Days allow the whole family to connect with museum research and collections. Children and adults are invited to create crafts, try out science experiments and cultural activities, ask the experts, and explore galleries. This year, we expanded our partnerships to work with other museum, university, and community partners.

Annual Report FY2012

University of Alaska Museum of the North 9

Family Days are proudly sponsored by



Education and Public Programs

1766
students

Fall/Spring

DIRECTED DISCOVERY FIELD TRIPS

79 classes

Add-ons: 21 classes added extra time to visit a special exhibit or another gallery on their own.

1901
students

Fall/Spring

EXHIBIT EXPLORATION FIELD TRIPS

72 groups

Add-ons: 31 groups scheduled time to visit the Special Exhibits gallery.

236
attendees

HOMESCHOOL DAY

October 4, 2011

EXPLORING THE MUSEUM

The museum welcomed 79 classes for a Directed Discovery field trip during the 2011-2012 school year. These docent-guided experiences connect students with the science, history, and culture of Alaska through museum collections and exhibits. One-quarter of the classes also added a visit to explore one of our special exhibits or an additional gallery on their own. For the sixth year, the museum was able to offer free admission for these students, thanks to the generosity of Flint Hills Resources.

More than 70 groups of students toured the museum on an Exhibit Exploration this school year escorted by teachers and chaperones. Nearly half scheduled time to visit the Special Exhibits gallery. Exhibit Explorations are scheduled throughout the school year for teacher-guided field trips for grades preK-12. Interpretive materials created by the education department are available.

Our 4th annual Homeschool Day welcomed students and parents for gallery explorations, hands-on experiences, and crafts. Homeschool Day is supported in part by Flint Hills Resources.

HELPING TEACHERS TEACH

Each year, the education department chooses projects at the Interior Alaska Science Fair for the UA Museum of the North Science Fair Award. These prizes for Alaska-related exhibit themes highlight the importance of student specimen collections and/or observations of natural and cultural history phenomena. The exhibit is judged on clarity of the hypothesis, research methodology, conclusions, and interpretation. Six students received free child/adult passes to the museum.

We began a strong effort to make our collections more accessible to teachers and produced a wide offering of museum kits. Museum Educator **Maité Agopian** created 12 new kits in FY12 and updated others, including four kits created by ornithology student **Kyle Campbell** featuring newly prepared bird specimens. Museum kits contain specimens, artifacts, models, and activities for a wide variety of ages. Designed for hands-on learning, the collections can be used in many different ways. Kit materials reflect the diversity of UAMN's research collections and utilize the teaching collection for explorations of culture, science, and natural history.



University Advancement provided support for new wire shelving and archival storage materials for the museum's hands-on collection. This project allowed us to ensure proper collection care in order to increase the longevity of our objects, make more of the collection accessible, and to increase outreach via loans.

Education and Public Programs



EDUCATORS' NIGHT

The first Educators' Night was held in January 2012. This evening reception thanks local teachers for their service and introduces them to museum resources and galleries. Representatives from 30 different schools attended and learned about museum kits, special exhibits and field trips.

Educators' Night was supported in part by the Friends of the UA Museum.



TOP TO BOTTOM: Ornithology student Kyle Campbell shows docent Macella Hill some of the kits he has been making. The Education Department held its first Educators' Night in September 2011 to show local teachers some of the resources available to them through the museum. Photos by Theresa Bakker

STAFF LISTING

Jennifer Arseneau 474 6948	Education & Public Programs Manager j.arseneau@alaska.edu
Maïté Agopian 474 5602	Museum Educator msagopianplattet@alaska.edu
Chris Cannon	Outreach Specialist cmcannon2@alaska.edu
Peggy Hetman 474 5360	School & Community Liaison mahetman@alaska.edu

STUDENTS

Patrick Joyce	UAF, Planetarium Outreach Research Assistant
Avril Weirs	Alaska Pacific University Student Intern

LEFT TO RIGHT: A robot made of recycled materials during Art Family Day greets visitors to the museum. School & Community Liaison Peggy Hetman and Education & Public Programs Manager Jen Arseneau welcome visitors to the education center at the 2012 Open House & Military Appreciation. Students create track posters during a Directed Discovery field trip. Museum Educator Maïté Agopian shows kids how to walk like water striders during a family day.





Roger Topp

Production Unit

Exhibits – Design – Media

NEW UNIT

In October 2011, the departments of Exhibits and Design, Communications, and Digital Media combined to form a new Production Unit with the goal of coordinating all museum outreach in the forms of exhibits, print, digital media, and publicity. Exhibition and design coordination expertise is provided by **Steve Bouta**. Exhibition and graphic design is overseen by **Tamara Martz**. **Theresa Bakker** coordinates all media production and outreach. The head of the new production unit is **Roger Topp**, long time writer, project manager, and digital media producer at the museum.

The creation of the production unit has expanded the creative output of the museum staff and doubled the size of the production team. Now, instead of relying on a single-person to complete film projects, we have a film crew.



Leggy! Live Spiders & Their Relatives



Derek Sikes

The special exhibit *Leggy: Spiders and Their Relatives* was installed in January 2012, featuring the research and photography of Entomology Curator **Derek Sikes** and the spider expertise of UAF graduate student **Brandi Fleshman**. The exhibit explored the wildlife that lives among us, spiders and insects of the phylum Arthropoda. These creatures are known for their many legs and their many relatives. The exhibit showed how spiders and insects display complex social behaviors, including courtship dances and other rituals, and looked at the profession of entomology.



Theresa Bakker



Tamara Martz



Tamara Martz

ART IN THE MAKING

To create the innovative exhibit, *Art in the Making*, Fine Arts Curator **Mareca Guthrie**, Head of Production **Roger Topp**, and Media Coordinator **Theresa Bakker** spent hours in the field, recording, interviewing, and observing as five Fairbanks artists took their work from inception to completion. The result was an exhibit, with graphic designs by **Tamara Martz** and original artwork by Guthrie, that featured the artists in their own homes and studios talking about their successes and fears and the sacrifices and challenges that come with the pursuit of a creative vision. In a set designed by Exhibitions & Design Coordinator **Steve Bouta**, original works of art were juxtaposed with the creation process and the tools that made them possible. The Curator of Fine Arts will pursue funding to continue the series.

LEFT TO RIGHT: Head of Production Roger Topp and Fine Arts Curator Mareca Guthrie prepare for another day of filming for *Art in the Making* with printmaker Sara Tabbert. Head of Production Roger Topp and Media Coordinator Theresa Bakker gather sound and video at ceramacist Teresa Shannon's outdoor studio. Painter Alfred Skondovitch watches as the *Art in the Making* crew set up for a recording session.

*Great exhibit design –
An example of successful intergration
of static, tactile and video.*

J. Laney



ABOVE: Exhibition and Design Coordinator Steve Bouta and Student Assistant Eric Henderson install a display case for the special exhibit, *Art in the Making*.



Production Unit | Exhibits – Design – Media

During this fiscal year, the team produced several special exhibits and installations. *The Diverse Interior* was installed at the Fairbanks International Airport in July. This exhibit includes eye-catching, diverse specimens from the museum's cultural and natural history collections meant to let visitors arriving by air see a fraction of the 1.5 million specimens in the museum's collections and discover what else what else there is to learn.

New installations prepared in the Gallery of Alaska include *Changing Alaska*, which talks about change on discrete time scales, emphasizes the importance of collections, and features a globe-projected film that highlights UAF climate change research through the use of satellites to track change in sea ice, vegetation, and surface temperatures on a global scale. Elsewhere in the Gallery of Alaska, the production unit installed a Dall sheep mount and a table made by Jack Ritter in 1905. The team installed *Unknown 21st Century Family* by Sheryl Maree Reily on the upstairs Art Bridge and several works to augment *Art In The Making* and assisted Fine Arts Curator Mareca Guthrie on the installation of a Rusty Heurlin painting in the Rasmuson Library.



CLOCKWISE FROM TOP: Tamara Martz installing *The Diverse Interior*, at the Fairbanks International Airport. Steve Bouta and Eric Henderson install the cast of a juvenile woolly mammoth in *The Diverse Interior*. *Unknown 21st Century Family* by Sheryl Maree Reily. This polished slab was cut from a petrified tree trunk collected at a stone quarry near Fairbanks. It is now part of the *Changing Alaska* exhibit.

COLLABORATIONS

Topp partnered with UAF researcher Steve Okkonen at the School of Fisheries and Ocean Sciences on a successful grant proposal to produce an animated film about bowhead whales. The educational film shows how winds and ocean currents interact to allow bowhead whales to survive entirely in arctic waters feeding on zooplankton. Bakker and Topp also teamed up to secure NSF funding for an audio series project called PoLAR Voices through the university's International Arctic Research Center. Using natural sound, recorded elements, and interviews gathered on location, the series will show listeners the polar landscapes where global climate change is a measureable event. Production will begin in FY13.

Bouta and the shop team completed several projects this year, including the design and fabrication of a mount for a pipeling cleaning pig donated by Alyeska; oversaw the carving of the museum's annual ice sculpture, *Crab Spider*, by James Stugart; crated and shipped six Michio Hoshino photographs to Anchorage to accompany the production of *The Blue Bear* by the Perseverance Theatre; and purchased public seating for the galleries.

Bouta also worked with Operations Manager **Kevin May** and UAF Facilities Services to design and install of mount for an outdoor projector. The museum's award-winning architecture is now the backdrop for a variety of messages. Bouta advised Natalie Thomas with the Fort Wainwright Cultural Resources Department on the archival framing

of historical documents about General Jonathan Wainwright. Martz collaborated with Visitor Services Manager **Dan David** and members of the Fairbanks community to plan and publicize the 2012 Artisan's Expo & Sale.

Bakker coordinated the museum's annual Halloween and Open House events, seeking out partnerships with local military and other organizations for volunteers and other displays of area resources. She also coordinated the Military Appreciation Reception, a sponsored event that celebrates the partnerships between military and the university communities and thanks the troops for their service. Topp revised the long-running Dynamic Aurora program, updating more than 60% of the film and working with Visitor Services Manager Dan David to sell DVDs in the Museum Store.

COMMUNICATIONS

The Production Unit includes the museum's communication activities. Under the supervision of Media Coordinator Theresa Bakker, the museum made advances in social media with a plan for daily engagement with museum supporters. In FY12, the museum posted 400 times on Facebook, sent out 180 tweets, and created 88 tumblr posts. Altogether, the museum produced a total of 761 social media messages. Bakker also began to share trailers for upcoming exhibits on YouTube and to incorporate digital media on the website in new ways. Interviews with the artists in the special exhibit *Art in the Making* accrued almost 1,000 views online. A trailer for the exhibit reached 850 views.

400
facebook

180
tweets

88
tumblr

RIGHT: *Crab Spider* by James Stugart.



STAFF LISTING

Roger Topp Head of Production
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Theresa Bakker Media Coordinator
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Steve Bouta Coordinator of Exhibitions & Design
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Tamara Martz Exhibit & Graphic Designer
474 6951 tfmartz@alaska.edu

STUDENT ASSISTANTS

Yasunari Izaki
Eric Henderson
Nicholas Toye
Nathan Feemster

FY 2012 | Production Unit Overview



PUBLICATIONS AND GRAPHIC DESIGN PRODUCTS:

- The Alaskan Experience: Museum Tour Guide
- Museum Movies
- Original street lamp pole banners
- Family Day and Chocolate Bash banners
- New designs for Halloween at the Museum
- New summer ads for the museum's publicity needs, including an ad for a Japanese language brochure
- New materials to help publicize Education Department events and programs

GRANTS AWARDED:

Arctic Currents: A Year in the Life of the Bowhead Whale is funded by the Bureau of Ocean Energy Management, the Cooperative Institute for Alaska Research, and the School of Fisheries and Ocean Sciences. Project funding is administered by the University of Alaska Coastal Marine Institute ... \$156,887

LEFT: Yasunari Izaki, student assistant from 2009 - 2012, installs additional work from the artists represented in the exhibit *Art in the Making*. This was his last installation before graduating from UAF with a BFA. He is now pursuing an MFA at the Pratt Institute of Art & Design in Brooklyn, NY.





Janet Thompson

Visitor Services

Museum Store – Admission – Tours – Events

Visitor Services

HOW CAN WE HELP YOU?

Operating the Visitor Services & Retail Operations department consists of running the Museum Store, the admission and information counter, Auditorium Movies, event rentals, and gallery security. As one of the largest departments in the museum with a staff of three full-time and 23 part-time employees, focusing on workforce development became one of our priorities. Students who work at the museum learn customer service, e-commerce, web development, inventory controls, time management, computer trouble shooting, interpersonal communication, security, proper cash handling and knowledge about Alaska's natural history and culture.

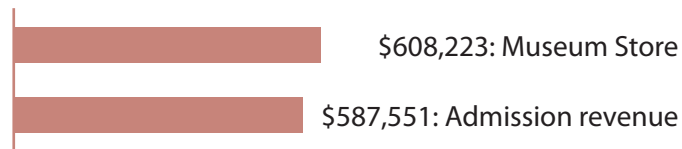
The museum hosted 27 events during the fiscal year, including the Family Cultural Events sponsored by UAF Summer Sessions and Lifelong Learning. There were 12 museum events with free admission in FY12, where 2,803 people enjoyed the museum at no cost.

PREVIOUS PAGE: The contestants for the 2011 Miss WEIO contest visited the museum for publicity photos.

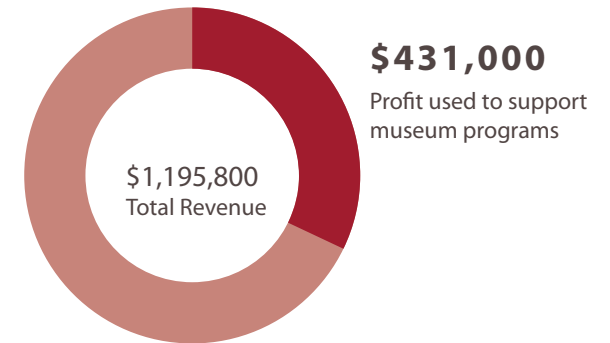
RIGHT: The 2011 Artisan Expo & Sale showcased 15 Alaskan artists working in many different mediums. Almost 500 visitors came to browse and purchase one-of-a-kind art works.

MUSEUM REVENUE

Revenue raised by the museum's admissions and retail operations totaled \$1,195,800 in FY12. After expenses, 36% of the total income (\$431,000) was used to support museum programs for education, exhibits, collections, and research. Admission revenue, including income from museum movies, the audio tour, and event rentals was \$587,551. The Museum Store earned \$608,223. Unfortunately, both admission and store revenues were down this year due to a decrease in overall museum visitation.



TOTAL MUSEUM REVENUE



Visitor Services

SUMMER Visitation

50,310



Decreased
4,968
From 2011

WINTER Visitation

22,602



Increased
384
From 2011

VISITATION

Visitation for FY12 was 79,912. Despite the overall drop in numbers since FY11, we saw strong growth in monthly visitation during the second half of the year due to our **Leggy!** exhibit and an increase in international winter tourism.

BY THE NUMBERS

Summer months: May, June, July, August, September: **50,310**

Decreased 4,968 from previous year

Winter months: October, November, December, January, February, March, April: **22,602**

Increased 384 from previous year

BELLOW, LEFT TO RIGHT: In the summer, the Museum Café is a favorite place to enjoy a latte while surfing the web. The Museum Store features local artists. The Museum Store's annual holiday sale is a good chance for the community to take advantage of the Alaska-made art and other products available year-round. Photos by Theresa Bakker



Visitor Services



CLOCKWISE: The Visitor Services crew helped make the museum's 2011 Halloween Open House a big success with the community by providing creative decorations. Visitors donated more than 750 items for the Fairbanks Community Food Bank at the event.



VISITOR SERVICES STAFF

Manager of Visitor Services & Retail Operations

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dsdavid@alaska.edu

Tour Planning and Event Rentals 474 6640

Janet Thompson jathompson@alaska.edu

Jake Sirevaag jmsirevaag@alaska.edu

VISITOR SERVICES ATTENDANTS

Claire Ashmead

Lara Johnson

Monique Ashmead

Mallory Jones

Marcus Avugiak

Cherise Lawrence

Little Ballard

Nona Letuligasenoa

Codi Burk

Holly Machida

Chelsey Curry

Tanya Shostik

Lance Ellanna

Morgan Simpson

Jed Ellis

Jenna Steffes

Nicholas Evans

Mariah Ver Hoef

Mari Freitag

Jayce Williamson

Brittany Jackson

Ming Zhu

Chelsea Jackson



Research and Collections

Alaska Center for Documentary Film



Alaska Center for Documentary Film

PARTNERSHIPS

The Alaska Center for Documentary Film continues its fruitful partnership with the San Francisco State University Program in Visual Anthropology. This partnership has produced the Indigenous Global Urban Migration research initiative, a program using ethnographic film to help indigenous peoples track the mechanisms and consequences of urban migration.

COLLECTIONS

This year our collections work focused on the restoration of original negatives and printing materials. With a preservation grant from the National Foundation for Film Preservation, we began the restoration of the Film Center's award winning film, *Uksuum Cauyai: The Drums of Winter* (named to the National Film Registry in 2006). This process will result in new 16mm prints for archival storage and a new digital master for distribution copies.

The Film Center also acquired ten hours of original ethnographic video materials from fieldwork in the Maasai Migrants Project.

PREVIOUS PAGE: Maasai villagers in Longido, Tanzania watch a health intervention video co-produced by the Film Center about HIV and urban migration.

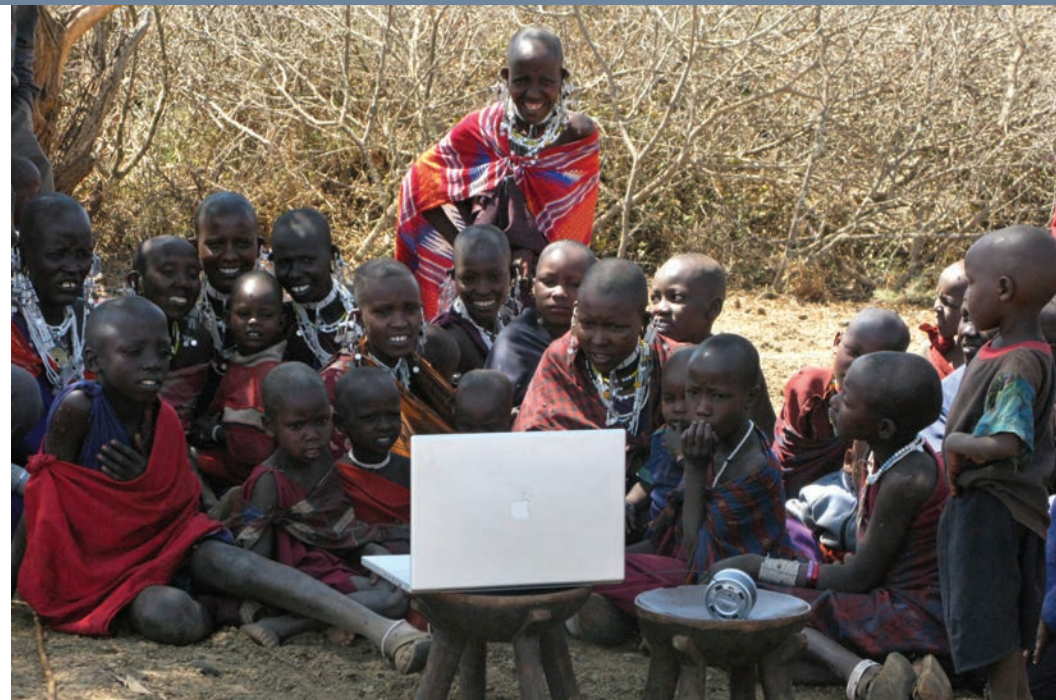
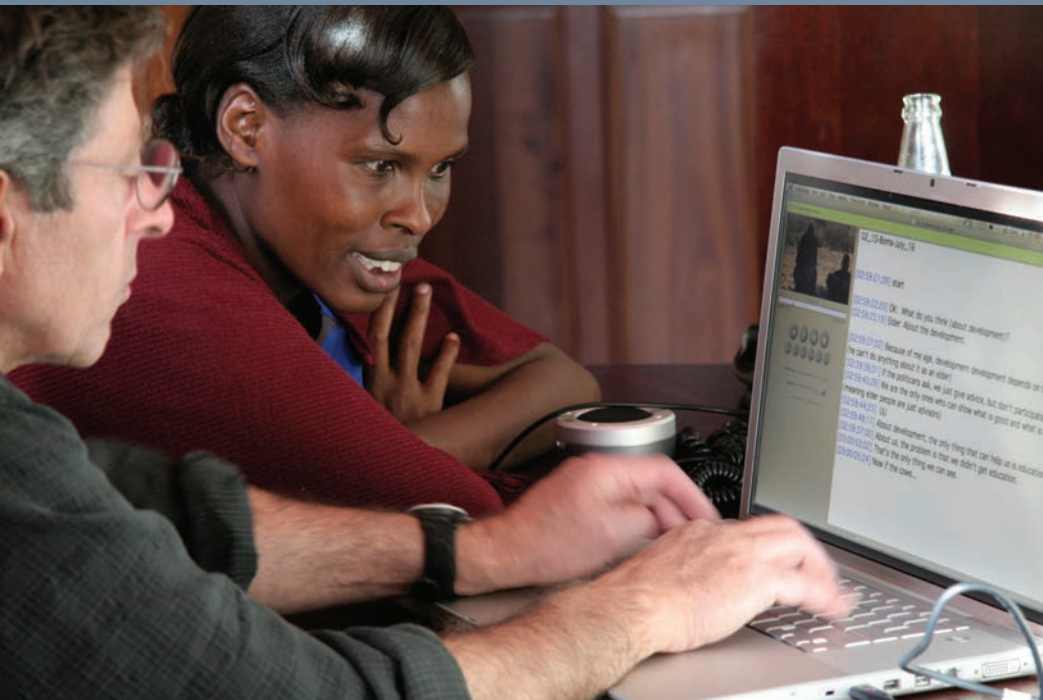
TOP TO BOTTOM: Archival film elements for the *Drums of Winter* ready for restoration. Elders from the Inupiaq community of Shungnak watch archival film clips of their community with Film Curator Len Kamerling.



Len Kamerling



Maria Smith



FIELD WORK

The Maasai Migrants Project is an applied visual anthropology program that looks at the economic and health consequences of the migration of indigenous peoples from villages and traditional homelands to large urban centers. For the third field season the project focused on Tanzanian Maasai culture and the impact of migration on the spread of HIV/AIDS. The Film Center, in collaboration with San Francisco State University Visual Anthropology Program, produces culture specific health intervention videos about HIV/AIDS for facilitated screenings in rural Maasai villages.

An important part of this project is the Tanzania Field School in Applied Visual Anthropology, which provides training for both undergraduate and graduate students in field work, ethnographic film, and visual anthropology.

STAFF LISTING

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RESEARCH ASSOCIATES AND AFFILIATES

John Luther Adams
Takashi Sakurai
Kathy Turco

CONFERENCE WORKSHOP

"The Native Universe" Imaloa Center, Hilo, Hawaii
Interactive workshops on including the Native voice in Museums
Participants: Oregon Museum of Science and Technology,
Tucson Museum of the Desert, UH Hawaiian College.

LEFT TO RIGHT: Len Kamerling and Maasai collaborator Naishiye Raphael working on the translation of a video clip. Women in Longido, Tanzania watch and discuss a video co-produced by the Film Center on HIV and urban migration.

Photos by Alexandra Kamerling

University Instruction

UAF COURSES

The museum's curators serve joint appointments as faculty members at the University of Alaska Fairbanks. During FY12, museum curators and other staff taught the following courses:

ART 460/690 – Economics of Art
ART 463/663 – History of Color and Pigments
BIOL F192P – Introduction to Alaska's Flora
BIOL 195 – Introduction to Alaska's Mammals

BIOL 195 – Field Entomology
BIOL 331 – Systematic Biology
BIOL 406 – Entomology
BIOL 425 – Mammalogy
BIOL 426 – Ornithology
BIOL 692 – Integrating Morphological and Geographic Variation into the Classroom
EBOT 193 – Introduction to Ethnobotany
ED F595P – Week in the Woods

ENG 488 – Dramatic Writing
ENG 697 – Independent Study
FISH 290/490 – Fisheries Internship
FISH/BIOL 427 – Ichthyology
GEOS 106 – Life in the Age of Dinosaurs
GEOS F488 – Undergraduate Research
JRN101 – Introduction to Mass Communication
MRAP 288/488 – Aquatics
MRAP 288/488 Ornithology
MRAP 288 – Earth Sciences
MRAP 293 – Ethnology & History

STUDENTS

Aquatics

Ethan Buchinger
Thaddaeus Buser
Matthew Campbell
Rachel DeWilde
Emily Lescak
Robert Marcotte
Veronica Padula
Joshua Ream

Archaeology

Fawn Carter
Roberta Eastwood
Aimee Ely
Sarah Ficcarota
Stormy Fields
Yu Hirasawa
Conner Hite
Allie Peltó
Cassidy Phillips
Gerad Smith
Jill Sundby
Allison Ward

Earth Sciences

Erica Blake

Alex Edgar
Hannah Foss
Todd Jacobus
Hiro Mori
Rebecca Parish
Kevin Stack

Education

Patrick Joyce
Avril Wiers

Entomology

Casey Bickford
Brandon Emmett
Brandi Fleshman
Ian MacDougall
Sarah Meierotto
Jill Stockbridge

Ethnology & History

Briana Brenner
Emily Chagluak
Alison Hancock
Charles Hilton
Kirsten Olson
Morgan Simpson

Film

Sarah Bechter

Herbarium

Ryanne Braselton
Monte Garrouette
Brianna Gilmore
Kelsey Gobroski
Stephany Jeffers
Jordan Metzgar
Zachary Meyers
Celia Miller
Lisa Strecker

Mammalogy

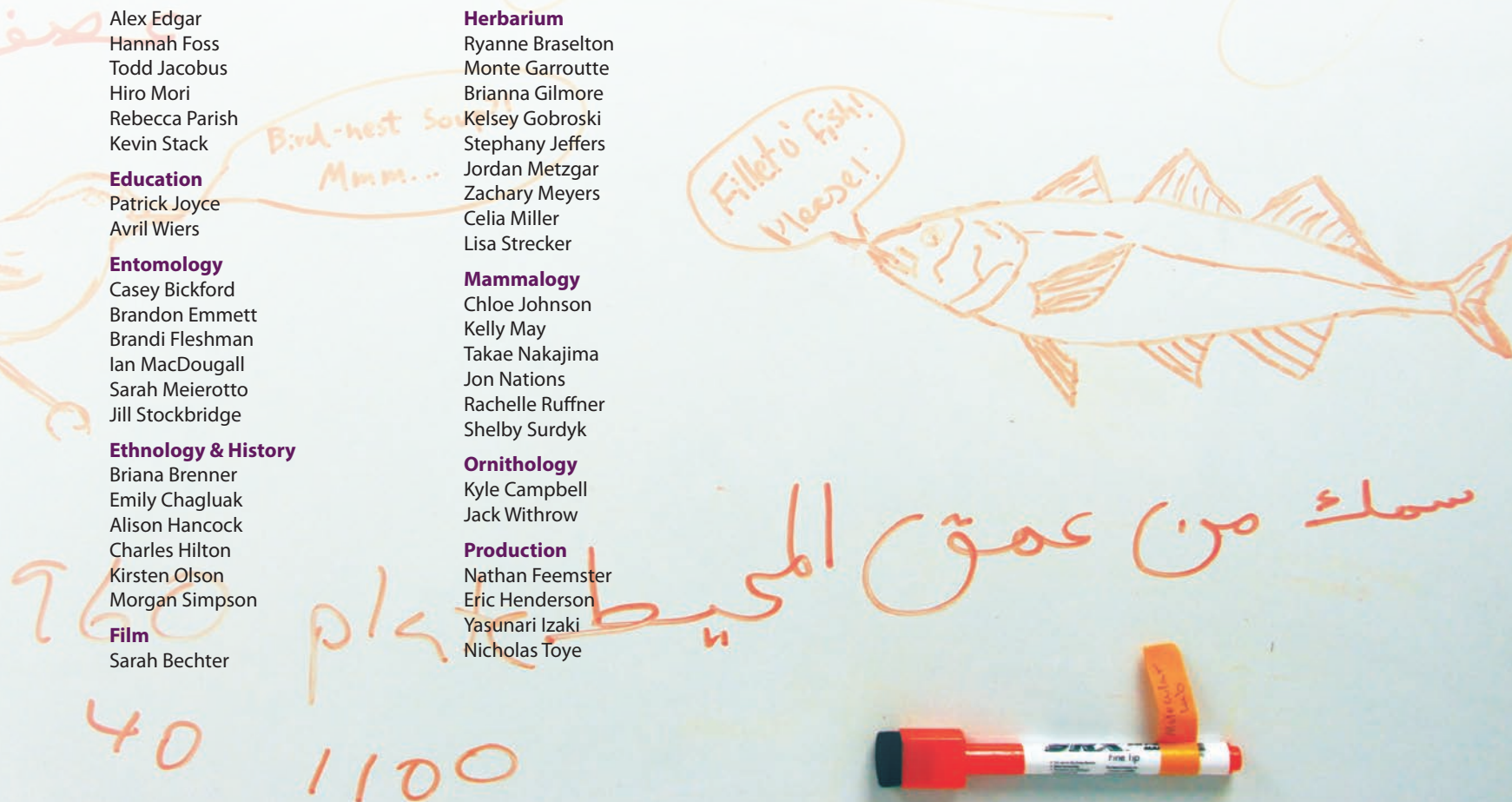
Chloe Johnson
Kelly May
Takae Nakajima
Jon Nations
Rachelle Ruffner
Shelby Surdyk

Ornithology

Kyle Campbell
Jack Withrow

Production

Nathan Feemster
Eric Henderson
Yasunari Izaki
Nicholas Toye





Theresa Bakker



Research and Collections

Aquatics



Aquatics

AQUATICS DEPARTMENT

The students and staff of the Fishes and Marine Invertebrates collections completed a year of strong collections growth and fish diversity research. Collections personnel conducted fieldwork in British Columbia, Washington, Oregon, Southcentral and Southeast Alaska, the Fairbanks area, Denali National Park, Selawik, Shungnak, and Wrangell. The collections received specimen donations from the Alaska Department of Fish and Game, the U.S. Fish and Wildlife Research, and Point Stephens Research. In addition, researchers from the UAF School of Fisheries and Ocean Sciences contributed valuable arctic marine invertebrate specimens and their associated tissue samples.

Six students are currently advancing their graduate studies while contributing to the growth of collection specimen and genomic resource holdings. Their research focuses on documenting and understanding patterns of distribution of fish genetic and morphological diversity across arctic waters. The collection also offered opportunities for undergraduate and high school students to gain experience in biological research through partnerships with the Rural Alaska Honors Institute and the Hutton Junior Fisheries Biology programs.

STAFF LISTING

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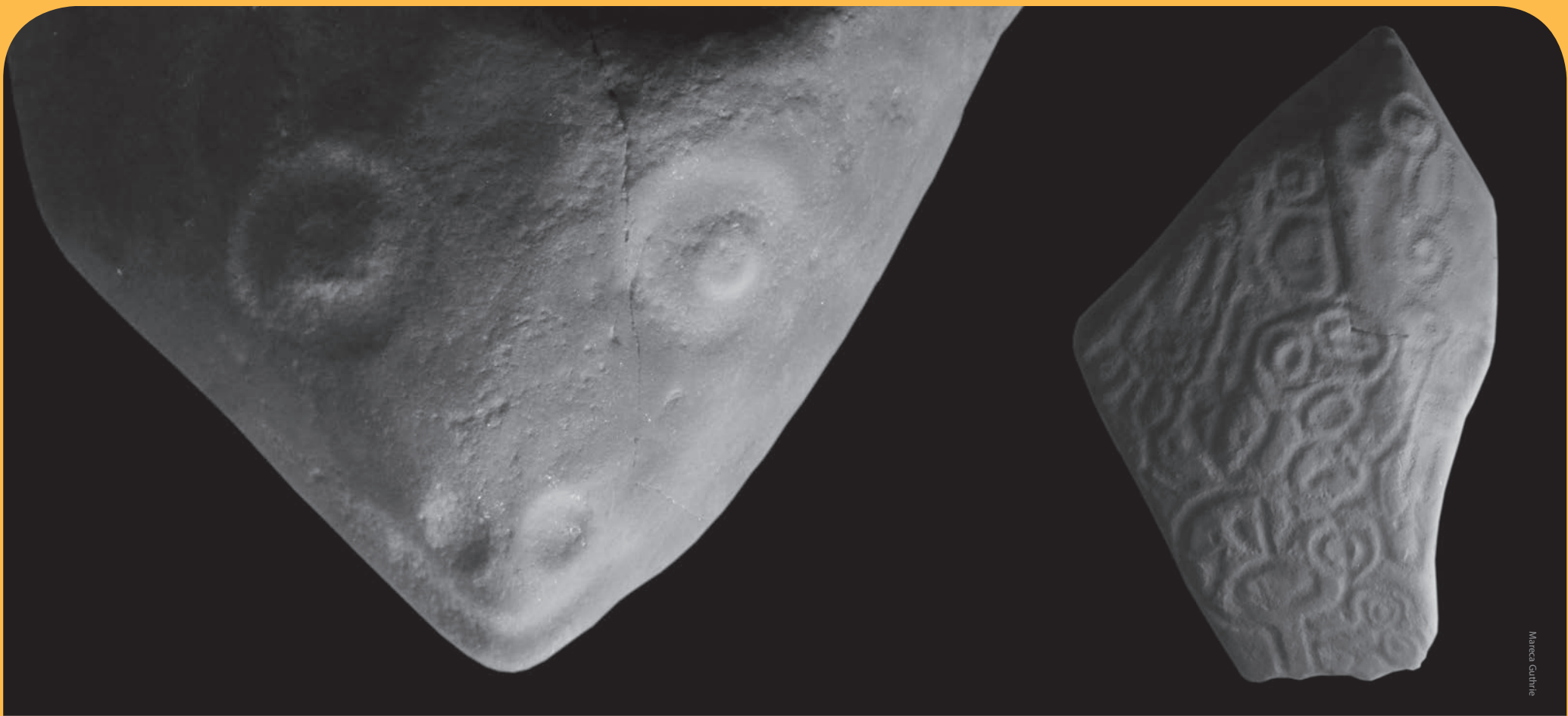
RESEARCH ASSOCIATE

Nora Foster



CLOCKWISE FROM TOP: Fishes and marine invertebrates caught at the bottom of the Chukchi Sea (RUSALCA 2012). Dr. Katrin Iken and graduate student Lauren Bell sort through a catch of benthic marine invertebrates from the Chukchi Sea (RUSALCA 2012). UAF student Rachel DeWilde and Aquatics Curator Andres Lopez prepare fish specimens at the museum's 2011 Halloween event. Members of the fish team clean a muddy trawl net during the RUSALCA 2012 oceanographic expedition to the Chukchi Sea.

PREVIOUS PAGE: Exploring the aquatics collection at a museum Family Day.



Mareca Gubhre



Research and Collections

Archaeology



Archaeology

AFIELD AND AT HOME

The Archaeology Department concluded another successful year through projects both in the field and in the museum. Our success relied on continued partnerships with federal and state agencies and our dedicated team of staff and volunteers. This year, **Sam Coffman** was hired as an Archaeology Technician after graduating with an MA from UAF. Sam worked for the Archaeology Department while earning his degree and brings his knowledge of Geographic Information Systems (GIS) to a number of our projects.

FIELD WORK

In collaboration with the National Park Service (NPS) and the US Fish and Wildlife Service (USFWS), the archaeology staff returned to the Alaska Peninsula for a second season of fieldwork investigating prehistoric village sites in the Aniakchak National Monument and Preserve and the Alaska Peninsula National Wildlife Refuge. Excavations were also continued at Raven Bluff, an 11,000-year-old site in Northwest Alaska that contains the oldest known collection of animal

bones from the American Arctic and promises to yield interesting new information about some of Alaska's earliest inhabitants. Research at the site is carried out in cooperation with the Bureau of Land Management (BLM) and with funding from the National Science Foundation (NSF). Research tracking the sources and trade of obsidian in Alaska and Canada continued with fieldwork in Wrangell-St. Elias National Park and Preserve documenting a poorly known source of volcanic glass in the Nabesna Road area. The sourcing of obsidian artifacts from existing Museum collections also continued.

With support from the NPS, the staff began a multi-year research project in Noatak National Preserve to investigate three Late Prehistoric-age village sites in the central-western Brooks Range. The first year of this research project successfully recorded some of the only known petroglyphs in Northern Alaska, while test excavations yielded mysterious clay disks engraved with geometric designs.

PREVIOUS PAGE: This rare example of Aleutian petroglyphs known as the seal stone was donated to the archaeology collection and will be used in a variety of research projects to better understand the roles of rock art in Unangam culture.

ABOVE: UAMN archaeology field camp on the Central Alaska Peninsula. **RIGHT:** Members of the excavation team look for screened artifacts from a test pit at the Feniak Lake site in the Noatak National Preserve.



Sam Coffman



Scott Shiner



Archaeology

IN THE LAB

The archaeology staff continued the ongoing work of rehousing and reorganizing artifacts and documentation to meet modern curatorial standards. Work also continued cataloging collections information in our database. Projects focused on significant archaeological collections from BLM land with additional funding from the BLM. Collection upgrades were also conducted on other agency-owned accessions with funding from the US Forest Service, the NPS, and the State of Alaska Office of History and Archaeology.

Verifying and digitizing records in the database also continued under the NAGPRA documentation grant in collaboration with the Ethnology & History Department. Funding from the NSF, in conjunction with researcher interest from Purdue University, enabled us to rehouse significant collections from the Ahtna region of Alaska. Rehousing these artifacts has supported the ongoing research of sourcing prehistoric native copper in Alaska and Canada. Similar to obsidian, this information may shed light on possible prehistoric trade routes.

CLOCKWISE FROM TOP: UAMN and NPS archaeological field crew at Feniak Lake in the Noatak National Preserve, Alaska. (from left) Fawn Carter (UAMN), Scott Shirar (UAMN), Miriam Kwietniewska (NPS), Michael Holt (NPS), and Natalia Slobodina (UAMN). UAF graduate Tristan Walsh worked in the archeology lab on an NSF project to document prehistoric northwest native copper technology. He organized specimens from our collection, such as these fish hooks, fancy ornaments, and razor thin blades. Archaeology Collection Manager Jim Whitney shows off the seal stone at Halloween.





In the news

Noatak prehistoric site contains new artifacts for Alaska

Fairbanks, Alaska—Archaeologist **Scott Shirar** expected to find boulders adorned with petroglyphs during his expedition to explore the previously discovered remains of two prehistoric lakefront dwellings in Northwest Alaska's Noatak National Preserve this summer. When he and members of his team began small-scale excavations, they made a new discovery: four decorated clay disks that appear to be the first of their kind found in Alaska.

"The first one looks like a little stone that had some scratch marks on it," said Shirar, a research archaeologist at the University of Alaska Museum of the North. "We got really excited when we found the second one with the drilled hole and the more complicated etchings on it. That's when we realized we had something unique."

After sharing information with colleagues and looking up examples in the archaeological record, Shirar said the disks appear to be a new artifact type for Alaska. "We only opened up a really small amount of ground at the site, so the fact that we found four of these artifacts indicates there are probably more and that something really significant is happening."

“That’s when we realized we had something unique.”



BELOW LEFT TO RIGHT: One of the clay disks found during the excavation at Feniak Lake. Fine Arts Curator Mareca Guthrie traces the petroglyph-adorned boulder that marks one of the prehistoric house pits at Feniak Lake. Members of the museum's archaeology and fine arts departments traveled to a prehistoric settlement on Feniak Lake to conduct small-scale excavations of prehistoric dwellings. They were particularly interested in a group of boulders adorned with petroglyphs that were part of the foundation rocks used for the ancient house pits. Photos by Scott Shirar





Archaeology

COLLECTION GROWTH

The Archaeology collections grew substantially in size and scope this year, due to the acquisition of a significant collection from Barrow. The collection was excavated from the Birnirk and Nuvuk sites in the 1950s by Wilbert Carter and contains over 26,000 artifacts with exceptional organic preservation. The Birnirk site is the “type” site for the Birnirk culture and is the first systematic collection in the museum representing this pivotal cultural period, filling a substantial gap. The collection was transferred to Alaska by the US Navy from the Harvard Peabody Museum where it had been curated since its excavation. With the support of the US Navy, we look forward to realizing the collection’s incredible untapped research potential.



CLOCKWISE FROM TOP: Archaeology Collection Manager Jim Whitney holds an atlatl thrower from the Birnirk collection, a new addition to the museum collections nearly 60 years after the artifacts were excavated near Point Barrow. A small knife collected at the Point Barrow site that became the type site for the Birnirk culture. A closer look at the atlatl thrower received by the UA Museum of the North as part of the Birnirk collection, previously housed at the Harvard Peabody Museum. A baleen ice scoop collected at the Point Barrow site as part of the Birnirk collection. Photos by Theresa Bakker



Archaeology

ARCHAEOLOGY STAFF

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Sam Coffman	Archaeology Technician
Lori Hansen	Curatorial Assistant
Tristan Walsh	Curatorial Assistant

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Claire Alix
Julie Esdale
Howard Smith
Christopher Houlette
Jenya Anichenko

CONFERENCE PRESENTATIONS

Barton, L., **S. Shirar**, **J.T. Rasic** and J. Jordan. 2012. Emerging Patterns in the Prehistoric Human Occupation of the Central Alaska Peninsula. Paper presented at the Alaska Anthropological Association. Seattle, WA.

Buvit, I., W.H. Hedman, S.R. Kuehn, and **J.T. Rasic**. 2012. Geomorphology, Stratigraphy, and Formation of the Raven Bluff Site, Northwestern Alaska. Paper presented at the Alaska Anthropological Association. Seattle, WA.

Buvit, I., W.H. Hedman, S.R. Kuehn, and **J.T. Rasic**. 2012. Stratigraphy, Archaeology, and Late Quaternary Geological History of Raven Bluff, A Late Pleistocene-Age Fluted Projectile Point Site in Northwest Alaska. Poster presented at the Society for American Archaeology. Memphis, TN.

Coffman, S and B.A. Potter. 2012. Lithic Analysis and Site Activities at Teklanika West (HEA-001), Central Alaska. Paper presented at the Alaska Anthropological Association. Seattle, WA.

Gilbert, P., C. Ciancibelli, and **J.T. Rasic**. 2012. Preliminary Results of 2011 Upper Kobuk River Archaeological Survey and Evaluation. Poster presented at the Alaska Anthropological Association. Seattle, WA.

Holmes, C. and **S. Coffman**. 2012. Ancestral Lake Minchumina Project (Phase 1). Poster presented at the Alaska Anthropological Association. Seattle, WA.

Houlette, C. and **J. Whitney**. 2012. The Principal Constant: Actions and Adaptations of Indigenous Han Athapaskan Populations to Gold Mining Efforts in the Upper Yukon River Region of Alaska. Alaska Anthropological Association. Seattle, WA.

Rasic, J.T., J.D. Reuther, and R.J. Speakman. 2012. Crossroads or Turnstile: A Look at Long term Patterns of Human Interactions in Beringia through Obsidian Provenance Data. Paper presented at the Society for American Archaeology. Memphis, TN.

Shirar, S., **J.T. Rasic**, E. Carlson and **M. Guthrie**. 2012. Rock Art in the Far North: A Local Style of Petroglyphs from the Western Brooks Range. Poster presented at the Alaska Anthropological Association. Seattle, WA.

Speakman, R.J., R.G. McGimsey, R. Davis, M. Yarborough and **J.T. Rasic**. 2012. Aleutian Island and Alaska Peninsula Obsidian Sources. Poster presented at the Society for American Archaeology. Memphis, TN.

Whitney, J. and M. Proue. 2012. Historical Archaeology. Session organized at Alaska Anthropological Association. Seattle, WA.

Whitney, J. and **A. Linn**. 2012. NAGPRA at 20: Now What? Session organized at Alaska Anthropological Association. Seattle, WA.



LEFT: UAMN archaeology crew in the field on the central Alaska Peninsula (pictured: Jillian Richie, Fawn Carter, Jim Jordan, and Scott Shirar).



Pat Dukenmiller



Research and Collections

Earth Sciences



Earth Sciences

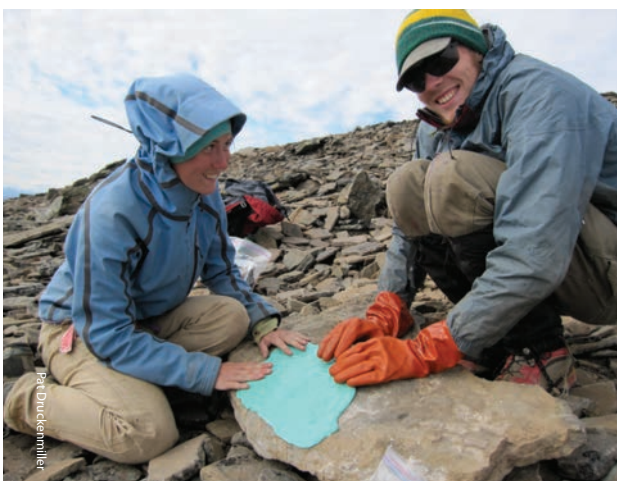
CONSIDERABLE GROWTH

The Earth Sciences Department has grown considerably in the past year, increasing personnel, fieldwork, and curatorial activities.

2012 marked a milestone in the department's history with the hiring of its very first collection manager, **Julie Rousseau**. Originally from Québec, Canada, she completed a B.S. in biology at McGill University and a M.S. in paleontology at the University of Oslo, Norway.

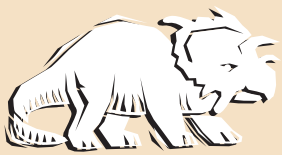
In March of 2012, graduate student **Kevin Stack** successfully defended his Master's thesis documenting a new dinosaur housed at the museum from the Talkeetna Mountains of Southcentral Alaska. Ph.D. candidate **Hiro Mori** continued his research on duck-billed dinosaurs from the North Slope. The Earth Sciences Department also welcomed graduate student **Danielle Serratos**, who will study a new marine reptile (plesiosaur) from the Bearpaw Shale of Montana collected by Curator **Pat Druckenmiller** in July 2011.

Undergraduate students played an important role in the department this year. **John Scott** and **Erica Blake** both conducted undergraduate research projects on the CRRL Permafrost Tunnel, and **Emma Boone** participated in a Museum Research Apprenticeship (MRAP) in the spring of 2012. Other important members of the departmental team include **Alexander Edgar**, **Todd Jacobus**, **Rebecca Parrish**, and **Meghan Shay** as well as art student **Hannah Foss**, who sculpted a reconstruction of the Brooks Range ichthyosaur collected in 2002.



LEFT TO RIGHT: Collection Manager Julie Rousseau joined the Earth Sciences team in April of 2012. Undergraduate students Emma Boone and John Scott making peels of dinosaur tracks on Slope Mountain, North Slope. Undergraduate employee Erica Blake scans specimen barcodes as part of the Earth Sciences collection databasing project.

PREVIOUS PAGE: Field camp in Puale Bay, Becharof National Wildlife Refuge, Alaska Peninsula, June 2012.



In the news

Ida comes to the museum

In the summer of 2011, Earth Sciences Curator **Pat Druckenmiller** worked with a colleague in Oslo, Norway and returned with a cast of the now-famous primate fossil “Ida” from the Messel site.

This perfectly complete specimen, widely known as Ida, is a juvenile primate that died at less than a year of age. We can tell that it is a young animal because it still has its baby teeth. Ida probably drowned in a shallow lake with no oxygen at the bottom. It lived almost 20 million years after the extinction of the dinosaurs.



Theresa Bakker

“Ida forces us to reexamine other evidence and rethink what we thought we knew.”

Ida is one of the most famous specimens in the collections of the Natural History Museum at the University of Oslo. I work with their curator, Jørn Hurum, the vertebrate paleontologist in charge of this specimen. Only a small number of these casts exist and each one of them takes many hours to make. After the cast is poured, an artist applies approximately 30 hours of detailed painting work to closely replicate what the actual specimen looks like. Only two other museums in the United States have a cast: the Smithsonian Institution and the American Museum of Natural History in New York City.

Messel is a famous fossil site in Germany with excellent preservation, including evidence for soft tissues such as skin, fur, and feathers. That’s one of the exceptional things about Ida – the body outline and all the fur is clearly preserved. Every single bone in the body is there. What’s exciting is that this is one of the oldest known fossil primates, the group of mammals to which we belong. It is also at the center of an ongoing controversy about primate relationships. Some researchers believe Ida is the oldest primate on the path to humans. That makes it a pretty hot topic of discussion in vertebrate paleontology.

The best thing about Ida is that it is controversial. Science is a process, not static. Ida forces us to reexamine other evidence and rethink what we thought we knew. Controversy focuses interest and research in a particular area. This cast will be used in the classes I teach, including vertebrate paleontology. It is a fantastic addition to the teaching collection, and I hope to use it for an exhibit in the museum at some point.

LEFT: Earth Sciences Curator Pat Druckenmiller holds the specimen known as Ida.



Earth Sciences

IN THE FIELD

Members of the Earth Sciences team had an active field season this past year both in Alaska and beyond. In August 2011, Curator Druckenmiller and UAMN Operations Manager **Kevin May** led a team to the North Slope, where they discovered and collected from a new dinosaur locality. In June 2012, with the generous support of the US Fish and Wildlife Service, Druckenmiller and May conducted reconnaissance fieldwork in search of Jurassic dinosaurs on the Becharof National Wildlife Refuge in the Alaska Peninsula.

Further abroad, Druckenmiller led an enthusiastic team of volunteers from the US Fish and Wildlife Service in July 2011 to a location in central Montana to excavate a new, nearly complete marine reptile skeleton (long-necked plesiosaur) on the Charles M. Russell National Wildlife Refuge in Montana. Thanks to in-kind donations by UPS and Lynden Transport, the specimen (weighing in at 1500 pounds) was shipped to Fairbanks and delivered just before Christmas. Finally, Druckenmiller and Rousseau both participated in the seventh successful field trip to the arctic archipelago of Svalbard in August 2011, where they excavated several new marine reptile fossils as part of the Spitsbergen Jurassic Research Group in collaboration with the Natural History Museum in Oslo.

BRINGING THE PAST TO THE FUTURE, ONE FOSSIL AT A TIME

13,000 | **20,000**
fossils cataloged | images uploaded

Student employees continued the painstaking, yet critical work of cataloging and digitizing the vertebrate fossil collection. This large-scale project, funded by a National Science Foundation Biological Research Collection grant, progressed at a brisk pace, with more than 13,000 fossils cataloged and 20,000 digital images uploaded in the Arctos database over the year.

An exciting component of this project was the installation in December 2011 of a new mobile storage system in the collection range, which significantly increased the amount of space available for housing specimens. Databasing efforts were also greatly enhanced by support from both the Bureau of Land Management and the National Park Service. Earth Sciences is now well on the way to bringing its collection up to 21st Century, state-of-the-art curation standards.

RIGHT: In July 2011, Earth Science curator Pat Druckenmiller participated to the excavation of a plesiosaur from the C.M. Russell National Wildlife Refuge in Montana.

STAFF LISTING

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Julie Rousseau Collection Manager
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CONFERENCE PRESENTATIONS

Druckenmiller, P.S., J.H. Hurum, E.M. Knutsen, and H.A. Nakrem. 2011. An exceptional new ichthyosaur from the Upper Jurassic Agardhfjellet Formation (Volgian), Svalbard, Norway. Presented at the Annual Meeting of the Society of Vertebrate Paleontology. Las Vegas, NV.

Fowell, S.J., **P.S. Druckenmiller**, P. McCarthy, R. Blodgett, and **K.C. May**. 2011. Paleocology of Alaska's Jurassic Park. Poster presented at the Annual Meeting of the Geological Society of America. Minneapolis, MN.

Stack, K.P. and **P.S. Druckenmiller**. 2011. Anatomy and relationships of a new Turonian hadrosauroid from the Matanuska Formation of southern Alaska. Poster presented at the Annual Meeting of the Society of Vertebrate Paleontology. Las Vegas, NV.





Derek Sikes



Research and Collections

Entomology



Entomology

CELEBRATING ACCOMPLISHMENTS

This year the Entomology Department celebrated three major accomplishments, the migration of our data (146,835 records) to Arctos – an online, publicly accessible database, the digital imaging of the beetle collection (one specimen per species), and the production of a five-month special exhibit, *Leggy! Live Spiders and their Relatives*.

146,835
Records online

DIGITAL IMAGES

The digital images are now online and can be accessed through the UAMN Entomology Department webpage.

<http://www.uaf.edu/museum/collections/ento/>

Over 99% of the specimen records can be mapped with a click of a button to see the distribution of species of interest in Alaska.

PREVIOUS PAGE: Lady Beetle on Willow (*Coccinella transversoguttata*). Lady beetles are voracious predators of garden pests. There are 32 known species in Alaska.



The **Leggy!** exhibit included 20 species of live arthropods, including horseshoe crabs, tarantulas, scorpions, earwigs, and a black widow spider. It featured macro images by Curator **Derek Sikes**.

Leggy! generated great community interest. A steady stream of school groups toured the exhibit and completed activities prepared by the museum's Education Department. A total of 864 students visited the exhibit as part of their school field trips to the museum.



A Dune Scorpion glowing under UV light in the **Leggy!** exhibit.

Tamara Mertz



Entomology

STUDENT SUCCESS

MS student **Joey Slowik** graduated in August 2011 and a new MS student, **Casey Bickford**, started her program in January 2012. Fieldwork was conducted throughout Alaska with the completion of a re-survey of Ants based on fieldwork conducted in 1982, work on the Kasatochi volcano ecosystem reassembly (with undergraduate **Sayde Ridling** and volunteer **Steve Peek**), a rapid biotic inventory of Southeast Alaskan alpine zones, and MS student **Jill Stockbridge's** continuing sampling in the Tongass National Forest on Prince of Wales to investigate different forestry practices using beetles and spiders as indicator species.

STAFF LISTING

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RESEARCH ASSOCIATES

Steve Peek
Ken Philip
James Kruse

CLOCKWISE FROM TOP: UAMN Entomology graduate student Jill Stockbridge sampling aquatics during Field Entomology course. Research team landing on Kasatochi volcano for 3rd year post-eruption sampling. Greenish Blue Butterfly (*Plebejus saepiolus*) found while teaching Field Entomology. Entomology students Sayde Ridling and Casey Bickford greet visitors during the museum's 2011 Halloween event.





Entomology

As the caregiver for the creatures in the museum's special exhibit, *Leggy! Live Spiders & Their Relatives*, **Jill Stockbridge** routinely put her hands in the cages of several species of tarantulas and scorpions. Even so, there was only one species that spooked her. The centipede – a voracious predator known to bite unsuspecting humans.

"I had the container open and was trying to find the centipede. But it wasn't under the rock or anywhere I could see it. Then I realized it was feeling my sleeve with its antennae."

“Then I realized
it was feeling my
sleeve with its
antennae.”

Jill Stockbridge

Her favorite *Leggy!* critters were the walking sticks, which she let crawl around on her hands and sleeves. "I just loved how they looked like a stick with their long legs. It is funny that they are my favorite and the only insect that gives **Derek (Sikes)** the heebie-jeebies!"

Stockbridge found her natural environment in the museum's **entomology department**. The job combines science with her studies. She is pursuing a Master's Degree in biology.

Stockbridge has helped collect thousands of specimens for the museum's collection to help us understand the insect and spider species of Alaska, but she also enjoyed caring for the live specimens in this special exhibit.



Jill caring for the *Leggy!* critters. Photos by Theresa Bakker

CONFERENCE PRESENTATIONS

Sikes, D.S., A. Baltensperger, D. O'Brien. 2012. Terrestrial arthropods of pre- and post-eruption Kasatochi: A test of the heterotrophs first hypothesis (with isotopes!). Alaska EPSCoR All Hands Meeting, Fairbanks, AK, May 24.

Sikes, D.S., G. Jarrell, D. McDonald. 2011. Arctos at the University of Alaska Museum Insect Collection. Alaska Entomological Society Annual Meeting, Anchorage, AK, Jan 27.

Sikes, D.S., G. Jarrell, D. McDonald. 2011. Arctos at the University of Alaska Museum Insect Collection. Entomological Collections Network, Annual Meeting, Reno, NV, Nov 12.

Sikes, D.S., A. Baltensperger, D. O'Brien. 2011. Terrestrial arthropods of pre- and post-eruption Kasatochi: A test of the heterotrophs first hypothesis. Entomological Society of America, Annual Meeting, Reno, NV, Nov 15.

Fairbanks resident Patrick Woolery found this new state record (Chernetidae) while chopping wood.



Derek Sikes



Maria Bakker



Research and Collections

Ethnology & History



Ethnology & History

PROJECTS AND PARTNERSHIPS

The Ethnology & History Department enjoyed a year of progress on a number of existing projects and also established new partnerships and collaborations. The Kolmakovsky Redoubt project continued under the Save America's Treasures grant, with the blockhouse rehabilitation concluding when a new sod roof was installed. Interpretive panels are planned for installation in the spring of 2013.

During the summer of 2011, WSU Anthropology Senior **Briana Brenner** finished her six-week internship in collections management by installing her exhibition, Alaska Mammals, at the Rasmuson Library. Graduate student assistant **Charles Hilton** continued working on the NAGPRA documentation grant in collaboration with the Archaeology department, while student assistants **Morgan Simpson** and **Emily Chagluak**, along with new graduate student assistant **Kirsten Olson** updated database entries, undertook collection photography,

processed new accessions, and developed customized archival housing for artifacts. Volunteer **John Smelter** assisted with the start of a collection-wide inventory (ongoing). Summer of 2012 brought SUNY Potsdam student intern **Alison Hancock**, who researched and installed an exhibition at the library on some of the common uses of ivory in Alaska.

PROMOTIONS AND APPOINTMENTS

Angela Linn was promoted to Senior Collections Manager and was elected to the Museums Alaska



CLOCKWISE: Putting the roof back on the blockhouse was the last step in stabilizing the building. Ethnology & History Collections Manager Angela Linn stands in front of the Kolmakovsky Blockhouse after the completion of the conservation project funded by the Save America's Treasures program. Ethnology & History students Briana Brenner, Emily Chagluak, and Charles Hilton. Kirsten Olson, graduate student assistant, completes her construction of a storage mount for a historic saddle. SUNY Potsdam summer intern, Alison Hancock, arranges her exhibit of ivory artifacts at the Rasmuson Library.

PREVIOUS PAGE: The Kolmakovsky blockhouse is blanketed in snow.



Ethnology & History

Board of Directors and appointed Secretary for the 2011-12 term. She also completed her last term as Vice-Chair of the Registrars Committee-Western Region. Linn was invited to sit on the Tanana Chiefs Conference (TCC) Art Selection Committee for the new Chief Andrew Isaac Health Center. During the summer of 2011 she welcomed the Fairbanks Coin Club for their monthly meeting, sharing some of the collections of commemorative medallions as well as currency.

In May 2012, Linn participated on a panel at the Annual Meeting for the American Association of Museums in Minneapolis, entitled *Out from Behind-the-Scenes: Bringing Our Work Forward*. She and co-PI **Sam Coffman** (archaeology) were awarded a UAF Technology Advisory Board grant to update the equipment used in the museum's Imaging Lab, including new digitizing and photography equipment.

COLLECTIONS KUDOS

During FY12, the department collaborated on a number of collection visits with the UAF Oral History program through Project Jukebox projects, including *Dog Mushing in Alaska* and *Gates of the Arctic National Park*. The US Fish and Wildlife Service deposited a collection of WWII objects from Attu in the Aleutian Islands under a repository agreement. This collection of approximately 100 objects represents some of the experiences of

both American and Japanese military personnel on Attu and is available to researchers.

The collection was the recipient of a new *Hybrid-B 48-inch Super Pig*, donated by Alyeska Pipeline Service Company. This pipeline cleaning device was delivered and installed on the northwest corner of the Museum's lawn and illustrates the history of resource extraction in Alaska.

Work began on the 2013 special exhibit, *Denali Legacy: 100 Years on the Mountain*. This exhibition, in partnership with the National Park Service, will commemorate the centennial of the first ascent of Denali by the 1913 climbing party of Hudson Stuck, Harry Karstens, Walter Harper, Robert Tatum, and John Fredson.

STAFF LISTING

Angela Linn	Senior Collections Manager
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Emily Chagluak	Student Assistant
Charles Hilton	Graduate Student Assistant
Briana Brenner	(WSU Intern) summer 2011
Morgan Simpson	Student Assistant
Kirsten Olson	Graduate Student Assistant
Alison Hancock	(SUNY Potsdam Intern) summer 2012

STUDENTS GRADUATED

Morgan Simpson (BA Anthropology)
Charles Hilton (MA Northern Studies)



CLOCKWISE FROM TOP: Basket covered bottle made in Attu by Mrs. Marth Prosopf and collected ca. 1934 by Lyle Gamble. Donated by Sharon Basse. UA2012-3-1AC. Walrus mask by Frank Ellanna of King Island. Collected by Elsie Jenssen Garrett ca. 1964 and donated by her daughter, Jean Strojan. UA2012-4-1. "Denali" project cookie, 2011 acquisition for history collection. UA2011-5-2.

RESEARCH ASSOCIATES

Phyllis Movius	Steve Jacobson
Glen Simpson	Dr. Lawrence Kaplan
Dr. Molly Lee	Prof. Michael Krauss
(Curator Emeritus)	Dr. Patricia Partnow
Dr. Ann Fienup-Riordan	Katrin Simon
Dr. Hiroko Ikuta	Candy Waugaman



Ethnology & History

SUPER PIG

When Alyeska Pipeline Service Company donated a new pipeline super pig to the museum's ethnology and history collections, it took a super crew of museum professionals, university mechanical experts, and operations supervisors to get it installed.

After more than two years of coordination between the donor, the museum, and the university, and many months of designing and installing a custom-fabricated saddle mount, the pig was delivered and installed on Dec. 6, 2011.

The new artifact replaces a pig given to the museum in 1984. "That older, mostly steel and rubber pig has been on exhibit in the museum's yard since it came to us." Collection Manager **Angela Linn** says. "The rubber components have severely degraded over the past few years and the bumper pieces have been falling apart, so we approached Alyeska to see if they had a spare pig ready to be decommissioned."

A pig is a device inserted into a pipeline to clean it, separate products or dewater the line. They also inspect pipelines and perform other special duties, such as plugging isolated pipelines. Alyeska agreed to donate a S.U.N. Engineering Super Pig Hybrid-B. This version has cutting devices in a configuration of disks and cups, but was decommissioned after the company transitioned to an all-disc pig in 2011.

The story of natural resource extraction is a part of Alaska's history. "This is one of the primary reasons we have research museums -- for comparing and contrasting changes through time," Linn says. "Alyeska's generous donation helps us tell this story in relation to the people of Alaska. The ethnology and history collection depends on donations to expand the collection and the willingness of corporations such as Alyeska to pass along items to help us achieve our mission."

After an Alyeska driver delivered the pipeline super pig to the museum, a UAF Facilities Services crew helped install it at its permanent location on the grounds of the UA Museum of the North. Photos by Theresa Bakker





Research and Collections

Fine Arts



Fine Arts

NEW DONATIONS

The Fine Arts collection continues to grow, thanks to the donations of people who care about Alaska art. Mr. and Mrs. Bennett provided funding for the purchase of Sara Tabbert's carved and painted bass wood piece *Winter Lake*. Laura Berkowitz and Jan Julian donated a recent painting, *Mountain Lake* by Cordova artist David Rosenthal. Grace Berg Schaible donated *Running Bear*, a bronze sculpture by Melvin Olanna, and two large watercolors of Tlingit Elders from Ketchikan by Claire Fejes valued at \$31,000. Michael and Donna Patrick donated *Ian at the end of Summer*, a photograph by Adam Ottavi.

After long time museum supporter and art collector Hugh Ferguson passed away, his daughter Ellen Ferguson arranged to donate 20 items from his collection to the museum in the Fall of 2011. The donated collection is valued at over \$100,000 and contains important historic artists such as Fred Machetanz, Belmore Browne, Jules Dahlager, Ellen Goodale, Ted Lambert, and Theodore Richardson, in addition to contemporary artists such as Kes Woodward.

PREVIOUS PAGE: *Elijah Kakinya using his spotting glass to look for caribou, 1951.* Watercolor and pencil on paper by Jeffries Wyman. Gift of Anne Wyman and Jeffries Wyman Jr. UA2010-001-008.



ABOVE: *Ian at the end of Summer, 2011.* Archival pigment print by Adam Ottavi. Gift of Donna and Michael Patrick. UA2011-002-001. **LEFT:** *Winter Lake, 2011.* Carved, painted basswood by Sara Tabbert. Purchase made possible by Larry and Margaret Bennett. UA2011-002-001.





Fine Arts

ART IN THE MAKING

Fine Arts Curator **Mareca Guthrie** curated *Art in the Making*, a special exhibition focusing on the artistic process of five Fairbanks artists. Mareca was responsible for the curatorial vision of the exhibition, selecting the artists, planning the filming and interviews, writing the text panels, developing the hands-on displays, and drawing over 100 illustrations that were featured in the exhibit and accompanying 35-page booklet.



Visitors to the museum were invited to share their own artwork in the special exhibit, *Art in the Making*.

Printmaking

Sara Tabbert



Video frames from the exhibit.

STUDENT PROJECTS

Birte Horn-Hanssen graduated in the Fall of 2011 with a Masters in Northern Studies. Her thesis project was an *Analysis of Strategies, Objectives and Results of the Sami Political Art Movement of the second half of the 20th Century until today*.

STORAGE AWARD

The Fine Arts Collection was awarded a \$100,000 grant from the Rasmuson Foundation to fund the purchase and installation of art racks and museum quality mobile storage furniture for the new fine art storage space in the Rasmuson Library.

FINE ARTS STAFF

Mareca Guthrie

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RESEARCH ASSOCIATES AND AFFILIATES

James Barker

Charles Mason

Glen Simpson

Kes Woodward

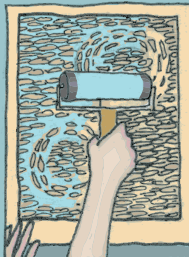
HOW IT'S MADE



1 Tear paper to fit the printing block.



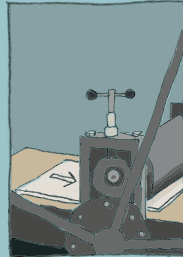
2 Carve the wooden block.



3 Ink the wooden block.



4 Place the paper on top of the inked block.



5 Run the paper and block through the press to transfer ink to the paper.



6 Repeat the process as needed with different blocks and colors of ink.



Wyman watercolors travel to Anaktuvuk pass

Harvard-educated **Jeffries Wyman**, co-discoverer in 1924 of a new branch of biochemistry, embarked on a series of global pilgrimages later in his career, including a painting retreat to the University of Alaska Fairbanks weather station at Anaktuvuk Pass in 1951. He produced over 100 drawings and watercolors while staying in the Brooks Range community.

When **Anne Wyman** and her brother **Jeffries Jr.** donated 17 of those watercolors and drawings to the University of Alaska Museum of the North, fine arts curator **Mareca Guthrie** arranged for them to invest in high quality reproductions to be framed and shipped to Anaktuvuk Pass for display at the Simon Paneak Memorial Museum.

“Museums have two conflicting goals, preserving objects so that they can be experienced by future generations, and ensuring that [the objects] get to be seen and enjoyed now. Because watercolors are so sensitive, we decided it would be best to keep the originals in the climate controlled environment of our museum, but it was also important for Anaktuvuk Pass to have something to display.”

Wyman said her father was not a socialite who cared about big hotels and comfort, but preferred to be among the people, observing how they lived and worked and managed their lives. It makes sense that the paintings have returned to the place where they were conceived.

“They are all about the Pass as it was in the early 1950s.”

“I love the paintings,” Wyman said. “But I am getting old now and trying to think of what to do with the rest of his pieces. We are particularly glad that the Alaska paintings and the journals have found a home.” **Vera Woods**, the director of the Anaktuvuk Pass museum, said the paintings have been well received. “They are hanging beautifully in the Elder’s Room, and the people love them.”

CLOCKWISE FROM TOP: University of Alaska Museum of the North fine arts curator Mareca Guthrie packs up reproductions of watercolors by artist Jeffries Wyman for the Simon Paneak Memorial Museum in Anaktuvuk Pass. Portrait of Simon Paneak, 1951. Watercolor and pencil on paper by Jeffries Wyman. Gift of Anne Wyman and Jeffries Wyman Jr. UA2010-001-014.





Richard Bond



Research and Collections

Herbarium



Herbarium

MAJOR MILESTONES

Another fascinating year of botanizing has passed, and the Herbarium (ALA) has completed some major milestones along the way. The Botany Department staff, students, and research associates produced eight publications and were involved in 15 presentations at international, national, and local meetings. Of significance here is the participation at the XVII International Botanical Congress in Melbourne, Australia (held only every six years). Collection Manager and Ph.D. student **Jordan Metzgar** and Curator **Steffi Ickert-Bond** were in attendance and were invited to participate in two symposium presentations, “Exploring the fern frontier: identifying the next generation challenges in fern biology” (Metzgar) and “Progress in placing gymnosperms on the Tree of Life” (Ickert-Bond).

The collection continues to grow based on staff and student efforts and gifts received from collaborators and agencies. We have accessioned over 3,400 new specimens and made an additional 12,000 high resolution images of specimens available in Arctos, bringing the total of images available in the online database to 174,000.

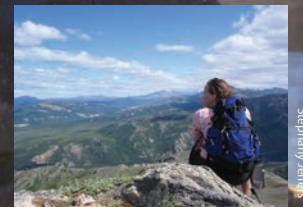
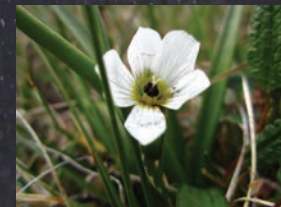
3,400 | **174,000**
new specimens | images online

PREVIOUS PAGE: White Cottongrass (*Eriophorum scheuchzerii*) in Tussock-sedge, dwarf-shrub, moss tundra, towards the Chetigun River, Chukotka Autonomous Region, Russia.

CLOCKWISE FROM TOP: Mist from Nairn Falls (BC) sprays exposed rock outcrops with numerous parsley ferns (*Cryptogramma acrostichoides*). There are four different species of *Claytonia* reported within the boundaries of Denali National Park. Bison Gulch, located right outside of the park, is home to a large population of *Claytonia eschscholtzii*. This is a picture from the summit. Noatak National Preserve is home to a putatively new species, *Claytonia noatakensis*. The flowers found in the Feniak Lake area show significant morphological and genetic differences from flowers found elsewhere in the state. Stephany examining a flower during a field trip out to Feniak Lake in Noatak National Preserve.



Jordan Metzgar



Stephany Jeffers



Herbarium

DIGITAL AGE

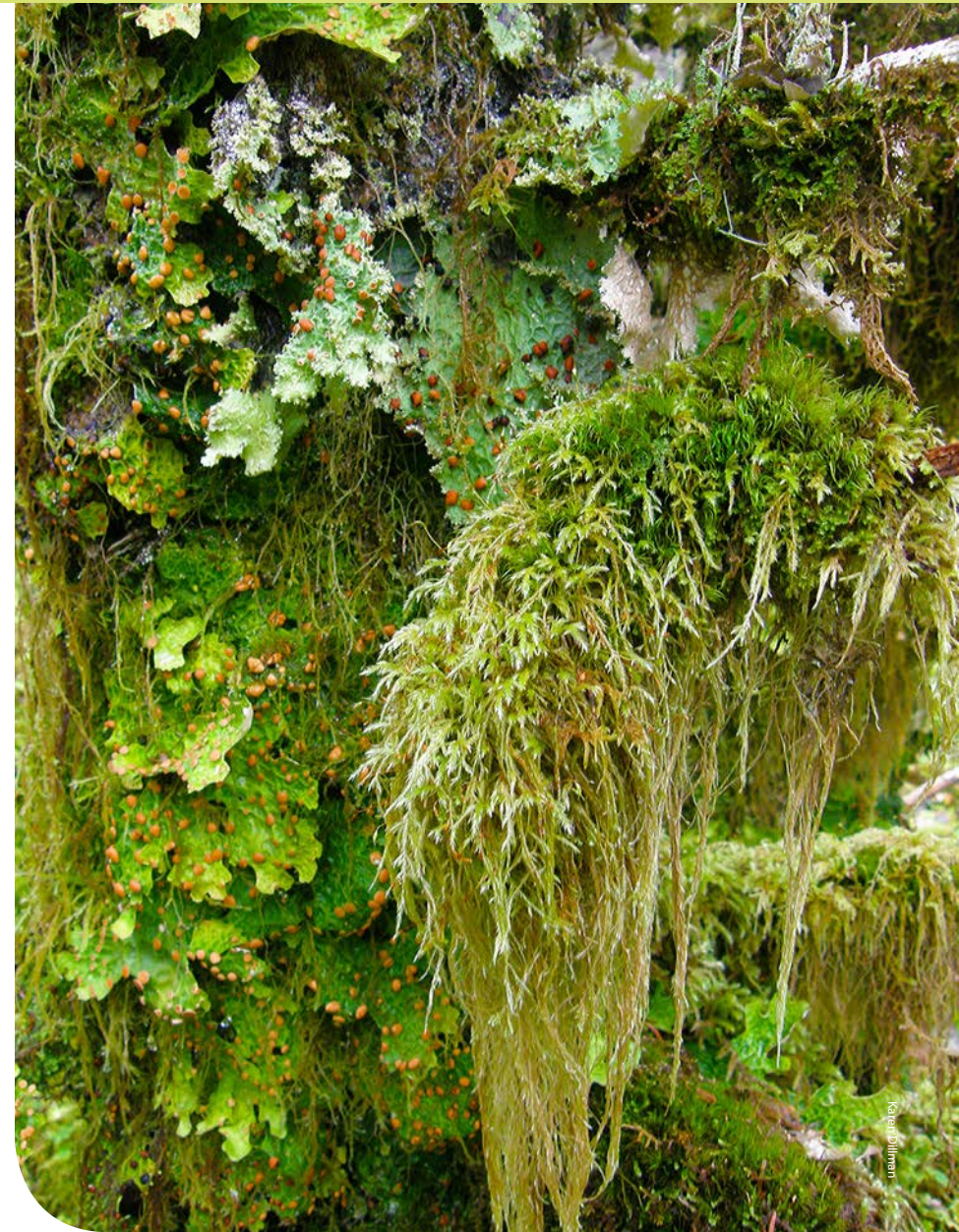
The Herbarium was fortunate to receive two additional grants from the National Science Foundation in support of collection digitization and infrastructure improvements for the cryptogam collection entitled, North American Lichens and Bryophytes: Sensitive Indicators of Environmental Quality and Change and the Toward Documenting Biodiversity Change in Arctic Lichens: Databasing the Principal Collections, Establishing a Baseline, and Developing a Virtual Flora. Both grants include funding for undergraduate curatorial assistants.

Another milestone was the completion of the “Field Guide to the Grasses of Alaska” by Dr. Quentin Skinner (University of Wyoming). He spent three years researching the subject, visiting ALA to view collections and making field collections in Alaska. The tome is exceptionally well-illustrated and covers over 160 taxa of grasses in Alaska.

STUDENT WORK

Graduate students **Monte Garrrouette** (M.S.), **Stephany Jeffers** (M.S.), and **Jordan Metzgar** (Ph.D.) are making good progress towards their degree goals, while M.S. student **Zac Meyers** defended his thesis, “A contribution to the taxonomy and phylogeny of Oxytropis section Arctobia (Fabaceae) in North America,” and graduated during the summer of 2012. Zac is now working for the OneTree Alaska project as the Educational lead. This year undergraduate student **Celia Miller-Hampton** presented her honor’s thesis, “Disentangling fistulose Ramalina species (Ramalinaceae, lichenized Ascomycota) in northwest North America,” and was awarded a three-year NSF Graduate Student Fellowship to pursue a Ph.D. at the University of Michigan.

Herbarium staff and students continue to look for new avenues to engage the public in collections research. This year we developed a new Plant Genetics Module for the ASRA (Alaska Science and Research Academy).



ABOVE: Cyanobacteria-associated lichens commonly seen in old growth forests in the coastal rainforest of southern Alaska. *Lobaria oregana* (light green) and *Lobaria linia* (bright green), along with the hanging moss *Isoetecium myosuroides*.



Herbarium



The course was delivered to local middle school students by Melody Durrett of the UAF Biology & Wildlife Department and Collection Manager Jordan Metzgar and included field trips and applied laboratory experiments. Curator Ickert-Bond, together with the museum's former director of public programs, **Laura Conner**, who is now the director of education and public outreach at UAF's College of Natural Science and Mathematics, delivered two workshops based on the use of museum collections at the 2011 Alaska Math & Science Conference that focused on *STEM Education: Foundation for Alaska's Future*. As part of our Institute of Museum and Library Science Museum of America award, the Herbarium funded 12 rural teachers from St. Mary's to participate in a Smart-board Technology and Student Engagement and Learning course (ED595) to integrate content and technology into the curriculum with Alaska applications (presented by Dr. Ute Kaden, UAF Education department).

LEFT TO RIGHT: Herbarium Collection Manager Jordan Metzgar oversees the dried plant station at the museum's 2012 Open House. Curator Steffi Ickert-Bond observes guest at the Hands-On Herbarium at the museum's 2012 Open House. Photos by Theresa Bakker

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Mary Stensvold
Stacy Studebaker
Donald A. Walker



A Place of Refuge

the migration patterns of two Alaskan species (*C. acrostichoides*, the American parsley fern, and *C. sitchensis*, the Sitka parsley fern) after the last ice age, work that requires detailed molecular data.

Herbarium Collection Manager **Jordan Metzgar** is working on his Ph.D. at UAF, focusing on the parsley fern (*Cryptogramma*). He's reconstructing

"I'm looking at the DNA sequences of different plants to discover diverse spots where the parsley fern may have sought refuge during the last ice age. These refugia weren't glaciated and acted as lifeboats."

The other alternative would be that the plant retreated to warmer climates in the south, but that is not what Metzgar thinks happened. "They are associated with glaciers and are one of the first plants to come in when a glacier recedes."

It also makes sense that ferns are the plants he's specializing in. "I was going on a hike one summer in Pennsylvania while I was an undergrad. We were looking for a great blue heron rookery I thought was in the area. My companions were pointing out different ferns. We saw 12 or 15 species that day. We never did find the rookery."

But Metzgar found his passion. He graduated from Cornell and took a job in a botany lab at Duke University. There he helped a post-doc with a tree fern project. Tree ferns are tropical species with trunk-like stems that grow up to 20 meters tall. He also worked on some side projects of his own, including the taxonomy of nitrogen-fixing water ferns used as bio-fertilizer in rice paddies.

The results of his DNA study will do more than help Metzgar earn his Ph.D. "It will be the largest genomic data set of any fern."

TOP TO BOTTOM: A sun-baked fertile leaf of parsley fern (*Cryptogramma acrostichoides*) near Nanaimo, BC. *C. sitchensis*, the Sitka parsley fern in Kenai Fjords National Park. Photos by Jordan Metzgar



CONFERENCE PRESENTATIONS

Garrouette, M. and **S.M. Ickert-Bond**. 2012. Using multiple regression models to understand the influence of geologic history, topography, island size, isolation, and dispersability on community assemblage in the Western Aleutian Islands. Alaska Botany Forum. University of Alaska Anchorage.

Ickert-Bond, S.M., A. Rydberg, K. Bolinder, S. Little, **I.C.**

Loera Carrizales, and P. von Aderkas. 2011. Chemical composition of pollination drops in *Ephedra* - safe sex and other oddities. Botany 2011. Botanical Society of America Annual Meeting. St. Louis, MO. <http://2011.botanyconference.org/engine/search/index.php?func=detail&aid=422>

Ickert-Bond, S.M., C.C. Cicero, J.A. Cook, S.A. Ewads, and E.A. Lacey. 2011. AIM-UP! A research coordinating network to increase the use of museum collections in undergraduate education. Botany 2011. Botanical Society of America Annual Meeting. St. Louis, MO. <http://2011.botanyconference.org/engine/search/index.php?func=detail&aid=386>

Ickert-Bond, S.M., C. Rydin, **J.S. Metzgar**, and L. Raubeson. 2011. Integration of plastid phylogenomics, morphology and the fossil record to assess biogeographic patterns and divergence in Gnetales – the importance of sampling deep and broad. Symposium: Progress in Placing Gymnosperms On the Tree of Life. XVIII International Botanical Congress. Melbourne, Australia.

Ickert-Bond, S.M., **J.S. Metzgar**, **S. Jeffers**, S., N. Sekretareva, and Y. Mikhaylova. 2011. Unravelling evolutionary relationships of Beringian plants - Plant collecting expedition to the Chegitun River, eastern Chukotka in collaboration with the Komarov Botanical Institute, St. Petersburg. Beringia Days Conference. Nome, AK.

Jeffers, S. and **S.M. Ickert-Bond**. 2012. Micromorphological comparison of species of *Claytonia* in Alaska. Midnight Sun Science Symposium, UAF.

Jeffers, S. and **S.M. Ickert-Bond**. 2012. Species delineation of the genus *Claytonia* in Alaska. UAF Research Day.

Jeffers, S. and **S.M. Ickert-Bond**. 2012. The Systematics of Alaskan *Claytonia*: an introduction to research being done and an update on field work at Feniak Lake. Alaska Botany Forum. University of Alaska Anchorage.

Metzgar, J.S. and **S.M. Ickert-Bond**. 2011. Developing the parsley ferns (z) as a system for studying rapid climate change in seed-free plants. Beringia Days Conference. Nome, AK.

Metzgar, J.S. and **S.M. Ickert-Bond**. 2011. Developing the parsley ferns (*Cryptogramma*) as a system for studying rapid climate change in seed-free plants. Botany 2011. Botanical Society of America Annual Meeting. St. Louis, MO. <http://2011.botanyconference.org/engine/search/index.php?func=detail&aid=514>

Metzgar, J.S. and **S.M. Ickert-Bond**. 2011. Lessons from imaging 180,000 vascular plant specimens. Lichens, bryophyte and climate change workshop. TCN workshop. University of Madison, Wisconsin.

Metzgar, J.S. and **S.M. Ickert-Bond**. 2011. Climate change impacts on ferns: reconstructing the past to predict the future. Symposium: Exploring the Fern Frontier: Identifying the Next Generation of Challenges in Fern Biology. XVIII International Botanical Congress, Melbourne, Australia.

Metzgar, J.S. and **S.M. Ickert-Bond**. 2012.

Deciphering diversification in the circumboreal parsley ferns (*Cryptogramma*). Alaska Botany Forum. University of Alaska Anchorage.

Metzgar, J.S. and **S.M. Ickert-Bond**. 2012. Diversification and reticulation in the circumboreal parsley ferns (*Cryptogramma*). UAF Midnight Sun Science Symposium.

Metzgar, J.S., **S.S. Jeffers**, and **S.M. Ickert-Bond**. 2011. Botany at the last frontier: The University of Alaska Museum of the North Herbarium (ALA) showcasing digital resources and collection-based research to study the Arctic flora. XVIII International Botanical Congress. Melbourne, Australia.



ABOVE: Graduate Student Botanist Monte D. Garrouette poses next to an example of *Artemisia globularia lutea* (Yellow wormwood) on St. Matthew in Alaska's Pribilof Islands. Yellow wormwood is endemic to St. Matthew Island.



Arin Gundersen



Research and Collections

Mammalogy



Mammalogy

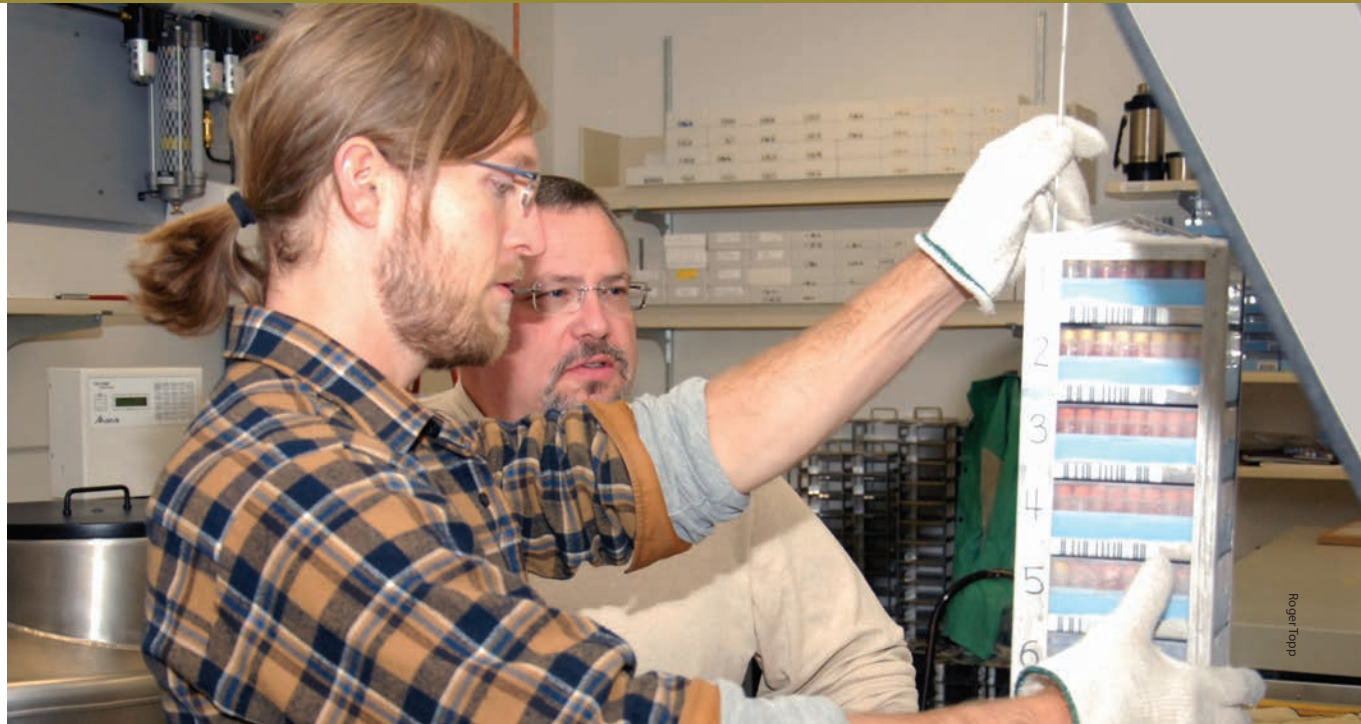
SHIFTING STAFF

This past year was a bittersweet one for the Department of Mammalogy. In September the museum bid a very fond but sad farewell to **Brandy Jacobsen**, who over the course of her 10 years in the Mammals Department served as an undergraduate curatorial assistant, research technician, and, finally, collection manager.

We were lucky to have an exceptionally well-qualified candidate poised to fill the vacancy and in late 2011, we welcomed **Aren Gunderson**, former graduate student and Coordinator of Genomic Resources, as the new Mammals Collection Manager. Aren's former position was reclassified in recognition of the importance of the Genomic Resources collection and in the spring of 2012, **Kyndall Hildebrandt**, a former undergraduate curatorial assistant, graduate student, and research assistant in the Mammals Department who'd gone on to work at the U.S. National Museum of Natural History (Smithsonian), was hired as the museum's first collection manager of genomic resources.

PREVIOUS PAGE: PhD candidate Nick Kerhoulas searches for hoary marmots in northern British Columbia, July 2011.

CLOCKWISE FROM TOP: Former Genomic Resources Coordinator (and current Mammal Collection Manager) Aren Gunderson explains how the museum's frozen tissue collection and liquid nitrogen production facility works to Matt Kane, Program Director at NSF. The museum's frozen tissue collection is the second largest of its kind in the country. Kyndall Hildebrandt is the museum's first Genomic Resources Collection Manager. Former Mammal Collection Manager Brandy Jacobsen sorts specimens in the mammals lab.





Mammalogy



OUT IN THE FIELD

Fieldwork was conducted throughout much of the state, with a particularly exciting trip to the mountains west of Eagle in August 2011. In a joint expedition by UAMN and the Smithsonian, a team of five mammalogists repeated a small-mammal survey conducted over a century ago by the U.S. Biological Survey. The resulting specimens, together with the original specimens housed at the Smithsonian, will provide an unprecedented opportunity to study changes in an entire community over the past hundred years. In March 2012, **Link Olson** was awarded a Researcher In Residence fellowship in Denali National Park and Preserve, where he and his students will conduct three additional “resurveys” at sites originally surveyed in 1906, 1937, and 1956. Together these resurveys will mark the beginning of a multi-year effort to investigate the effects of climate change on Alaska’s small mammals.

2,496 | **114,291**
new database entries | total database entries

CLOCKWISE FROM TOP: A hoary marmot in the mountains west of Eagle. A northern red-backed vole is released from a live trap during a Mammalogy field trip. Mammal study skins dry in the sun near Eagle. L-R: Mammal Curator Link Olson, Kyndall Hildebrandt (formerly Smithsonian, now UAMN), Nick Kerhoulas (UAMN), Aspen Reese (Yale Peabody Museum), and Suzy Peurach (Smithsonian) share a space blanket during a frigid expedition to the mountains west of Eagle in August 2011.



FUNDING SUCCESS

Two undergraduate students in Mammals were awarded grants from the newly-formed Undergraduate Research and Scholarly Activities (URSA) program at UAF to study body size variation in red squirrels and arboreality in northern red-backed voles. **Nick Kerhoulas**, a Ph.D. candidate, was awarded a Theodore Roosevelt Grant to conduct research on hoary marmots at the American Museum of Natural History in New York City.

The Mammal Collection remains very lucky to have a dedicated and enthusiastic group of undergraduate student assistants and volunteers who perform critical work at virtually every step in the specimen preparation process.

STAFF LISTING

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Dr. Joseph A. Cook, University of New Mexico

Dr. Nikolai Dokuchaev, Russian Academy of Sciences

Mr. Stephen O. MacDonald, University of New Mexico

Dr. Eric Sargis, Yale University

Ms. Gay Sheffield, UAF

Mr. Thomas McDonough, ADFG

Ms. Lori Quakenbush, ADFG

Dr. Kimberlee Beckmen, ADFG

Dr. Neal Woodman, USGS-Smithsonian

Dr. Travis Booms, ADFG

Ms. Brandy Jacobsen

Dr. Hayley Lanier, University of Michigan

Mr. Dominique Watts, U.S. Fish and Wildlife Service

ABOVE: Genomic Resources Collection Manager Kyndall Hildebrandt looks for pika sign in the mountains west of Eagle.



JACK WINTROW



Research and Collections

Ornithology



Ornithology

PRODUCTIVE YEAR

It has been another productive year for our group. Ornithology Department staff, students, and research associates produced 14 publications, while the collection grew by 1,500 specimens. Fieldwork was conducted in Interior Alaska and on Kodiak and Baranof Islands. We worked together with other curators to establish a new museum research apprenticeship program (MRAP) that provides opportunities for students to study with us in the lab; we hosted several MRAP students during the program's first year. We also hosted two high-school students doing research in our lab.

CLOCKWISE FROM TOP: Ornithology graduate student Kyle Campbell spent the fall of 2011 touring the East Coast, where he was able to visit the collections at the Smithsonian Institution. Here he is holding an Ivory-billed Woodpecker specimen. These specimens from the ornithology collection are included in the exhibition, *Changing Alaska*. Kyle Campbell prepares a specimen during the museum's Halloween Open House in October 2011. Children examine specimens in the museum's ornithology department during the museum's 2012 Open House.

PREVIOUS PAGE: Field location on Kodiak Archipelago, May 2012.





Ornithology

SPECIMEN OUTREACH

The number and diversity of specimen loans made to students and researchers remains high, and the research that this supports is both scientifically and geographically dispersed. We keep a list of publications that have used the collection on our web site.

<http://www.universityofalaskamuseumbirds.org/>

This year the Bird Collection completely ran out of cabinet space. We are revising a proposal to the National Science Foundation to rectify this situation. As in the past, we've been fortunate to have excellent volunteers. We thank them and the Friends of Ornithology for their ongoing support, which is so critical to being able to achieve such a high level of activity.

RIGHT: Ornithology student Kyle Campbell presented these bird specimen education kits at the NSF Graduate STEM Fellows in K-12 Education (GK-12) Program conference in Washington DC in March 2012. He created the kits as part of his teaching fellowship.



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Johannes Erritzoe

Rose A. Z. Meier

Kevin McCracken

Christin Pruett

Daniel Gibson

LEFT: Collection Manager Jack Withrow prepares specimens at the museum's annual Halloween Open House.



Ornithology

CHECKLIST OF ALASKA BIRDS

493 species

64 families

20 Orders

In addition to science supported by the collection, the Ornithology Department keeps the state bird checklist.

As of 1 January 2012, the list of avian taxa known in Alaska included 493 naturally-occurring species in 64 families and 20 orders. The Ornithology Department maintains a checklist based on archived specimens, but includes some species known only from (archived) photos, videotapes, or audio recordings.

This list is downloaded from the department's website as many as 2,000 times per year. You can see it here:

<http://www.universityofalaskamuseumbirds.org/products/checklist.pdf>



ABOVE: Examples of Alaska birds included in the museum's collection include (from top down) a common snipe (*Gallinago gallinago*), pin-tailed snipe (*Gallinago stenura*) and solitary snipe (*Gallinago solitaria*), three of the four *Gallinago* snipe known in Alaska.



LEFT TO RIGHT: An Eastern Reef Egret, *Egretta sacra*, feeding off the coast of Palawan, Philippines. The Pacific golden-plover, *Pluvialis fulva*, seen here in the Philippines, is an important Alaska migrant and part of UAM Ornithology Collection Manager Jack Withrow's thesis work. The red jungle fowl, *Gallus gallus*, is the wild ancestor of the domestic chicken. This specimen was collected in the Philippines and is now part of the museum's bird collection. Photos by Kyle Campbell

Field Research



Field Research



AQUATICS

Kasitsna Bay
Kodiak
Vancouver, Canada



ARCHAEOLOGY

Aniakchak National Monument and Preserve
Alaska Peninsula National Wildlife Refuge
Noatak National Preserve
Raven Bluff Site, NW AK
Wrangell-St. Elias National Park



EARTH SCIENCE

Charles M. Russell National Wildlife Refuge, Montana
Lake Becharof National Wildlife Refuge, Alaska
Slope Mountain, Alaska
Svalbard, Norway



ENTOMOLOGY

Aleutian Islands (Atka, Great Sitkin, Tagalak,
Kasatochi, North Atka, Umak)
Dall Island (Southeast AK)
Etolin Island (Southeast AK)
Prince of Wales
Ketchikan
Seward
Tonsina Creek Trail
Chatanika
Steese Highway
UAF Campus
Creamer's Field
North Pole High School
O'Conner Creek (off Goldstream Road)
Tanana Road



FILM

Dar es Salaam, Tanzania
Kiteto, Tanzania



HERBARIUM

Anchorage
Buldir Island
Coldfoot
Eagle Summit
Healy
Homer
Kiska Island
Palmer
Seward
Toolik Lake
Valdez
San Bernardino Mountains, CA
Nair Falls BC
Vancouver Island, BC
Mt. Seymour, BC



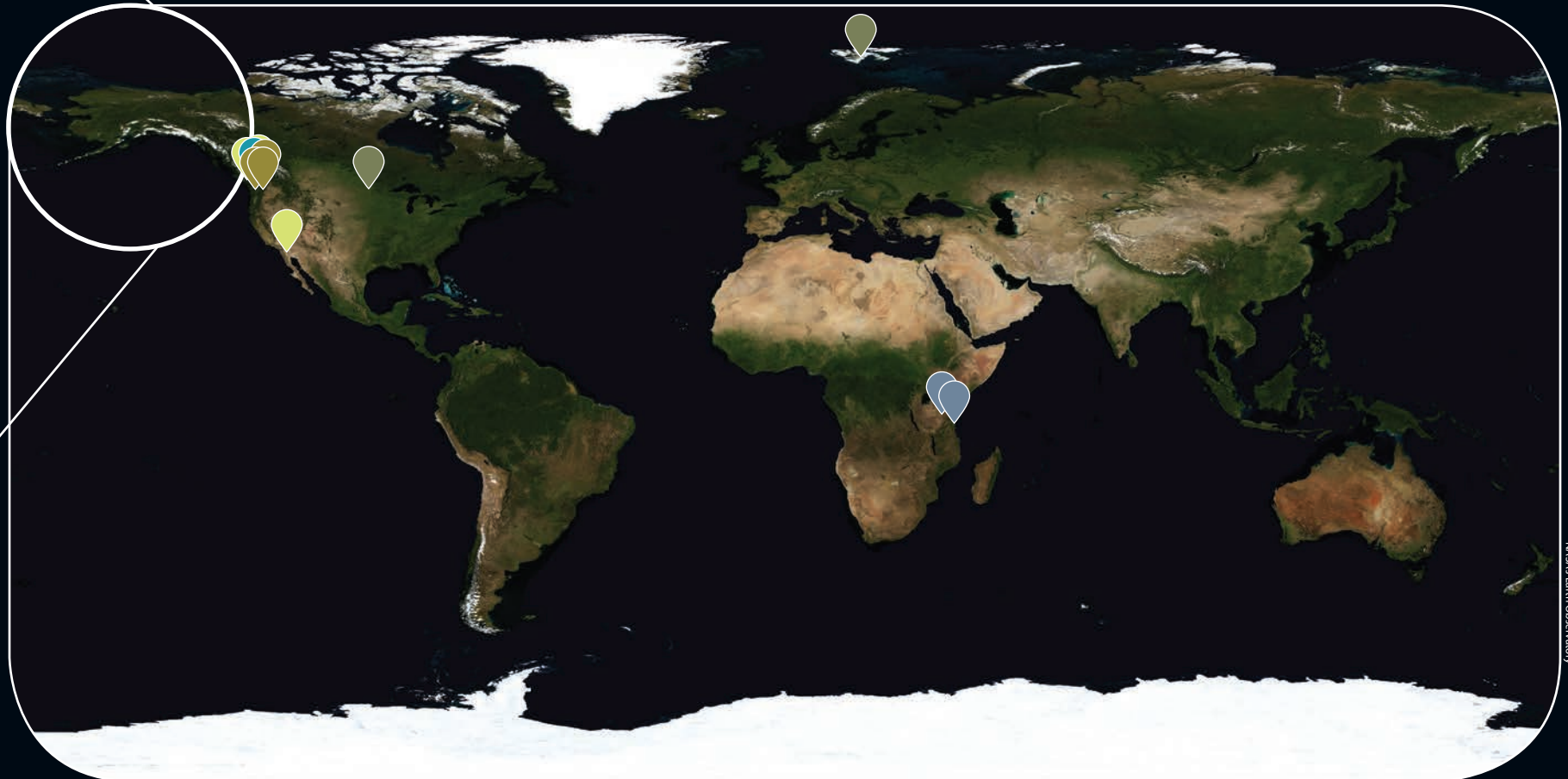
ORNITHOLOGY

Alaska Range
Baranof Island
Fairbanks
Kodiak Island
Tanana Uplands



MAMMALOLOGY

Black Rapids
Eagle
Hinchinbrook Island
Homer
Old Nenana Highway, Fairbanks
White Mountains
British Columbia, Canada
Mt. Adams, WA
Western Washington State



Publications by UAMN faculty and students

AOU Committee on Classification and Nomenclature (one of 12 members). 2011. Fifty-second supplement to the American Ornithologists' Union Check-list of North American Birds. *Auk* 128:600-613.

Aronsson, M., F.J.A. Daniëls, L. Gillespie, S. Heiðmarsson, H. Kristinsson, **S.M. Ickert-Bond**, H. Väre, and K.B. Westergaard. 2012. Red Listing of Arctic Vascular Plants: Current Status and Recommendations. Conservation of Arctic Flora and Fauna (CAFF) Proceeding Series Report No. 8:86-88.

Benson, R.B.J., M. Evans, and **P.S. Druckenmiller**. 2012. High diversity, low disparity and small body size in plesiosaurs (Reptilia, Sauropterygia) from the Triassic-Jurassic boundary. *PLoS ONE* 7(3): e31838.doi:10.1371/journal.pone.0031838.

Breen, A. I., **D. F. Murray**, and M. S. Olson. 2012. Genetic consequences of glacial survival: the late Quaternary history of balsam poplar (*Populus balsamifera* L.) in North America. *Journal of Biogeography* 39:918-928.

Brown, C.M. and **P.S. Druckenmiller**. 2011. Basal ornithopod (Dinosauria, Ornithischia) teeth from the Prince Creek Formation (early Maastrichtian) of Alaska. *Canadian Journal of Earth Sciences* 48:1342-1354.

Bulgarella, M., J. L. Peters, C. Kopuchian, T. Valqui, R. E. Wilson, and **K. G. McCracken**. 2012. Multilocus coalescent analysis of hemoglobin differentiation between low- and high-altitude populations of crested ducks (*Lophonetta specularioides*). *Molecular Ecology* 21:350-368.

Coffman S. and B. A. Potter. 2011. Recent excavations at Teklanika West, a Late Pleistocene site in Denali National Park, Central Alaska. *Current Research in the Pleistocene* 28:73-75.

Crawford, N. G., B. C. Faircloth, J. E. McCormack, R. T. Brumfield, **K. Winker**, and T. C. Glenn. 2012. More than 1000 ultraconserved elements provide evidence that turtles are the sister group of archosaurs. *Biology Letters* 8: doi:10.1098/rsbl.2012.0331.

Fenner L., G. Smith, **S. Coffman**, and G. Noyes. 2011. Comparing Great Basin Paleoindian raw material procurement strategies: x-ray fluorescence data from obsidian fluted and stemmed points from Mud Lake and Lake Tonopah, Nevada. *Current Research in the Pleistocene* 28:44-46.

Ferris, C. D., J.J. Kruse, J.D. Lafontaine, K.W. Philip, and **D.S. Sikes**. 2012. A checklist of the moths of Alaska. *Zootaxa* 3571:1-25.

Gaines, E. P., K.S. Yeske, W.C. Johnson, **S.J. Shirar**, and J.F. Kunes. 2011. Pleistocene archaeology of the Tanana Flats, eastern Beringia. *Current Research in the Pleistocene* 28:42-44.

Gibson, D.D., S.C. Heinl, A. J. Lang, T.G. Tobish, Jr., and **J.J. Withrow**. 2012. Checklist of Alaska birds, 18th edition.

Gillespie, L., M. Aronsson, **S.M. Ickert-Bond**, H. Väre, and K.B. Westergaard. 2012. Monitoring of Red Listed species in the Arctic. Conservation of Arctic Flora and Fauna (CAFF) Proceeding Series Report No. 8:89-95.

Gunderson, A.M., H.C. Lanier, and **L.E. Olson**. 2012. Limited phylogeographic structure and genetic variation in Alaska's arctic and alpine endemic, the Alaska marmot. *Journal of Mammalogy* 93:66-75.

Ickert-Bond, S.M. 2012. *Ephedraceae*. In Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson and T.J. Rosatti (eds.), Second Edition of The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. 140-142, 147.

Kamerling, L. 2012. North by 2020: Looking Back on 30 Years of Filmmaking in the North. University of Alaska Press.

Loera, I., **S.M. Ickert-Bond**, and V. Sosa. 2012. Diversification in North America arid lands: niche conservatism, divergence and expansion of habitat explains speciation in the genus *Ephedra*. *Molecular Phylogenetics and Evolution* 65: 437-450.

Lynch, Alfaro J.W., J.P. Boubli, **L.E. Olson**, A. Di Fiore, B. Wilson, B.A. Gutiérrez-Espeleta, M. Schulte, S. Neitzel, V. Ross, D. Schwochow, I. Farias, C. Janson, and M.E. Alfaro. 2012. Explosive Pleistocene range expansion leads to widespread Amazonian sympatry between robust and gracile capuchin monkeys. *Journal of Biogeography* 39: 272-288.

Maxwell, E.E., M. Zammit, and **P.S. Druckenmiller**. 2012. Morphology and orientation of the ichthyosaurian femur. *Journal of Vertebrate Paleontology* 32: 1207-1211.

McCracken, K.G. and R. E. Wilson. 2011. Gene flow and hybridization between numerically imbalanced populations of two duck species in the Falkland Islands. *PLoS ONE* 6:e23173.

McCracken, K.G., L. A. Alza, T. G. McCracken, and M. M. Smith. 2012. Joint incubation/takeover of Upland Goose (*Chloephaga picta*) nest by Yellow-billed Pintail (*Anas georgica*). *Ornitologia Neotropical* 23:287-290.

Miller, M.J., M.J. Lelevier, E. Bermingham, J.T. Klicka, P.E. Escalante, and **K. Winker**. 2011. Phylogeography of the Rufous-tailed Hummingbird (*Amazilia tzacatl*). *Condor* 113:806-816.

Nobuko, K., M. Mikage, **S.M. Ickert-Bond**, M. Maier-Stolte, and H. Freitag. 2011. A molecular phylogenetic study of the *Ephedra distachya* / *E. sinica* complex in Eurasia. *Willdenowia* 41:203-215 (*Featured on the cover*).

Publications by UAMN faculty and students

Peters, J.L., T. Roberts, **K. Winker**, and **K.G. McCracken**. 2012. A genomic transect of non-coding DNA reveals strong deviations from selective neutrality in holarctic gadwalls. *PLoS ONE* 7:e31972

Proue, M., J.M. Hays, **J.T. Rasic**, and J.D. Reuther. 2011. The Hayfield Site: A new look at the 1949 collection. *Alaska Journal of Anthropology* 9:97-114.

R.M. Shelley and **D.S. Sikes**. 2012. Centipedes and Millipeds (Arthropoda: Diplopoda, Chilopoda) from Saba Island, Lesser Antilles, and a consolidation of major references on the myriapod fauna of "Lesser" Caribbean Islands. *Insecta Mundi* 0221:1-9.

Roberts, T.E., H.C. Lanier, E.J. Sargis, and **L.E. Olson**. 2011. Molecular phylogeny of treeshrews (Mammalia: Scandentia) and the timescale of diversification in Southeast Asia. *Molecular Phylogenetics and Evolution* 60:358-372.

Shaw, D. and **K. Winker**. 2011. Spring stopover and refueling in migrant passerines in the Sierra de Los Tuxtlas, Veracruz, Mexico. *Wilson Journal of Ornithology* 123:575-587.

Shirar, S. 2011. Late Holocene chronology of the Noatak and Kobuk Rivers. *Alaska Journal of Anthropology* 9:1-16.

Sikes, D. S., M.L. Draney, and **B. Fleshman**. In press. New records of spiders (Araneae) from the Arctic Long Term Experimental Research (LTER) field station at Toolik Lake, Alaska: Unexpectedly high among-habitat faunal diversity. *Canadian Entomologist*.

Sikes, R.S., W.L. Gannon, and the Animal Care and Use Committee (including **L.E. Olson**). 2011. Guidelines of the American Society of Mammalogists for the use of wild mammals in research. *Journal of Mammalogy* 92:235-253.

Sonsthagen, S.A., S.L. Talbot, K.T. Scribner, and **K.G. McCracken**. 2011. Multilocus phylogeography and population structure of common eiders breeding in North America and Scandinavia. *Journal of Biogeography* 38:1368-1380.

Srivastava, A., **K. Winker**, T.I. Shaw, K.L. Jones, and T.C. Glenn. 2012. Transcriptome analysis of a North American songbird, *Melospiza melodia*. *DNA Research* 19:325-333. doi: 10.1093/dnares/DSS015.

Westergaard K.B., M. Aronsson, L. Gillespie, **S.M. Ickert-Bond**, and H. Väre. 2012. The Arctic Plant Portal. Conservation of Arctic Flora and Fauna (CAFF) Proceeding Series Report No. 8:96-97.

Wilson, R.E., M.D. Eaton, and **K.G. McCracken**. 2012. Plumage and body size differences in Blue-winged Teal and Cinnamon Teal. *Avian Biology Research* 5:107-116.

Wilson, R.E., M.D. Eaton, S.A. Sonsthagen, J.L. Peters, K.P. Johnson, B. Simarra, and **K.G. McCracken**. 2011. Speciation, subspecies divergence, and paraphyly in Cinnamon Teal and Blue-winged Teal. *Condor* 113:747-761.

Winker, K. 2012. [Review of] *Measuring Birds*. *Auk* 129:565-566.

Yurtsev, B.A., **D.F. Murray**, and R. Elven. 2012. *Ranunculus glacialis* subsp. *alaskensis* subsp. nov. (Ranunculaceae), a Beringian race of an otherwise Atlantic species. *Journal of the Botanical Research Institute of Texas* 6:17-24.

Collections Outreach



Part of the museum's mission is to make collections accessible to students, researchers, and the public. As these photos illustrate, curators, collection managers, and other staff spend a large portion of their time with people from outside the museum community.

198
professional
visitors

21,910
contacts with
the public

6,433
specimens
loaned out

422,146
database queries



TOP TO BOTTOM: Bird Curator Kevin Winker (center) explains the importance of the museum's bird collection in tracking worldwide epidemics like the H5N1 avian influenza outbreak. Mammals Collection Manager Aren Gunderson shows Jerry and Teresa Rounds the museum's two-headed caribou calf, a specimen they remember seeing when their family visited the museum in 1962. Mammals Curator Link Olson (center) talks with Dan White, director of UAF's Institute of Northern Engineering, about the museum's genomic resources collection, one of the largest of its kind in the world. Photos by Theresa Bakker



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Development

Chocolate Bash



Thanks to the culinary community in Fairbanks, the museum once again hosted the annual Chocolate Bash. The theme for the 25th Chocolate Bash was *A Medieval Fantasy*, featuring a renaissance faire of decadent desserts along with period entertainment. Participants dressed up in their finest gowns, tunics, and frocks. Chainmail was optional. The museum raised \$9,000 for the endowment fund.

ARTISAN EXPO & SALE



The 2011 Artisan Expo & Sale featured 15 artists working in a variety of media. Friday's *Evening with the Artists* event offered a chance for guests to mingle with the artists and get a first look at the original artworks and displays. On Saturday, admission was free and more than 400 visitors come to browse. The event was proudly supported by the Office of the Vice President for Academic Affairs, University of Alaska. The 2011 Artisan Expo & Sale earned \$7,700 for the museum endowment fund.

Alex Lewandowski displays his jewelry during the 2011 Artisan Expo.

The museum relies on partnerships with local businesses and our donors to operate. Those funding sources make up 70% of our operating budget. Our major donors – The Fairbanks Daily News-Miner, Flint Hills Resources, Totem Ocean-Trailer Express, and Wells Fargo – provide the resources for our outreach programs, including Directed Discovery tours for school-aged children, our Family Days series of events, and family passes at local libraries.



Darren Franz, Northern Alaska District President for Wells Fargo, presents Director Carol Diebel with a check for \$25,000 in support of the museum's military appreciation efforts while UAF Chancellor Brian Rogers looks on.

And finally, it is our members whose support provides the lifeblood for the museum. We offer them admission to the museum and a discount at the Museum Store, along with other benefits. And we hope to continue to grow the program in the years to come.

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The museum's collections have grown through decades of fieldwork and research, careful cultivation and the generosity of people whose passion for science, culture and education leads them to support the museum's mission. We are grateful to our donors for their contributions during FY12.

GIFTS TO EARTH SCIENCES

Robert Blodgett	Invertebrate fossils from Glacier Bay National Park and Chichagof Island
Alan James	Femur of a Quaternary felid
Lynden Transport	In kind support for shipping of the elasmosaur
Ralph New	Quaternary mammal fossils
United Parcel Service (UPS)	In kind support for shipping of the elasmosaur
US Fish and Wildlife Service	In kind air support of fieldwork

GIFTS TO EDUCATION

Jean Strojan	Cultural objects
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GIFTS TO ENTOMOLOGY

A total of 13,640 specimens/lots were donated to the Entomology Department by 26 individuals in FY12.

Patrick Woolery	Pseudoscorpion with eggs, new state record
A. Woodward	Ticks from rabbit
John Hudson	Elmids from Prince of Wales Island, AK
Alberto Pantoja (USDA ARS)	Misc. by catch from USDA ARS sampling
Robert Armstrong	Thrips from Gentian, Juneau, AK
National Park Service	Tick, on loan from NPS accession (KLGO-00537)
Susan Wise-Eagle	Several vials of invertebrates
Dr. Paul Skelly	Several Scarabaeidae specimens
Chris Denker	Semioscopis inornata det. Ferris, from Haines
Dr. G. B. Edwards	Alaskan spiders from the Florida State Collection of Arthropods, collected in the 50s and 60s
Sayde Ridling	Aquatic arthropods collected for BIOL F665 course
Sarah Meierotto	Misc. Alaskan terrestrial arthropods
Ken Zogas	Buprestid sp. donated to the museum because the collection lacked this species
Curtis Knight	Species previously missing from the collection
S. Dasher	Microlepidoptera on the monitoring filters on the roof of the IARC building for identification
Loren Russell	Caurinus decetes from OR
Karen Adams	Swallow bugs indoors on the 8th floor of the Gruening building
Kevin S. Winker	Carabus vietinghoffi from yard
Alberto Pantoja (USDA ARS)	About 13,000 vials most with full data from entomology projects in AK
Susan Hallinan	Carabus vietinghoffi with mites
Jack J. Withrow	Specimens from Kodiak and Chirikof islands, including Lucanid and Lyrosoma

Mark Schultz (USDA FHP)

Beetle specimens that represent new species records for Alaska

Molly Forrest
Charles Simmons

First pseudoscorpion record for Alaska Range
First adult Cuterebra for the museum's collection

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Karen Dillman and USFS	97 vascular specimens from southeast Alaska
DAO	10 vascular plants from the Yukon
Michael Windham and Duke University	16 fern specimens
Peter Lesica and University of Montana	a vascular plant
Stephen Talbot and USFWS	195 vascular plant specimens from the Aleutian Islands
Ron Abbott	55 vascular plant specimens from Colorado

GIFTS TO MAMMALOGY

Gifts to the Mammalogy Department were made by the following agencies:

Alaska Department of Fish and Game (Anna Bryan, Tom Seaton, Thomas McDonough, Kimberlee Beckmen, Travis Booms, Karen Blejwas, Kathy Burek, Harry Reynolds)
National Marine Fisheries Service (Barbara Mahoney)
National Oceanic and Atmospheric Administration (Doug Marsden, Brendan Kelly)
National Parks Service (Jim Lawler, Melanie Flamme)
US Fish and Wildlife Service (Steve Ebbert, Kristin Worman)

And these individuals:

Andy Baltensperger	Jon Martin
Brian Barnes	Kevin May
Kent Bovee	Harry Reynolds
Kyle Campbell	Derek Sikes
Brad Griffith	Ryan Stephens
Karsten Hueffer	Jill Stockbridge
Audry Magoun	Jack Withrow

GIFTS TO ORNITHOLOGY

Christian Dau
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Thank you for **4,134 Hours** of Service to the Museum

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Steve Peek
Mary Wyatt

Ethnology

John Smelter

Fine Arts

JR Ancheta
Alice Bailey
Michael Berrie
Lindsey Kline
Crystal Lor
Kirsten Olson
Kate Sanders
Perrin Teal Sullivan
Ariel Thomasson
Kaitlin Wilson

Herbarium

Al Batten
Heather Havel

Mammalogy

Louise Bishop
Rachel Noriega
Cyrena Parker
Katie Rubin
Magali Vincent
Delaney Vinson
Bennett Wong

Ornithology

Luke DeCicco
Rebecca Dunne
Joey Friclone
Arvia Glass
Steve Heint
Isaac Helmericks
Aurora Hoefflerle
Barbara Logan
Brittany McCraw
Joe Morris
Takae Nakajima
Hayden Nevill
Margaret Oliver
David Sonneborn
Bennett Wong

Volunteer Brenda Sperl Riley runs the "fright" elevator during the museum's 2011 Halloween Open House.

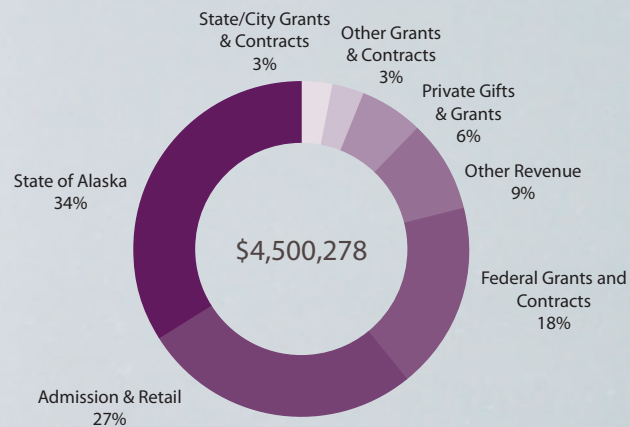


Financial Summary

INCOME

Admission & Retail	\$1,195,774
State of Alaska	\$1,515,942
Federal Grants and Contracts	\$805,339
Private Gifts & Grants	\$283,218
Other Grants & Contracts	\$151,531
State/City Grants & Contracts	\$142,135
Other Revenue	\$406,339
Total income	\$4,500,278

* Note: Revenue from museum memberships, bequests, and other private donations are held and managed by the University of Alaska Foundation and only appear in the museum's financial summary as those funds are transferred to the museum's spending accounts.



EXPENSES

Research	\$554,270
Collections	\$1,469,438
Exhibits & Public Programs	\$723,969
Visitor Services	\$764,634
Administration & Operations	\$938,999
Membership & Development	\$68,633
Total expenses	\$4,519,943



Grants & Contracts Received

July 1, 2011 – June 30, 2012

Alaska Department of Fish and Game

Terrestrial Arthropod Response to Tongass Second-Growth Thinning (Sikes)	\$81,843.26
Systematics of Hoary Marmots YR4 (Olson)	\$76,897.58
Baseline Surveys of Arthropods in Alpine and Subalpine Habitats in SE AK FY10 (Sikes)	\$8,972.65
Alaskan Insect Pollinators: Occurrence Data for an Undersampled Northern Biota (Sikes)	\$6,819.33

Alaska Department of Natural Resources

Archaeological Collections Care for State of Alaska (Rasic)	\$5,000.00
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Bureau of Land Management

BLM-UAM Paleontology Collections Management (Druckenmiller)	\$40,000.00
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University of Alaska Coastal Marine Institute

Arctic Currents: A Year in the Life of the Bowhead Whale; an animated film (Topp)	\$71,257.64
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Defense Finance and Accounting Service

Artifact Curation of Cultural/Archaeological Material Collected by U.S. Army Garrison Fort Wainwright, Alaska (Rasic)	\$19,000.00
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National Film Preservation Foundation

Preservation on Uksuum Cauyai: The Drums of Winter (Kamerling)	\$15,000.00
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National Park Service

Celebrating the Centennial of the First Ascent of Mt. McKinley (Diebel)	\$50,000.00
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National Science Foundation

Testing Species Limits and Phylogeographic Concordance in Madagascar's Endemic Small Mammals/REU Supplement (Olson)	\$282,158.00
Paleoindian Adaptations in Eastern Beringia: Prelude or Postscript to the Early Settlement of the Americas (Rasic)	\$149,807.00
Digitization TCN Collaborative Research: North American Lichens and Bryophytes: Sensitive Indicators of Environmental Quality and Change (Ickert-Bond)	\$64,719.00
Collaborative Research: Towards Documenting Biodiversity Change in Arctic Lichens: Databasing the Principal Collections and Development of Virtual Flora (Ickert-Bond)	\$168,417.00
REU Supplement for NSF-1057426 (Druckenmiller)	\$6,694.00

Collaborative Proposal: Using Ultraconserved Elements (UCEs) as Genomic Markers to Study Shallow Levels of Evolutionary Divergence (Winker)	\$5,980.00
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Purdue University

Native Copper Metallurgy in North America. (Rasic)	\$18,519.00
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Rasmuson Foundation

Rasmuson Foundation/Modular Shelving and Art Racks (Guthrie)	\$100,000
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Technology Advisory Board

UAF Technology Advisory Board Innovative Technology & Education Program: "Renewing the Museum Imaging Lab Infrastructure" (Linn)	\$16,854.00
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USDA Forest Service

Identify/Verify Identification of USDA FS Sitka Pressed Vascular Plant Specimens (Parker)	\$992.00
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U.S. Fish & Wildlife Service

Inventory of Small Mammals on the Alaska Peninsula (Olson)	\$10,000.00
Investigating Dinosaur Fossils on the Alaska Peninsula/Becharof NWR (Druckenmiller)	\$9,980.00

University of New Mexico - subaward

RCN-UBE: Advancing Integration of Museums into Undergraduate Programs (Ickert-Bond)	\$34,979.00
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* This list reflects new grants and contracts awarded during the FY12 fiscal year only. It does not include multi-year grants or contracts awarded in previous years.

BELOW: The terrestrial lichens often found on granitic rocks in the alpine and other high light environments like the Juneau Icefield: *Cladonia bellidiflora* (red tips), *Cladonia cornuta* (slender brown), with fragments of *Cladonia rangiferina* (white with small branches), and *Stereocaulon* in the lower left.





Explore
the North

Tour the
Museum





*Visit us to experience Alaska Native cultures,
natural wonders, and diverse wildlife,
all in one amazing place.*

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phone: 907.474.7505 • email: museum@uaf.edu

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museum.uaf.edu

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