

Extra Credit



UAF photo by Allison Blanchard.



UAF photo by John Wagner.

How well do you know UAF?

Think you know where most of the Fairbanks campus building names originated?

Test your knowledge; answers are on page 5.

1. (Syun-Ichi) Akasofu
 2. (Albert Hulse) Brooks
 3. (John) Butrovich
 4. (Sydney) Chapman
 5. (Carl Ben) Eielson
 6. (Christian T.) Elvey
 7. (Laurence) Irving
 8. (Ernest) Gruening
 9. (Paul) Reichardt
 10. (William R.) Wood Center
- a. Alaska territorial and state legislator for 34 years; speaker of the delegation sent to the White House to persuade President Eisenhower to sign the statehood bill
 - b. Known as the "Arctic Lindbergh"
 - c. Former chemistry professor, dean and provost at UAF
 - d. Graduate of Harvard Medical School who joined the *Boston American* newspaper as a reporter; appointed territorial governor of Alaska by President Franklin D. Roosevelt in 1939
 - e. Professor at the Geophysical Institute from 1951 until 1970; crater near the north pole of the moon named in his honor
 - f. UAF alumnus and professor of geophysics from 1964 to 2007
 - g. President of the University of Alaska from 1960 to 1973
 - h. Founding director of the university's Naval Arctic Research Laboratory in 1948 and of the Institute of Arctic Biology in 1963
 - i. Chief Alaska geologist of the U.S. Geological Survey from 1903 to 1924
 - j. Managing director of the Geophysical Institute from 1952 to 1963 and UAF's first vice president for research and advanced study from 1961 to 1963; he also has a moon crater named in his honor

Learn more about the buildings on the Fairbanks campus at www.uaf.edu/campusmap/buildings/.



AURORA

9,500 B.C.
IN A TIME BEFORE TIME



UNIVERSITY *of* ALASKA FAIRBANKS

Editor's Corner



Some issues of our magazine garner such little response I wonder if anyone is reading it at all. Others, like our spring 2011 issue, get so much that I wish, in my more paranoid moments, that fewer people were.

Reaction to the academic freedom story by LJ Evans was wide and varied. Most readers

were supportive, others questioned some conclusions, still others pointed out minor errors. One such error in fact checking on our end was that we didn't verify the reason for the discontinuation of Rich Seifert's column in the *Fairbanks Daily News-Miner*. The *News-Miner* editor at the time pointed out that the column ran for months after the item about the little girl's demise, and he couldn't recall the exact reason for its cancellation either. We subsequently added this note to the online version of the story: Postpublication we learned that Mr. Seifert's column in the *News-Miner* may not have been canceled as related in the story, but we are unable to verify the actual circumstances.

Lesson learned.

For the spring issue we also sent out a reader survey to a random group of people on our mailing list for whom we have email addresses. Comments ran the gamut from "It tells me interesting and impressive things I otherwise would not have known about the university" (can I kiss that person?) to "I think sending obviously expensive and unsolicited material to alumni is a real disservice to your students and the taxpayers of the state of Alaska. Your relentless whoring to empty the pockets of your graduates makes me ashamed

to be an alum." (Gosh, I have absolutely no response to that.) My personal favorite was in response to the question "What do you like most about *Aurora*?"

"That you've finally started talking about the 'real' things of academia and started to express yourselves as Alaska's premier intellectual institution. Alaska politics have taken a harsh turn to the libertarian/religious right; the cities and towns have a gray patina of grime and indifference; and all of the economic development schemes of the 1970s and 1980s have resulted in a boring sameness whether it's in the villages or urban centers. If you continue to publish such as you have in the spring 2011 issue, you might also inspire many of us expatriate Alaskans to think about 'coming home.'"

Mission accomplished.

Most puzzling was that many readers still insist *Aurora* is primarily a fundraising publication. Now, granted, that's the not-so-hidden intent behind many university magazines, but the main purpose of our magazine is simply to tell good stories. There was only one small reference to an actual gift in the spring issue — a brief about a scholarship gift, comprising just 55 words — so for some of these comments I am left scratching my head, wondering, "What magazine are they reading, exactly?!"

One thing I found very interesting is that adding a little quiz on the back cover caused some people to actually open it, which they said they wouldn't have done otherwise. People like games, I guess.

I always want to know what you, our readers, think about anything we've written. So don't be shy about it. Contact me anytime.

— Kim Davis, *managing editor*

Letters

"Unlimited freedom?," spring 2011

Dear Ms. Evans,

I read your recent article entitled "Academic freedom and the university" that appeared in the most recent issue of *Aurora*. I was with you until page 8 when you used the Project Chariot incident as an example of a failure of academic freedom. Based on the definitions of Dr. Bult-Ito and Provost Henrichs that you provided in your article, I'm not sure it was.

Two words seem to be missing in the provost's caveat: legal and proprietary. I wouldn't think that academic freedom would allow a faculty member to knowingly divulge information that was proprietary or obtained and used illegally. The Atomic Energy Commission contracted with the University of Alaska to conduct bio-environmental studies of Ogotoruk Creek. As the sponsor the AEC owned all intellectual property and retained the right to approve all written or oral disseminations of the information before they occurred. When Bill Pruitt and Les Viereck joined the U of A's field research team they were obliged to fulfill the letter of the contract.

When they believed their information was being misused by the AEC they tried to solve the problem with the U of A, but also began to go public with their concerns. Les Viereck resigned on principle; he wasn't fired. Bill Pruitt produced a final report that contained recommendations that were beyond the scope of his work and refused the editorial suggestions of Brina Kessel. His contract was not renewed.

After losing his position Bill Pruitt filed a grievance with the American Association of University Professors. After reviewing the facts the AAUP committee judged that the U of A acted properly to modify Bill Pruitt's work. AAUP's judgement doesn't seem to support Dr. Chapin's statement that this was "the most flagrant disregard of academic freedom" at U of A.

How do you account for this significant disparity in judgments concerning the same issue? Perhaps it is because life, and incidents such as those surrounding Project Chariot, are more complex than black and white. You have to go back 50 years and put the incident into the tenor of the time. As you wrote, the university of 1958 was sorely limited as regards research funding, and the faculty and administration wanted to land the AEC funding. No question

Volume 4 No. 1
 Published twice a year
 for alumni and friends of the
 University of Alaska Fairbanks

AURORA

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America's Arctic University

www.uaf.edu



Image from the film *Strange and Sacred Noise*.

HEAR THAT? IT'S A STRANGE AND SACRED NOISE

That strange noise you're hearing isn't what you think. It's a film by Leonard Kamerling, curator of film at the UA Museum of the North. *Strange and Sacred Noise* premiered nationally in New York City last February at the music festival Tune-in.

"I am a documentary filmmaker," Kamerling says. "I deal with the narratives of real events, of people living their lives, and I look at stories through that filter. *Strange and Sacred Noise* pushed me far beyond that familiar zone."

It was something new for composer John Luther Adams as well. "I'm not usually a hands-off kind of guy," he says. "In this case I've done my best to stay out of Len's way. He's the filmmaker. My attitude now is one of curiosity about what I might learn and what Len made of that extraordinary night."

Kamerling and Adams had long talked about making a film together, but nothing stuck. Then a musician who had already performed Adams' symphony of the same name in various outdoor locations wondered what it would be like to return to an Alaska setting, the source of the glaciers, rivers and mountains that inspired the piece. This time Kamerling, who is also a professor of English with the College of Liberal Arts, sensed a story. So the crew trucked musical instruments, recording equipment and camping gear to one of Adams' favorite camping spots in the Alaska Range.

The performance transpired through an Alaska night in June 2008. As the sun dips below the mountains, bathing the lake and tundra in a supernatural glow, Kamerling shows the audience different perspectives of the environment, from expansive mountain vistas to miniature elements like the small white flowers that flourish on the tundra.

"To experience it there was moving," he says. "It was like setting an animal free in its environment."

Kamerling used the composer's on-camera narration as a balance between the live performances and location footage. With that addition, the film became an exploration of Adams' artistic process as well as a record of the performance.

Adams says he took his symphony outdoors — from the desert of California to the woods of New England, a meadow in Ohio and finally the tundra of the Alaska Range — in a spirit of exploration.

"The experience was humbling and transformative for me. Outdoors some things that sounded so powerful, even frightening in the concert hall, simply blew away in the wind. But at other moments, I began to hear a magical dialogue between the music of my composition and the music of the places in which we performed it."

The film *Strange and Sacred Noise* will premiere at the Davis Concert Hall Sept. 24.



Find out about the film's UAF premiere at www.uaf.edu/museum/calendar/.

Rolling out the green carpet

Three students were recognized for their efforts to encourage campus sustainability with the first Green Carpet Awards in April. The awards recognize leadership in advancing sustainability on campus.

Heather Currey, a biology major, chaired the student sustainability board and was president of the Sustainable Campus Task Force. She helped organize campus sustainability events like the Earth Day Fair, the campus bike fest and the Sustainable Living Conference. She also volunteers at green community events such as clean-up days and the Interior Alaska Green Star recycling event.

Ryan Good, '11, served as the recycling director for ASUAF. As a member of the Sustainable Campus Task Force, he helped organize the Earth Day Fair and obtained funding to purchase energy efficiency devices for campus vending machines.

Jessie Huff is a senior working toward an interdisciplinary bachelor's degree in renewable energy in rural Alaska. She helped with many sustainability projects, including a proposal for the campus' first large-scale solar project. One of Huff's grants is to determine the greenhouse gas emissions for the Fairbanks campus, which will in turn be used to plan future emissions reductions. A second grant will be used to create an



Wearing a dress made of plastic grocery bags, Heather Currey sits on a bench made of recycled plastics during Earth Day activities at Lola Tilly Commons.

energy dashboard for 20 campus buildings — a computerized, real-time energy-usage device so viewers can track exactly how much energy is being consumed at any given time.

Also in April, UAF kicked off its Green Bike program, which allows students to rent bikes free. A student bike shop is operated through Outdoor Adventures, and workshops are offered throughout the year on bike and sustainability topics.

Project Ummid: Better lives, one cow at a time

By Sitara Chauhan, '11

Project Ummid (Hindi for “hope”) was created in spring 2009, after fellow student Michael Schulte and I learned about microfinance, where small loans are awarded to some of the world's poorest people, allowing them to improve their lives and escape poverty. As members of the School of Management's student organization Students in Free Enterprise, we had the resources to put our idea into action.

That summer we traveled to Jamsuth, a village on the west coast of India, with our goal to help impoverished women earn a living. The challenge was that most women in Jamsuth are illiterate, working on family farms and taking care of children. Their situation gave us the idea of co-operative microfinance. Our model consists of lending money to a woman to buy a cow; she then rents her cow to

a local agricultural-based business, Salvi Estates. This way, the women have a minimum financial investment, and expenses such as the care of the animals and milk production are covered by Salvi Estates.

In the last two years, SIFE has raised a total of \$8,200 for this project and has changed the lives of 10 women. Project Ummid has helped increase the women's income 65 percent, helping them afford better nutrition and provide an education for their children.

Sitara Chauhan graduated in May 2011 with a BS in biochemistry, Michael Schulte with a BA in political science.



Photo by Michael Schulte.



Comment on any of these stories at www.uaf.edu/aurora/.

TRACING TRIASSIC IN THE TONGASS

Sometimes finding a fossil is as easy as a walk on the beach. That's what happened in May when a member of a geological team working in Southeast Alaska chanced upon a find during an extremely low tide.

Something caught team member Eugene Primaky's eye. "I instantly thought 'fish' and brushed it with my boot to make sure it wasn't a branch."

The fish turned out to be a fossil of a prehistoric marine reptile called a thalattosaur. It may be the most complete fossil of its kind found in North America.

Tongass National Forest geologist Jim Baichtal immediately sent photos to UA Museum of the North earth sciences curator Patrick Druckenmiller.

"Then we went through the process of eliminating what it could be," Druckenmiller said. "We know the rocks are about 220 million years old. Based on the age of the rocks and what I could see in the picture, I was 99 percent sure that's what it was."

Thalattosaurs are rare, prehistoric marine reptiles. They range in length from between three and ten feet and have long, flattened tails and paddle-like limbs. Some have

downturned snouts, like modern lizards. They evolved from land-dwellers and became extinct at the end of the Triassic Period.

Druckenmiller and his museum colleague, Kevin May, traveled to the site in mid-June to collect the specimen from an outcrop near Kake. The location lies in the intertidal zone, so the fossil would only be exposed

during extreme low tides. That meant they needed to excavate during a two-day window and would only have four hours each day, when the tide was at its lowest, to retrieve the fossil. If they missed their chance, the outcrop wouldn't be exposed again until October.



Eugene Primaky, Jim Baichtal and Patrick Druckenmiller at the site of the thalattosaur find. Photo by Kevin May.



Read the rest of the story by Theresa Bakker at www.uafnews.com/headlines/low-tide-reveals-rare-marine-reptile-fossil-find/.



Photo by Patrick Druckenmiller.

Accreditation visit in October

Evaluators from the Northwest Commission on Colleges and Universities will visit Fairbanks Oct. 3 – 5 to review UAF and make recommendations concerning reaffirmation of its institutional accreditation. Accreditation is the process through which the quality of an institution's programs is evaluated and areas for improvement are identified. Accreditation qualifies UAF and its students for federal funds for teaching, research and student financial aid.

The site visit is the culmination of a self-evaluation process of all aspects of UAF's programs and processes. For more than two years, teams from UAF have assessed its academic, research and public service units to determine if it is meeting the standards set by the NWCCU and fulfilling its mission. The mission encompasses these themes: educate, discover, prepare, connect and engage.

The site visit team will summarize its findings after visiting the Fairbanks campus and a community campus.

 For more information on UAF's accreditation process, visit www.uaf.edu/accreditation/.

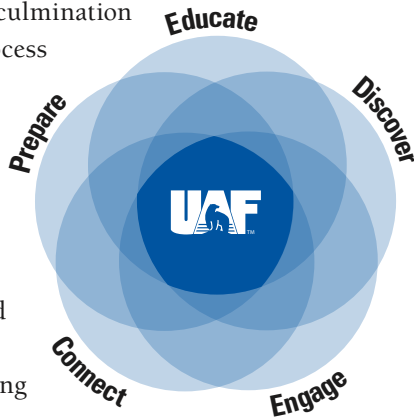


Photo courtesy of Morris Palter.

Practicing percussion from Fairbanks to Sweden


In March 2011, members of Ensemble 64.8 (the UAF percussion lab) went to Sweden to perform at the Percussion Repertoire Festival held at the Institution for Music and Media of Luleå Technical University in Luleå. The festival attracted percussionists from across Europe and North America. During the weeklong festival, the group participated in five concerts and performed a grand finale concert at the Kroumata Theater in Stockholm. Ensemble director Morris Palter also gave a master class on memorization techniques for solo, multiple-percussion performance.

Ensemble 64.8 was invited to perform at the festival by famed Swedish percussionist Anders Åstrand, director of Ensemble Evolution. He and his group will perform at UAF with Ensemble 64.8 in November.

Quote/unquote

“Please don't flush your laundry down the toilet. [It's] not going to come out cleaner.”

— Bill Cox, Facilities Services maintenance superintendent, in response to the mysterious sock flushing episodes in the Fine Arts Complex last winter and spring, *The Sun Star*, April 22, 2011, www.uafsunstar.com/?p=4532

 Comment on any of these stories at www.uaf.edu/aurora/.

“The earthquake, which measured 9.2 on the Richter scale, and the tsunami waves that followed, impacted every marine community in Prince William Sound.”

— Arny Blanchard, research assistant professor, Institute of Marine Science, on the 1964 Alaska earthquake and its effects on marine life, *UPI.com*, April 25, 2011 www.upi.com/Science_News/2011/04/25/Quakes-effect-on-sea-life-lasts-decades/UPI-84741303773007/

“I didn't get a sense from anybody that it's something that was completely under control or ever will be.”

— David Fazzino, assistant professor of anthropology, in an interview about his visit to Chernobyl 25 years after the worst nuclear accident in history, *Fairbanks Daily News-Miner*, April 25, 2011 http://newsminer.com/view/full_story/12924725/article-University-of-Alaska-Fairbanks-professor-visits-Chernobyl-site/

Answers to building quiz on back cover

1-f; 2-i; 3-a; 4-e; 5-b; 6-j; 7-h; 8-d; 9-c; 10-g

ATHLETICS

New coach for men's b-ball

Mick Durham is the new head coach for the Alaska Nanook men's basketball program. He takes over as the 12th head coach in program history, replacing Clemon Johnson, who coached the Nanooks for the past four seasons.

Durham has spent the past three seasons as an assistant men's basketball coach at New Mexico State University in Las Cruces. Before that he served for 16 years as the head coach at Montana State University, part of the Big Sky Conference. He left in 2006 with the second-most victories and second-longest coaching tenure in Golden Bobcat school history.



ALASKA NANOOKS volleyball schedule 2011

August

Alaska-Hawai'i Challenge

26 @Hawaii-Hilo, Honolulu, Hawaii
 @Chaminade, Honolulu, Hawaii

27 @Hawaii Pacific, Kaneohe, Hawaii
 @BYU-Hawaii, Laie, Hawaii

September

1 Minnesota State

Flint Hills Resources Nanook Classic Tournament

2 Dallas Baptist

3 Minnesota State
 Grand Canyon

8 Saint Martin's

10 Western Oregon

17 Alaska Anchorage

22 @Western Washington, Bellingham, Wash.

24 @Simon Fraser, Burnaby, BC

29 Montana State Billings

October

1 Seattle Pacific

6 @Northwest Nazarene, Nampa, Idaho

8 @Central Washington, Ellensburg, Wash.

15 @Alaska Anchorage

20 Simon Fraser

22 Western Washington

27 @Seattle Pacific, Seattle, Wash.

29 @Montana State Billings, Billings, Mont.

November

3 Central Washington

5 Northwest Nazarene

10 @Western Oregon, Monmouth, Ore.

12 @Saint Martin's, Lacey, Wash.

(Away games in italics. Tournament games in blue.)



For more details, visit www.alaskanook.com.

PHILANTHROPY

Endowment means more for future engineers

Student engineers will soon have better lab facilities and more research opportunities because of the \$500,000 ConocoPhillips UAF Engineering Endowment, which will augment engineering labs, and increase academic support services and undergraduate research opportunities.



“Our company is investing in UAF’s engineering programs to create the workforce our state will need in the future,” says Trond-Erik Johansen, president of ConocoPhillips Alaska. “We hope that funding these programs will encourage students to stay in Alaska, work in Alaska, and bring their skills, technology and innovation to the state.”



Under construction

It was a busy summer on the Fairbanks campus, with construction beginning on the new greenhouse next to the Arctic Health Research Building and on the Life Sciences Facility near the museum. Groundbreakings for both occurred last spring. The Life Sciences Facility is the first new building constructed on the Fairbanks campus since the state-owned virology lab opened in 2009. Watch the building take shape at <http://facilities.alaska.edu/uaf/sitecam/view.htm>.

Community campus construction projects included Kuskokwim Campus’ Alaska Native health research clinic renovation; Chukchi Campus’ expansion for a flight simulator room and classroom; and Bristol Bay Campus’ addition for a science lab and research space.

Did you know?

... Judge James Wickersham, who conceived the idea of establishing the Alaska Agricultural College and School of Mines, later UAF, and who served 14 years as Alaska’s territorial delegate to Congress, never made it past the eighth grade. (Courtesy of *The Cornerstone on College Hill*, by Terrence Cole, '76, '78)


CAMPUS BRIEFS

THE NATIONAL WEATHER SERVICE MARKED ITS 100TH ANNIVERSARY of weather observation at the Fairbanks Experiment Farm this past summer. The farm is the oldest continuous weather observation site in Alaska.

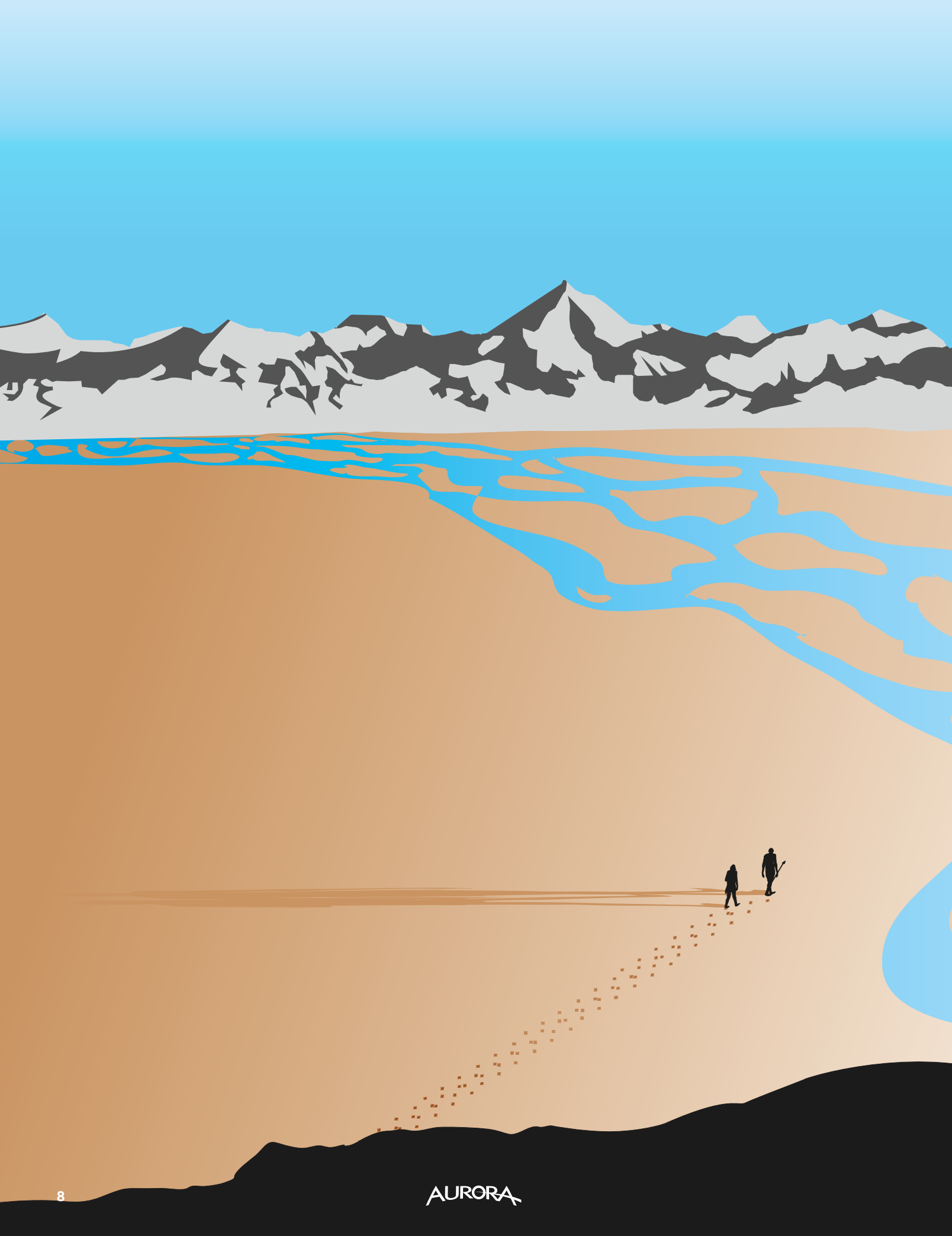
UA PRESS HAS 32 TITLES AVAILABLE AS E-BOOKS through the Amazon Kindle Store, including *Fighting for the Forty-Ninth Star*: C.W. Snedden and *the Crusade for Alaska Statehood*, by Terrence Cole, '76, '78.

OCEAN SURGING IN THE FRONT DOOR, FIRE RAGING IN THE BACK? A new website helps Alaskans plan their communities’ future in the face of climate change.

THE FRONTIER SCIENTISTS WEBSITE gives those curious about arctic discoveries a direct link to Alaska scientists and their work.

 <http://seagrant.uaf.edu/map/climate/>

 www.frontierscientists.com



9,500 B.C.

IN A TIME BEFORE TIME

Story by Ned Rozell, illustrations by Phil Raymond

I wake in early morning to the woofs of a great horned owl. No, two of them, in the hollow to the south. Silhouetted in branches 20 feet away, with those concave eye sockets, they can probably sense my whiskers scratching the sleeping bag's nylon as I turn to look. I imagine talons reaching for my scalp, but the owls don't mistake a synthetic orange grub for snowshoe hare.

A few hours later, over coffee in his cabin, I tell Dave about the encounter. He appreciates hearing, and telling, a good wildlife story. My 84-year-old friend remarks on my choice of resting spot, about five feet away from what resembles an open grave with a fading pillow of snow inside.

"People have been using that spot for a long time," he says.

The moss on which I had slept was my second choice; the flattest piece of ground is unavailable, as archaeologists have there troweled a perfect rectangle, three feet deep. Near Dave's cabin and at his invite, the scientists found sharp chips of rock, the debris of men who sat here thousands of years ago, working tools made of the only material they could find that could pierce a bison's hide.

Dave's cabin sits on a rise that most people would not recognize as an ancient sand dune. To the untrained eye — a pair of which belongs to most of us — these central Alaska hills are pleasant mounds of poplar and aspen, where sage crushes sweetly underfoot. Many of the dunes are on south-facing slopes, the heat of which keeps the mosquitoes away; they are as appealing to humans today as they were thousands of years ago.

On one of these bumps not far from here, back when this fading winter was first hardening the landscape, archaeologists made the startling discovery of the bones of a 3-year-old child who took his or her last breath 11,500 years ago. The child's bones endured because the toddler's parents deserted the house site shortly after. I picture the mother and father collapsing their



skin-covered shelter and covering it with loess, the brown flour soil that explodes like baby powder at a footstep. Perhaps taking one last tear-blurred look at the pile, the nomads abandon the site and move on.

The find was remarkable not because it told researchers people had been here — stone tools thousands of years older have turned up in Alaska — but because no one, in more than a century of searching, had found human remains that old on the Alaska side of the land bridge. Bones, though the most enduring of our parts, don't preserve well, and — unlike blades made of stone — they are food for bugs, bears and everything in between.

Sitting on Dave's dune, with a view of Quartz Lake and with Mount Hayes shouldering into the blue sky, I wonder what it might have been like to live at the time those heartbroken parents turned their summer home into a funeral pyre.

It might have smelled like this. The sage releasing these clean peppermint vapors was here then. Clinging to sun-baked slopes, this species is one of a few survivors of the time when the broad swath of grasslands known as the land bridge was not yet cleaved by the rising sea. The last great ice age had almost warmed away, and the ice load on the landscape was not much different than it is now. Mount Hayes was still Mount Hayes, its white pyramid a landmark for all who chased food across central Alaska.

But the Interior was so different then. A moldering log cabin from the 1920s seems like ancient history to me, so it's not easy to envision a landscape from 9,500 B.C., even though scientists have pulled up pollen grains from ancient trees in lake mud and have found other revealing artifacts, like the toddler's bones.

To imagine what this place was then, I have to first accept that I would be sleeping nowhere close to this latitude today without my grocery-store milk, coffee and matches. Nor the refined fuel

oil from California and fiberglass insulation from Michigan and the trucks and barges and cargo ships and planes that bring it all to me. Today, stripped down to stone microblades I insert into my self-made spears, wearing whatever skins I could wrap around myself, I would not last long. In almost five decades of life, I have managed OK without developing the skills to find my food. Others have grown it or killed it for me, packaged it, shipped it and created bags so I could carry it home. Even if I did possess those abilities, I doubt the boreal forest could provide enough calories during the winter, when protein flies south and fat slumbers beneath the snow.

But things were a bit different in the time that baby lived and died. Though it was still cold, *Homo sapiens* was a different creature then, our senses sharp, instincts honed, deformities cut from the gene pool long before they could be passed on. The fit

were tuned to the whistle of a ground squirrel, the moan of river ice, the crazy chuckle of ptarmigan.

Eleven thousand years ago, from Dave's Interior Alaska cabin, I would not have been looking out on a shallow lake ringed with twisted spruce. The spruce trees and the red squirrels and fires and lean times they ushered in wouldn't be here for a few thousand years.

Instead, grasslands spread as far as I can see toward the mountains. Aspen and cottonwoods spill along the floodplain of the Tanana River, which quenches the thirst of elk, caribou and bison. As they do now, meaty birds set their wings to land in the wetlands like Shaw Creek Flats, where they feast on the northern insect boom that ignites their own explosion.

The fish would be here, too. Bones found 12 feet below the muskeg today show there were plenty of salmon, and plenty

No one, in more than a century
of searching, had found human remains
that old on the Alaska side
of the land bridge.



of wood and fire and a means to keep the salmon from rotting for a while.

An archaeologist called those years a “hunter’s paradise,” a term that isn’t often applied at this latitude. Home would be a circular frame of bent saplings covered with skins, with a fire pit in the middle that is the focal point for a small family. Homesites would be seasonal — follow the food — summers on the bluffs, winters in the river valley where the wind does not blow so hard, or maybe a fall journey through the mountains to a saltwater cove far away, where the incoming tide sets the table twice a day. Moving would be the way, and that’s what we mammals, from bunny to bowhead, were born to do.

Living in the days of the dunes must have been a thrill. Learning to sneak up on an elk, snagging two geese in one net, advancing to strangle them. Trying to avoid sharp beaks in a world without bandages. Smelling the change of season, the musk of highbush cranberry. Hearing the throttled call of cranes, which once again stirs that desire to move. Maybe, one summer, moving farther south along the coast than ever before. Never returning north. Taking a chance on the unknown and finding new riches of sustenance, and warmth. Repeating this for enough generations. Peopling the Americas.

The squeak of a cabin door brings me back to Dave’s bluff. Last summer, I visited archaeologists at Broken Mammoth, a site just a few miles from here and a short leap from the Richardson Highway. One archaeologist was wrapping up 20 years of field schools at the site. He had found a needle made of bone and many stone points, one of which he let me hold in my hand. It was triangular, sharp, and priceless in its day, in contrast to a time when whalers in a northern village can purchase tips for their harpoons at the local NAPA auto parts store. At Broken Mammoth, amid the sunshine and the sage, the researcher pointed across the Tanana River to where Ben Potter, his colleague and rival, had recently discovered the 11,500-year-old bones. The

researcher I was interviewing knew of the discovery, but kept a vow of silence to Potter.


“Look over there to those hills,” he said. “You’ll be hearing about something there later this year.”

So the world did. The oldest bones ever found in this part of the subarctic, and — even more exciting to some — the evidence of a home. Not just a camp where hunters honed their weapons and spotted elk, but a place of women and children and men, at least for the richness of summer.

On Dave’s boreal dune, I look around the hills and wonder what other discoveries might be under my foot, or beneath Dave’s cabin. One needs only a reason to look for them (they found the ancient child during a survey for the potential extension of a railroad line) to discover that others have been here before. And they always have. It’s just a matter of how deep you dig.



Ned Rozell, '90, is a science writer at UAF's Geophysical Institute. He claims to have grown smarter since his last Aurora article appeared, in fall 2010.

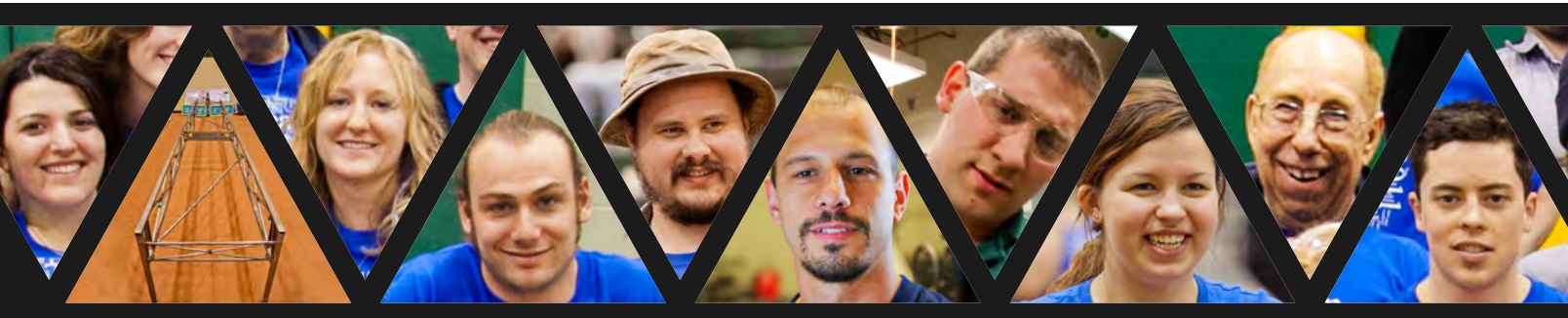


*To be able to build what we design —
that makes us first-class engineers.*

— Pauline Fusco

Team co-captain Jennifer Holland welds part of the framework for this year's steel bridge effort in preparation for the regional competition. The photos on the following pages reflect the anxiety, euphoria and teamwork the students experienced while dominating the regional competition at the University of Alaska Anchorage in April.

BRIDGE to ANYWHERE



Story by LJ Evans, photos by Todd Paris

Regionally speaking, the UAF team was tops at the 2011 Student Steel Bridge Competition. Students from the College of Engineering and Mines won first place overall and in five of six individual categories: efficiency, stiffness, economy, lightness and construction speed.

Each year, students design and build a scale model steel bridge that meets that year's specifications. They must strictly adhere to a set of complicated rules in the bridge's design and assembly. The teams are then judged on how quickly, efficiently and well they build their bridge model during the competition, as well as on the design, strength and aesthetics of the structure.

After proving themselves best in the Pacific Northwest in April, the team moved on to Texas for the national competition in May, where they competed against 48 other teams and won first place in the economy category and seventh place overall.

Team members were Nicholas Brehm, Gordon Dufseth, Pauline Fusco, Jennifer Holland, Jeromy Jones, Louis Landry-Michaud, Aaron Simpson, Greg Smith, Aubrey Swallows, Julien Tessier-Lessard, Stephanie Young and Jason Zottola. Professor Leroy Hulsey and Adjunct Professor Wilhelm Muench were the team advisors. The annual competition is sponsored by the American Society of Civil Engineers and the American Institute of Steel Construction.





Won nationals

1993

2nd

1995

Won regionals
4th at nationals



My biggest surprise at UAF was that the students actually build all the parts of the bridge themselves, working with power tools in the shop.

— Louis Landry-Michaud, exchange student, Quebec

I suddenly understood what they're talking about in steel design class. It was all real to me in a way it never had been before.

— Jennifer Holland, team co-captain

All the team members were so focused that at regionals, when Jeromy dropped a bolt, Julien caught it in midair. For us these things all happened in slow motion when in reality they were split seconds.

— Stephanie Young, team co-captain

I step back, I let them decide. I want them to be accountable. They need to call this theirs, not mine.

— J. Leroy Hulsey, team advisor

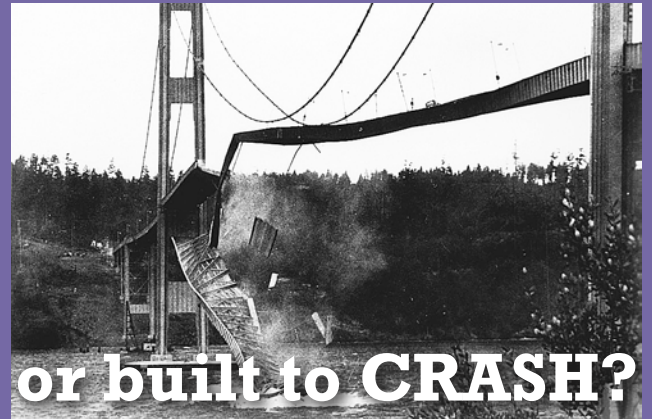




at nationals	Won regionals 6th at nationals	Won regionals 7th at nationals
1996	2003	2005
Won regionals 6th at nationals		Won regionals 8th at nationals
	2008	2011



Built to LAST



or built to CRASH?

One of the most spectacular bridge failures of the 20th century was the 1940 collapse of the 5,939-foot-long Tacoma Narrows Bridge, in Washington state, just four months after its ribbon-cutting ceremony.

The bridge used a new design concept, intended to be flexible and less expensive than previous suspension bridges. But it was nicknamed Galloping Gertie almost immediately because of the rolling, corkscrewing motion the bridge developed in response to winds. Motorists driving across the central span reported feeling like they were on a roller coaster. Though the undulation was unexpected and unusual, officials still thought the bridge was safe.

They were wrong. On Nov. 7, winds in the Tacoma Narrows Gorge rose to 42 miles per hour. The bridge began to oscillate more and more violently until finally it broke apart. People were lucky that day, and no one was injured. The only fatality was a dog named Tubby, who refused to get out of the car when his owner had to abandon it; the car eventually fell into the waters below.

It's hard to identify spectacular bridge successes because usually the well-designed and well-built bridge just quietly stands there, doing what it's supposed to. California's magnitude 7 Loma Prieta earthquake of Oct. 17, 1989, offers an example by comparing what happened to the Golden Gate Bridge vs. the Oakland Bay Bridge, both of which were completed in 1936. Though separated by only a few miles, the upper deck of the Bay Bridge collapsed, killing one, while the Golden Gate Bridge suffered no observable damage.

Each time an earthquake tumbles a bridge — or doesn't — engineers analyze what happened and why. Sound science and solid construction are what get you safely to the other side.

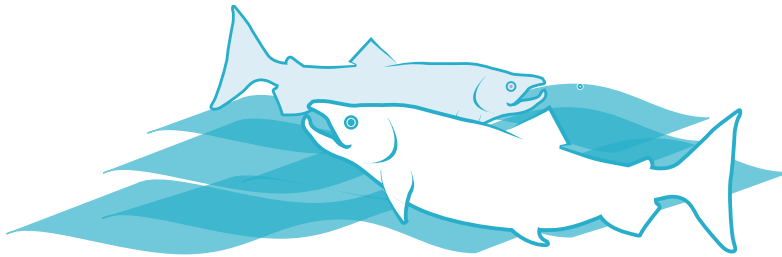


For more information and links to other bridge stories, visit www.uaf.edu/aurora/.



Like a fish to water

By Amanda Meyer



• Rachel DeWilde thinks of her time at Bishop Mountain, her
• family's fish camp on the Yukon River, as "before" and "now."
• "Before" means catching, cleaning and putting away about 50
• salmon a day. "Now" means a mere 20 – 30 a day.
• "Now" also means DeWilde is at UAF learning about fish
• genetics so someday she can go back to Bishop Mountain and
• find out the reasons for salmon declines.
• "Bishop Mountain is fundamental to who I am," she says.
• "There's a freedom, wildness and culture about fish camp. It
• would be devastating to think what will happen if subsistence
• fishing goes away. I wonder, what will happen to rural culture?"
• DeWilde was 14 when she first heard about the salmon run
• decrease. It took a while for stories to travel from the older
• people to the younger. Watching the salmon get smaller and
• less abundant made her worry for the future of her generation
• of Native people, but she didn't have the tools to help. She didn't
• even know there were tools she could use.

To find the right answers, you have to ask the right questions

She found her toolbox — maybe her tackle box — at UAF, where she is in her second year. It was RAHI II and her interest in fish that brought her here. She works in Andres Lopez's fish genetics lab, and is contemplating a graduate degree so she can go back to Bishop Mountain to look for answers to the salmon decline.

At 14, DeWilde had volunteered at Tanana Chiefs Conference, an Interior Alaska Native nonprofit corporation, to collect salmon samples at Bishop Mountain. She later worked for the Alaska Department of Fish and Game, clipping scales and taking measurements before the salmon were gutted and cut.

"I saw scientific changes for the first time," the 19-year old Athabascan says. "My interest snowballed from there."

During summer 2009, after her junior year in high school, DeWilde took a RAHI II course in genetics and molecular biology through the Rural Alaska Honors Institute. Hosted by UAF, regular RAHI helps rural and Alaska Native students prepare for college through six-week courses in language and math. RAHI II students, like DeWilde, focus on science, and study molecular biology in research labs.

DeWilde saw Lopez's fish lab for the first time during her RAHI II summer. Lopez is an assistant professor at the School of Fisheries and Ocean Sciences and curator of fishes for the UA Museum of the North. He and graduate student Mac Campbell are investigating the genetics of the Alaska blackfish, an understudied fish species.

Under Campbell's guidance, DeWilde became familiar with the lab techniques related to fish genetics. She learned to use a micropipettor (micro-PIE-petter), a laboratory tool that can transfer very small amounts of liquid samples, such as blackfish DNA, to other containers. She then uses these blackfish DNA samples in a polymerase chain reaction and subsequent gel electrophoresis. Translation: DeWilde creates millions of copies of DNA, puts those samples on a gel and uses electricity to separate the different fragment sizes for further study. [See sidebar].

When DeWilde returned to UAF as a college freshman, a year after RAHI, Lopez hired her to work in the lab under an Alaska INBRE work internship, an opportunity open to RAHI II alumni to get more lab experience during their first or second year in college. "It was great, fantastic. I couldn't have gotten my job in the lab without it," DeWilde says, referring to RAHI II.



Blackfish as surrogate salmon

Under Campbell's watchful eye and patient tutelage, DeWilde has grown to love researching Alaska blackfish genetics. Though she spends her time on blackfish rather than the salmon that first got her interested in science, DeWilde sees only benefits.

"I have an amazing opportunity to develop myself as a geneticist," she says, "and I'm blessed to be studying a great species with a great mentor."

DeWilde would rather be in a lab than a class. Seeing a picture of pipetting won't help you understand until you pick one up. DeWilde handles the purple micropipettor with ease, deftly dropping her samples into the wells of the polyacrylamide gel she's running for Alaska blackfish DNA.

"You should throw someone in a lab, even if it's over their heads," DeWilde says. "They'll learn faster and gain invaluable information."

She began applying for, and receiving, her own research grants, capitalizing on the funding to work on microsatellites and genetics.

“You should throw someone in a lab, even if it’s over their heads. They’ll learn faster and gain invaluable information.”

She has also taken advantage of opportunities to see another side of science. In 2009, she went to Washington, D.C., to present her RAHI II research at the National Institute of Diabetes and Digestive and Kidney Diseases. In March 2011 she returned to D.C. and impressed attendees of a National Institutes of Health meeting with her professionalism, personality and knowledge. According to Arthur Hussey, program administrator for Alaska INBRE, “She wowed them.”

“It was really cool to see the other side of science,” DeWilde says. “There are lots of people fighting for funding so we can do what we love. Seeing this side of things was really important to understanding my career, and makes me appreciate the opportunities for research even more. It’s nice to make connections and know who’s funding me.”

She hopes to translate her undergraduate experience working with blackfish to studying the population genetics of Alaska salmon, either through graduate work or in a job right after her bachelor’s degree. Then maybe she can go back to Bishop Mountain to figure out what’s happening to the Yukon’s salmon, and help preserve the rural culture she loves.



Amanda Meyer is program coordinator for Alaska BioPREP at UAF. She is a transplant from Florida and has found more fun outside in the Alaska Interior than she ever had in the clubs of Miami. Meyer hopes to start an interdisciplinary doctoral degree program at UAF in 2011.

This article was made possible by Science Education Partnership Award Number 5R25RR024282-02 from the National Center for Research Resources, a component of the National Institutes of Health. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of NCRR or NIH.

And now a word from our sponsors

Science research takes a lot of work from a lot of people in a lot of disciplines. It also costs a lot of money. Here are some of the programs that make Rachel DeWilde’s work possible:

Alaska BioPREP, a research lab training program, which funds RAHI II

Alaska EPSCoR, a National Science Foundation-funded program to improve Alaska’s research capacity

Alaska INBRE, a National Institute of Health-funded infrastructure-building and research support program

National Institutes of Health: Science Education Partnership Award, which funds Alaska BioPREP

UAF Center for Research Services



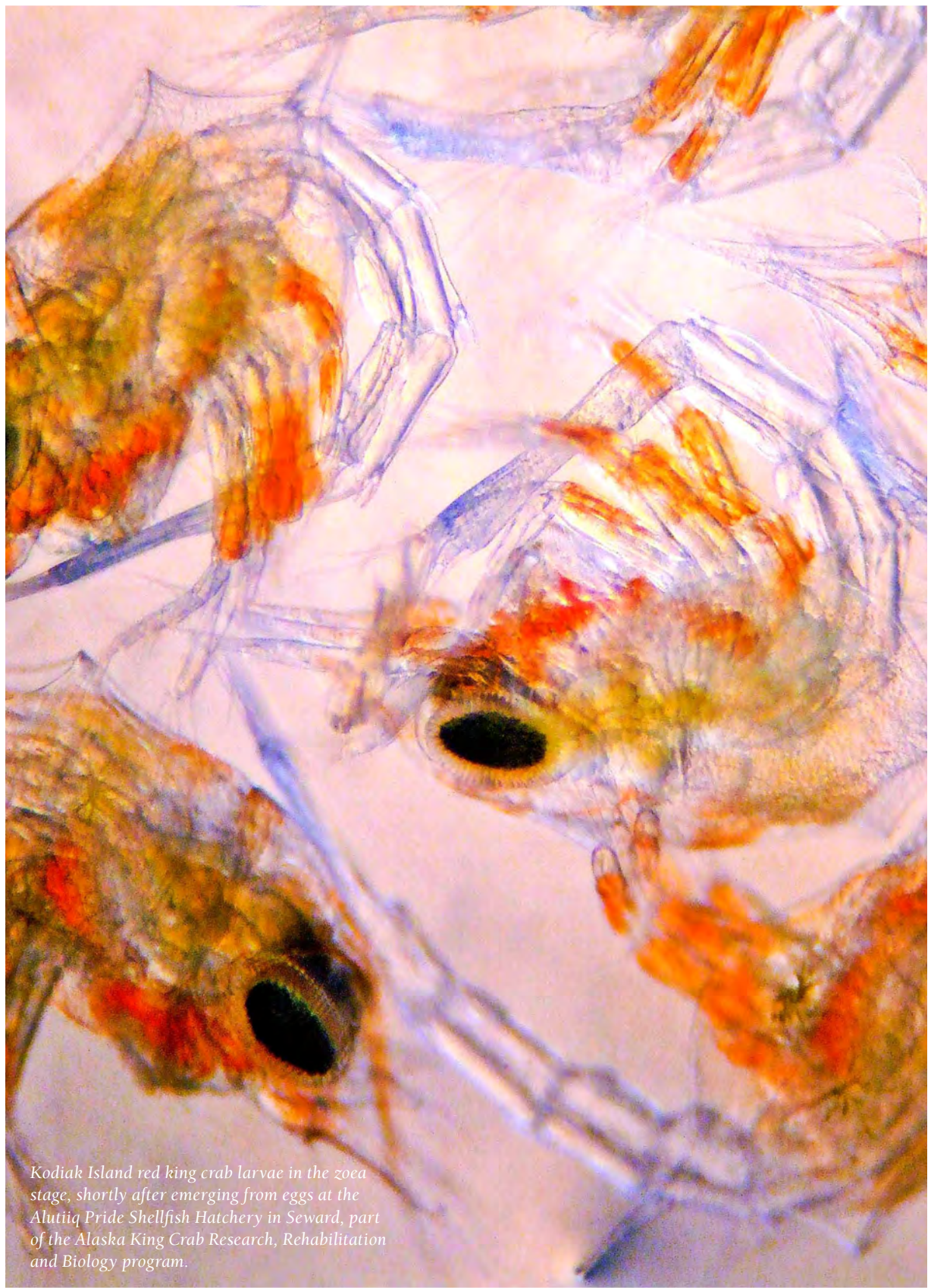
DeWilde’s research

Microsatellites refer to repeating base pairs in the noncoding region of DNA. They are used as molecular markers in genetics, and can help determine relatedness in population studies. They may also be used to study gene duplication or deletion. DeWilde is developing microsatellites using 454 sequencing, a new technology wherein DNA is cut into small fragments. A machine identifies microsatellites on the genome and the area around it, and sends the researcher a file. From this smaller-scale analysis of genetic variation, DeWilde developed 40 primers she will be comparing to the larger population.

As DeWilde puts it, “I’m using a tetranucleotide microsatellite I developed, which is a four base pair repeat. It’s really cool because most are only two base pairs.”

Right.

Still, it’s pretty impressive language from someone who admits she could barely get through a research paper when she started in RAHI II.



Kodiak Island red king crab larvae in the zoea stage, shortly after emerging from eggs at the Alutiiq Pride Shellfish Hatchery in Seward, part of the Alaska King Crab Research, Rehabilitation and Biology program.

Photo courtesy of Celeste Lenoux, Alaska Sea Grant

Trying to get A Crab in every pot

Can crab hatcheries save an industry?

By Doug Schneider

Inside the Alutiiq Pride Shellfish Hatchery on the south end of the fishing and tourism town of Seward, thousands of recently hatched red and blue king crab are starting to actually look like crab.

Just four weeks earlier, these king crab were embryos within eggs tucked neatly beneath their mothers' abdominal flap. The mothers — 20 red king crab from Bristol Bay, 20 red king crab from Southeast Alaska waters, and 19 blue king crab from the Bering Sea around St. Matthew Island — had been collected by local fishermen and the Alaska Department of Fish and Game, and delivered to the hatchery a few months earlier.

The newborn crab have so far grown through the major steps of larval development, collectively called the zoea stage. At the moment, they are well into the next stage, called glaucothoe, when they take on features common to all crab. They brandish tiny claws on their front legs. Large, beady black eyes sit atop their heads. In a few more weeks, these crab will have armored shells and be instantly recognized as Alaska's biggest crab.

"They start out small," says biologist Jim Swingle, a crab research biologist with Alaska Sea Grant. "It's amazing to see them develop."

For each of the past five years, Swingle and fellow Sea Grant biologist and UAF graduate student Ben Daly have carefully cared for and watched over the adult female king crab and the growth of their numerous offspring.

The efforts are part of a UAF partnership with fishermen and trade associations, coastal communities, and state and federal scientists to figure out how to hatch and raise large numbers of king crab from wild brood stock. The project will also teach scientists more about the ecology and biology of wild crab, and how hatchery crab might fare if they are released.

"Overall, the research is aimed at learning whether raising red and blue king crab in hatcheries is feasible as a means to help dwindling wild king crab stocks recover in places like Kodiak Island and the Pribilof Islands," says David Christie, director of Alaska Sea Grant.

King crab boom, then bust

For decades, Alaska crab fishermen from Southeast to the Bering Sea happily rode what seemed to be a tidal wave of king crab.

Take the waters around Kodiak Island, some 300 miles southwest of Anchorage. Beginning in the late 1950s, Alaska crabbers hauled in seemingly bottomless boatloads of red king crab. At the peak of the fishery in 1965, fishermen caught 94 million pounds of the colossal crustacean, valued then at \$12.2 million. At today's price paid to fishermen, the value would be \$500 million.

In Bristol Bay, fishermen in 1980 hauled in 130 million pounds of red king crab, worth \$115 million. (That's \$650 million for fishermen in today's dollars.)

They hunted blue king crab as well. At the peak in 1981, fishermen in the frigid Bering Sea around the Pribilof Islands and St. Matthew Island filled their boats with 14 million pounds of blue king crab.

But the boom was not to last. Following that gigantic Kodiak haul in 1965, red king crab catches there declined rapidly over the next decade. In 1983, after a few years of harvests in the 20-million-pound range, fisheries managers finally shut it down. The closure was a huge economic blow to the island's economy. And even though king crab fishing has been closed for more than 30 years, the stock has not recovered.



UAF photo by Ben Daly, Alaska Sea Grant.

About the size of a pea, red king crab in glaucothoe stage take on features common to all crab.

UAF alumni in this story: Ben Daly, '07; Jim Swingle, '82

Around the Pribilof Islands, blue king crab have not fared well either. After years of erratic catches, the blue king crab fishery closed in 1999. Officially, the blues there are classified as overfished.

A similar fate befell red king crab in Southeast Alaska, where commercial fishing has been closed for the last five years.

About the only place in the United States where large numbers of red king crab can still be caught is in the eastern Bering Sea, near Bristol Bay, where some 50 – 70 boats, including the boats seen on the show *The Deadliest Catch*, still ply their trade. But even here, catches of around 15 million pounds each year are nowhere near what they used to be.

Grassroots call spurs research

In the years following the collapse, fishermen called for a hatchery program to rebuild king crab stocks around Kodiak and the Pribilof Islands, in much the same way that hatcheries were used in Prince William Sound to restore salmon stocks following the 1964 Good Friday earthquake, which destroyed important salmon spawning habitat. In 1992, Kodiak residents convened a workshop on their island's crab crash and what might be done to help the stocks recover.

But no research effort came until the idea was brought up again in 2006 during conversations among Arni Thomson (Alaska Crab Coalition), Heather McCarty (Central Bering Sea Fishermen's Association) and Gale Vick (Gulf of Alaska Coastal Communities Coalition).

"We were all talking and I asked . . . about the possibilities of enhancing the wild king crab stocks. Arni arranged for us to meet with several scientists," says Vick. "From there, it picked up steam with the communities and other fishermen's groups. The beginnings were truly grassroots."

The group asked UAF's Alaska Sea Grant College Program to examine the hatchery idea. In 2006, Alaska Sea Grant hosted a workshop to discuss the status of red and blue king crab and the prospect for hatcheries to help rebuild the stocks.

Former Alaska Sea Grant Director Brian Allee recalls the mood of the people in the workshop.

"The consensus was that enough time had passed, that nature needed a little help," says Allee, who now works for the National Oceanic and Atmospheric Administration, helping rebuild salmon stocks in the Pacific Northwest. "The fishing industry wanted a research and development program to test the feasibility of hatcheries as a way to rebuild the crab stocks."

Taking cues from this meeting, Alaska Sea Grant pulled together university and federal biologists, fishermen, community leaders, and the Alutiiq Pride Shellfish Hatchery to form the Alaska King Crab Research, Rehabilitation and Biology — or AKCRRAB — program.

Slow start, then rapid progress on hatchery research

Hatchery research began in earnest in 2007, thanks to fishermen who gave scientists 36 adult female king crab whose abdominal flaps were stuffed with eggs.

"The exact number of eggs varies with the species and size of the female crab, but it is usually between 150,000 and 200,000 eggs for each red king crab, and fewer for the blues we have this year," says Alaska Sea Grant's Swingle.

Scientists monitored the expectant female crab, making sure water temperatures, salinity, flow rates and other factors in the hatchery's seawater tanks were just right.

Then, around the end of March and early April, the larvae began to wiggle free from their eggs. In all, some four million red and blue king crab larvae hatched that first year.

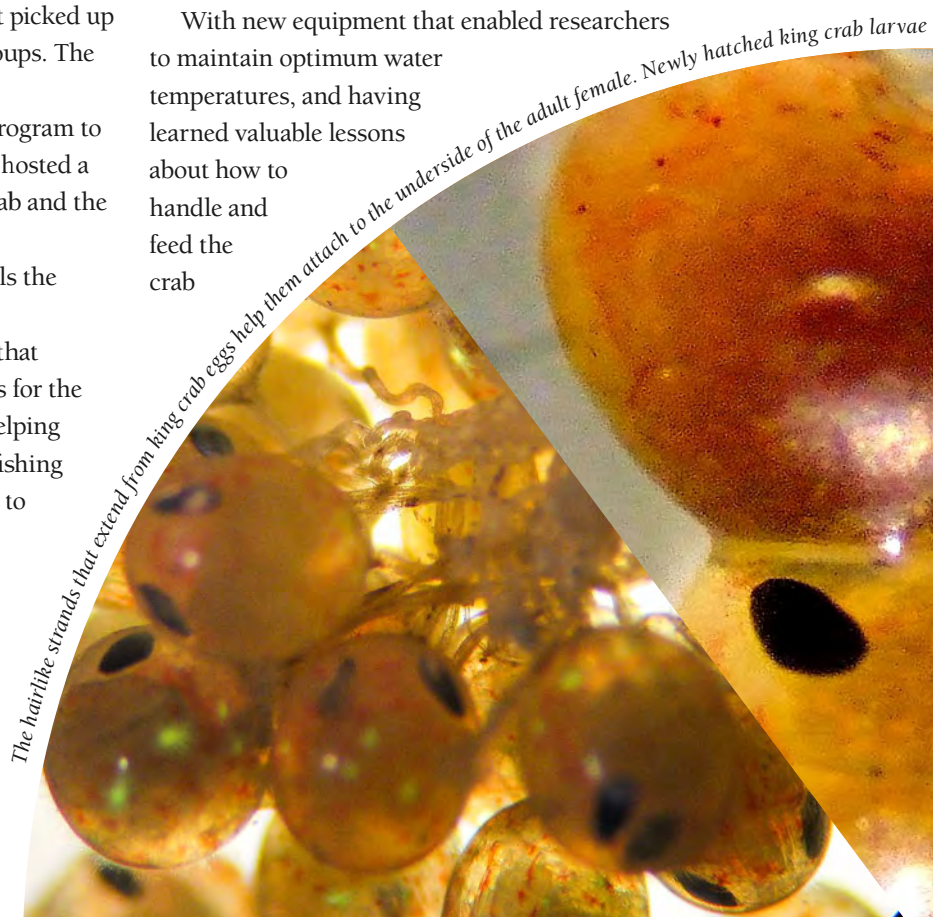
No one had tried this

"Getting the hatch completed was great, but at that time, we didn't know that much about how to take care of the larvae — what they ate, the exact combination of water temperature, light, food and other critical needs," recalls Allee. "We were learning as we went along."

The early problems resulted in the loss of nearly all the larvae that first year. Although a setback, no one had expected a flawless first year.

"No one had tried this before with Alaska crab," says Allee. "We learned a lot and we made adjustments."

With new equipment that enabled researchers to maintain optimum water temperatures, and having learned valuable lessons about how to handle and feed the crab



larvae, researchers made steady progress during the following years.

In 2008, 31 percent of larvae reached the glaucothoe stage. Of these, 10 percent survived to the first juvenile stage — the animal has fully formed legs, shell, mouth and internal organs, and has settled out of the water column to the bottom of the tank. Most importantly, the crab look like crab, albeit miniature ones.

“In 2009 and 2010, our methods allowed us to increase glaucothoe survival to 50 percent, and juvenile survival to 20 percent,” says grad student Daly. “In all, some 100,000 crab reached the juvenile stage in each of these years. We consider that to be reasonably good, but there is always room to improve.”

While Daly and Swingle continue to perfect techniques for hatching and raising red and blue king crab in the Seward

Association, the Aleutian Pribilof Islands Community Development Association and the Groundfish Forum, all based in Alaska, and Santa Monica Seafood, one of the largest West Coast seafood distribution companies.

Causes of the collapse

To understand what caused the collapse of red king crab, it's important to understand what caused the population explosion, says Gordon Kruse, professor of fisheries at the School of Fisheries and Ocean Sciences.

Kruse says that although no one knew it at the time, environmental events during the late 1950s set the stage for a crab population boom. Hundreds of feet below the surface of the North Pacific and the Bering Sea, millions of female red king crab were hatching billions of larvae. The ocean during this time was unusually cold — a good thing for crab — full of food and largely empty of predators.

“In almost every way, the Kodiak and Bering Sea ecosystems were a haven for king crab production during the 1950s,” says Kruse. He says that Alaska's red king crab bonanza couldn't have come at a more perfect time for fishermen.

“Just as fishermen were learning where to find red king crab, how to catch them and how to process them, they ran into the mother lode of red king crab,” Kruse says.

The fishermen proved fast learners, quickly reshaping their towns to catch, process and deliver millions of pounds of king crab to markets all over the world. For the next 20 years, the number of fishermen joining the frenzy increased, and for a time, so did the catch.

Signs of a collapse began to appear in the late 1960s, just a few years following the peak in 1965. At least one state biologist at the time warned of a crash, but few with the power to do something seemed to be listening. By 1983, with red king crab all but gone from waters around Kodiak Island, it was over.

In broad terms, says Kruse, the crash came from overfishing and a management system that simply didn't have a thorough understanding of the stocks or the variability of the ocean environment.

“Huge numbers of crab led to too many boats taking part in the fishery,” says Kruse. “The resultant large harvests and king crab bycatch in other fisheries caused high mortality among undersize crab. The overfishing led to the rapid decline in the number of adult males and that led to long-term reproduction failure.”

If overfishing and inadequate management caused the collapse, what's keeping the stocks from recovering on their own? In a word, nature.

Kruse explains that around the mid-1970s, the North Pacific became warmer, triggering massive

before with Alaska crab.

hatchery, UAF scientists and graduate students in Seward and Juneau, and federal researchers in Kodiak and Newport, Ore., are studying the roles of habitat, water conditions, crab body size, prey density, and predator density and types on the survival of juvenile crab in the wild. There are lab experiments at the Hatfield Marine Science Center in Oregon and in the Kodiak fisheries lab run by NOAA, and small-scale field experiments near Juneau.

And while state and federal grants have paid for most of the research to date, there is growing interest from industry in supporting the program.

Donations come from organizations like the Bering Sea Fisheries Research Foundation, the Central Bering Sea Fishermen's



zooplankton blooms that helped halibut, cod, and pollock stocks skyrocket and move into new areas, particularly inshore areas used as nurseries for young king crab. On top of this, the warmer waters helped cod and other fish reproduce rapidly. Such ocean conditions continue to dominate the North Pacific and Bering Sea.

“We think it is likely that there is a whole suite of fish species that chomp down on young king crab and adult crab, and we think this may be what is keeping king crab stocks from recovering,” says Kruse. “Unfortunately, studies of predation on king crab in these shallow nursery areas are woefully lacking.”

But Kruse offered another possible explanation for the lack of recovery.

“It’s conceivable that with limited numbers of crab out there, they are experiencing reproduction problems,” says Kruse.

Put another way, male and female crab aren’t reproducing as much because they simply cannot find each other. Moreover, Kruse says the few remaining adult crab are farther out at sea, greatly reducing the chances that the few crab larvae produced will find their way into safer nursery areas near shore.

Should hatcheries be used to rebuild crab stocks?

AKCRRAB scientists stress that any program to seed Alaska waters with millions of juvenile king crab is still years away. “Hatchery scientists need to improve the production techniques to produce the very large numbers of crab that would be needed to enhance the low wild populations,” explains Christie, Alaska Sea Grant’s director.

He says continued research is needed to understand when, where and how best to release hatchery crab. Also underway is research into the genetics and distribution of wild crab stocks to ensure that any breeding program will not adversely affect the viability of wild stocks.

And while a large-scale hatchery program is not yet in the picture, scientists hope to begin small pilot programs to release some hatchery crab to see how they behave in the wild — assuming they survive.

Are hatcheries likely to be successful?

Like many Kodiak and Pribilof fishermen yearning for the good old days of big red and blue king crab harvests, Gordon Kruse thinks the hatchery research program is probably a good idea. But he is concerned that hatcheries might not be enough to jump-start king crab recovery.

High on the list of Kruse’s concerns is that ocean conditions today still largely favor halibut, flounder, cod and other fish that prey on crab. Such conditions are likely to continue, at least in the short term, according to James Overland, a leading oceanographer with NOAA’s Pacific Marine Environmental Lab, in Seattle.

“I would say do not look for big changes in the years to come, as compared to the changes we have seen the last few decades,” Overland says. “Global processes in the Gulf of Alaska will probably warm the region around 1.5 degrees by the year 2050, but you can also get that big a shift in any given year.”

If current ocean conditions persist, would an abundance of predators simply see the juvenile hatchery crab as a new source of easy food?

“If predation is the bottleneck, as our results thus far suggest, then a remedial hatchery program may have a difficult time rebuilding the stocks,” says Kruse. “However, if we are mistaking predation mortality for some reproductive failure, then if sufficient crab are seeded from hatcheries to help the wild stock reach some critical mass, maybe the crab will have a chance. It’s an open question.”



Doug Schneider is the science writer and information officer with the Alaska Sea Grant College Program at the UAF School of Fisheries and Ocean Sciences.



To learn more about the Alaska King Crab Research, Rehabilitation and Biology program, please visit http://seagrant.uaf.edu/research/projects/initiatives/king_crab/general/.

This study was made possible by:

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Alumni expertise ... sort of

Nanook illustrations by Jenn Baker, '03

College can't teach us everything. Ever wonder about what quirky things your fellow alumni know how to do? When we asked some of you about your experiences outside the classroom, the results were pretty hilarious. Here are some practical, and some not-so-practical, tips for life.

If you have a "how-to" you'd like to share, send it to aurora@uaf.edu and we'll publish it in a future issue.

How to be a spelling bee champion

By Simon Kinneen, '99

The life of a spelling bee champion certainly has its ups and downs, and I wouldn't recommend it for everyone.

Dictionaries (aka "study guides") have gotten lighter in the digital age so I'm sure that's helpful, but with the advent of spell check my usefulness to friends has diminished significantly. However, if you still yearn for the thrill of backing down would-be aggressors in darkened alleys with powerful statements like, "Hey, man, you'd better watch it; I was the 1986 Alaska state spelling bee champion," read on.

I don't actually recall ever having picked up a dictionary as a study guide, but I did definitely spend some time with the practice booklet that was available. Mom was a huge help in the studying (and genetics) process, and it didn't hurt that my main competitor was my twin brother.

I became eligible to participate in the Nome spelling bee in third grade, but decided in that infinite third-grade wisdom that playing outside was more productive. I won the fourth-grade

event, though, and came in somewhere in the 30s in the state competition that year. My brother won the fifth-grade event (a dark period in my life I prefer not to discuss), and then I reclaimed the hugely competitive Nome title again the next year. The state bee (as we on the inside call it) went well, with words like *machinator* and *stuccoed* not able to thwart my dreams of fame on the nation's stage. I went on to the national event in Washington, D.C., and made it a few rounds there, eventually falling to the word *kabuki* (although not before playing some mind games with fellow competitors by tripping on my way up the stairs to the stage in order to make them lose their focus — a strategy employed, but never quite reproduced, by many since).

I've since come to terms with my premature exit from the national scene; losing on a Japanese word made me question the justice of the system for many years, but there were definitely



more talented spellers there than me so I think it all sorted out in the end. I never went back to the national event, but the fond memories endure. It was a great experience that I'm glad to be able to relive in this writing.

I also, with great satisfaction, would point out to my friends that both *machinator* and *stuccoed* were questioned by spell check as valid words in the writing of this document — so I've still got it! I'm sure I'll be hearing from you soon ...

Simon Kinneen is the chief operations officer for the Norton Sound Economic Development Corp. He lives in Nome.

How (not) to deliver a baby at 8,000 feet

By Jillian Swope, '97

It doesn't matter if you're flying into the Bush or to the bottom of the Grand Canyon, there are finite rules when flying air medical transports.

Rule number one? Don't puke on the pilot. Most medevac pilots chunder when chundered upon, which makes for a rather unpleasant decontamination scenario after landing.

Rule number two? Placenta is not allowed in the helicopter. Aside from decon considerations, placenta in the whirlybird means at some point you've had to catch a baby. Trust me, newborn kidlets can be slippery, especially at altitude with turbulence.



I've had the opportunity to catch quite a few newborns since I first started flying medevacs my senior year at UAF. Now that I work as a critical care flight nurse and maternal team leader for high-risk obstetrical transports, I

catch them more often. But even with all the high-tech gadgets and good drugs that we carry in the back of the birdie, I'm still a big fan of the no-placenta policy.

Earlier this year we received a flight request for a woman in precipitous labor at a small clinic in rural Arizona. Mama's cervix was fully dilated and she was pushing when we landed, which meant baby was ready to say howdy. The only

problem was the kidlet was eight weeks premature, stuck sideways in the uterus and showing signs of fetal distress, which necessitated an emergency cesarean section.

We scooped mom into the helo and started the 18-minute dash to the nearest operating room, but halfway through the flight, mom shouted that she thought something "just popped out!" Uh-oh.

Our pilot made an emergency landing, which happened to be in the middle of a sheep field. A Navajo cowboy looked up quizzically as our Bell 407 dropped suddenly out of the sky into the middle of his flock.

He soon started laughing as I raced awkwardly around piles of sheep plop in full gown, gloves and helmet to the other side of the aircraft. Flight can be a dirty job, but someone's got to do it.

Luckily there was no baby yet, so we continued to the hospital and performed a "hot" offload with rotors turning. Eight minutes after landing, our kidlet made her grand entrance into the world.

Mama said later she was going to name her daughter "Alaska" after the experience. "That's cool," I said, a little embarrassed by the honor. "Just make sure when she grows up, she cheers for the Nanooks."

Jillian Swope is a lifetime alumni association member. She and her husband, Jack Fletcher, '96, '98, currently live in Colorado.

How to bake a shoofly pie

By Jenn Baker, '03

Late November at my house is the time not for pumpkin pie but for shoofly pie. I

make it every Thanksgiving, and every year I have a hard time coming up with a description for the uninitiated besides, "Uh, it's kind of like molasses pie." A better description is that shoofly pie is a traditional Pennsylvania Dutch recipe and comes in two varieties: "wet bottom" and "dry bottom." Wet bottom is the more common version, with a dense, gooey layer on the



bottom and a lighter, coffee-cake-like layer on top. The origin of the pie's name is debatable, but the cooling molasses may have attracted flies that needed "shooing" away.

I like to make this pie in the winter. At a time of year when fresh fruit pie ingredients are hard to come by, shoofly pie is a great way to use up those pantry staples. No exotic ingredients here! This is a pie that keeps well and can be served any time of day, though I recommend a slice at brunch paired with coffee or black tea.

I used the following recipe for the blue-ribbon-winning shoofly pie at the 2010 Tanana Valley State Fair:

www.absoluterecipes.com/desserts-rec/shoo-fly-pie.html.



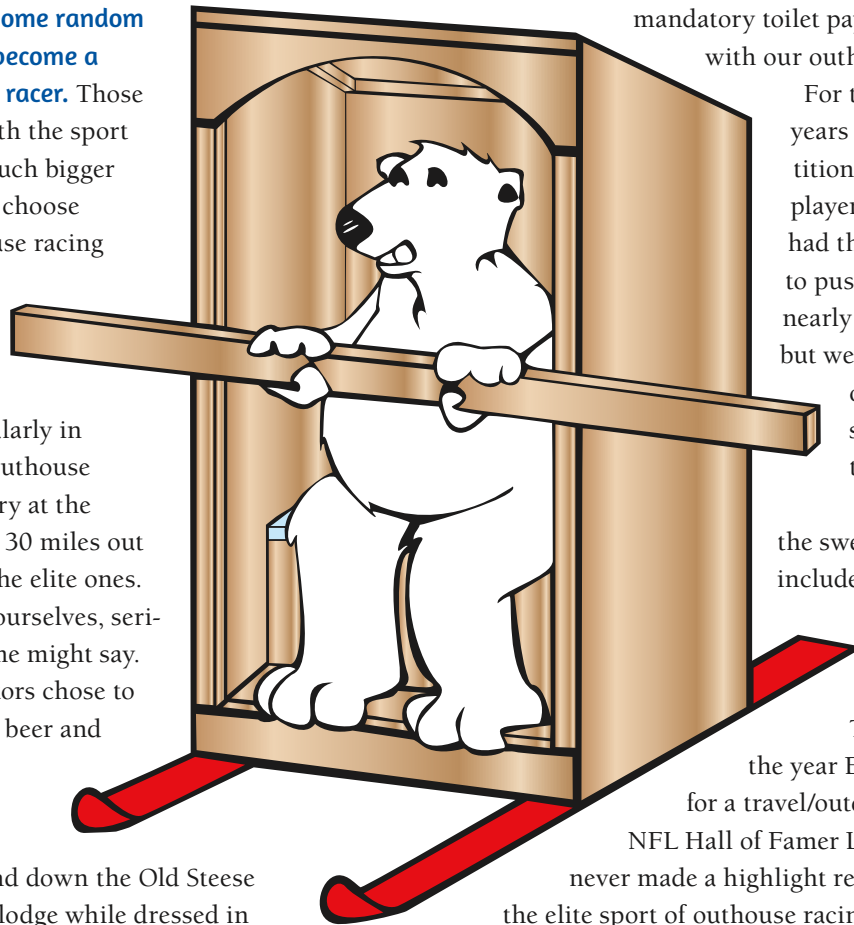
How to win an outhouse race

By Scott McCrea, '94

One does not wake up some random morning and decide to become a championship outhouse racer. Those passionately familiar with the sport know that it is much, much bigger than that. One does not choose outhouse racing; outhouse racing chooses you.

In the late 1990s there was a team of runners I belonged to that participated regularly in the annual Chatanika Outhouse Race, held every February at the Chatanika Lodge, about 30 miles out of Fairbanks. We were the elite ones. We took the sport, and ourselves, seriously. Too seriously, some might say.

While other competitors chose to lounge around drinking beer and smoking cigarettes, we treated the event as if it were the Midnight Sun Run, doing strides up and down the Old Steese Highway in front of the lodge while dressed in form-fitting running tights. We drank Gatorade and ate bananas. We waxed the skis on our outhouse. We debated the merits of one-ply versus two-ply for the



mandatory toilet paper we had to include with our outhouse.

For the three consecutive years we won, the main competition was a team of local rugby players. They were good. They had the upper-body strength to push the outhouse over the nearly one-mile race course, but we were able to stay ahead of them because of our speed and finely tuned technique.

And oh heavenly father, the sweet thrill of victory. Prizes included coats, trophies, cash and free beer — a case for each member of the team.

The highlight for us was the year ESPN II filmed the event for a travel/outdoor show hosted by NFL Hall of Famer Larry Csonka. Though we never made a highlight reel for *SportsCenter*, it gave the elite sport of outhouse racing 15 minutes of well-deserved fame.

I have not competed in outhouse racing for several years now, having stepped aside to let the next generation pursue its dreams.

But I yearn for the competition. This usually happens when I watch a sporting event of similar scope, such as the Super Bowl or the World Series. With that yearning comes memories.

The wind rushing in my face.

The roar of the crowd.

The challenge to keep going.

And, more importantly, the fear that the roll of toilet paper will fall out of the outhouse and my team will be disqualified.

I remember.

And dream.

Scott McCrea won the Chatanika Outhouse Race three years in a row, from 1999 – 2001.

Filling:

1 cup boiling water
 ½ cup dark molasses
 ½ cup light corn syrup
 1 large egg, lightly beaten
 1½ teaspoons baking soda

Crumb topping:

1½ cups flour
 ¼ cup butter
 3 tablespoons sugar
 3 tablespoons brown sugar
 ¼ teaspoon cinnamon
 ⅛ teaspoon cloves

1 unbaked 9-inch pie shell in a well-greased pie plate

Thoroughly combine boiling water, molasses, corn syrup, egg and baking soda. Let stand about 15 minutes. Preheat oven to 350 degrees. In a medium bowl, combine next 6 ingredients and stir with fork until crumbly. Stir half the crumbs into molasses mixture. Spoon into pie shell. Cover with remaining crumbs. Bake 45 to 50 minutes. Serve warm or let cool to room temperature.

Jenn Baker, who did the illustrations for this story, is a pie-baking enthusiast in Fairbanks. Read about her pie-baking adventures at <http://jennalpha.wordpress.com>.

How I became an ice carver

By Ron Tavernier, '97, '07

When I look back at my time at UAF I will always remember one of my unique experiences — participating as an ice carver in the World Ice Art Championships. I am a scientist, not an artist. My students mock my daily attempts at diagrams and drawings that are more akin to cave scratchings than anatomical illustrations. But I do have one hidden artistic ability that I discovered through ice carving: I can cut straight lines with very large chainsaws.

Looking back at it all, I originally got into ice carving for the food. I was a cabin-dwelling graduate student when I got the call from the big leagues. Actually, it was a call from a strange man who identified himself as Klaus. He had gotten my phone number from my parents whom he met in a coffee shop in northern New York, where they live. They had overheard he was travelling to Fairbanks, so like all good parents they had handed out my number to a complete stranger. Klaus had called because one of his multiblock teammates had gotten ill and was unable to compete. He needed someone and the only qualifications were a strong back and the ability to follow orders. I hesitated, but when he mentioned that all the meals were free, I was in.

Even after seven years of carving in competitions and a handful of bronze medals I still consider myself more of an “ice enabler.” Klaus was a retired art teacher and he had a design in mind. My job was to use the 5-foot

chain saw and my muscles to make it happen. The first day on site I was hesitant. Growing up I had never been allowed to touch the saw. I was the chop-and-stack guy when it came to firewood, and here I was carrying a saw that was almost as long as I was tall.

The first thing I noticed when we reached the site was the size of the ice blocks. They sat on the ground looking like cubes Godzilla might use in a mixed drink. Klaus had laid out my first cuts of the day. I was to cut 2-foot-wide slices off the 5-foot-deep blocks. This I could do. After assuring my other two teammates I had it covered, I attempted to fire up the saw. It was a stubborn attempt that lasted 10 minutes before I asked for assistance.

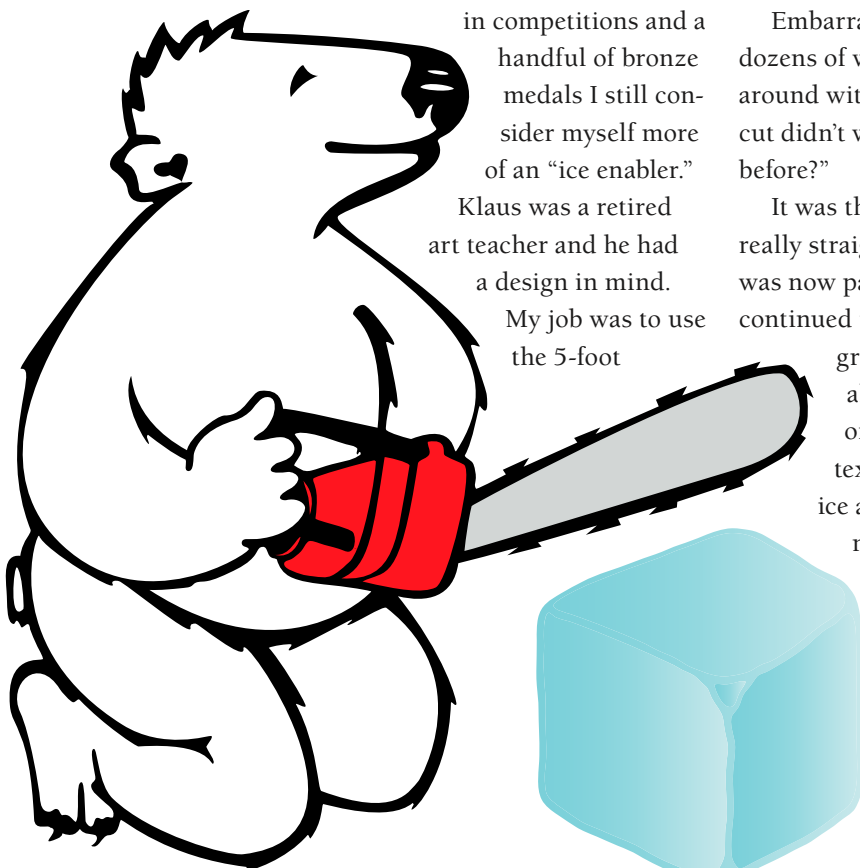
As the saw kicked to life and I hefted it I suddenly realized what I was holding: a spinning implement of death and dismemberment. I laid the saw into the block and starting cutting. Ice chips and water covered my wool pants and instantly froze in the minus 20-degree air. I slowly worked my way through the block, amazed at the fact I could see clearly all the way through it.

As I lifted the saw and prepared for the next cut I heard Klaus boom, “STOP!”

Embarrassed, I lowered the saw and waited to hear the dozens of ways I had messed up. Instead my team gathered around with looks of awe on their face. “Perfect.” “Look, his cut didn’t wander at all. It’s square.” “Have you done this before?”

It was then that I discovered my hidden ability to cut really straight lines with big saws. Apparently, it is difficult. I was now part of the team. As my graduate career progressed I continued to carve every year with Klaus, and our friendship grew. Under his tutelage my artistic ability with ice also grew by leaps and bounds. I learned the tools of the trade and how to use them to create different textures and effects. I learned to look at a block of ice and see the sculpture hidden within it. If it were not for my choice to attend UAF, I would have missed this once-in-a-lifetime opportunity. After all, it isn’t every science professor who can also brag that he is a world-class ice carver.

Ron Tavernier lives and plays in the woods of northern New York with his wife, Sharon (Nagel), '97, '09, and their children Elyse (7) and Isaac (5).



How to audition for a play

By Leslie O'Connor, '02, '03

In order to audition for a play, whether on Broadway or in community theater, you must be an extrovert. A real one. No phonies here. If you were a ham as a child and hoarded most of the attention or you were the boss of your siblings, then I am talking about YOU.

Do you have a family you love, are you a workaholic or are you very busy? Then acting in a play may not be the ideal endeavor. Whether you get the lead or are a nonspeaking henchman, plays eat up your time like a fire-breathing dragon. Rehearsals are brutal. You sit around either waiting for your turn or you are on stage. Bring something to eat and read to all rehearsals.

Have you done enough self-examination to know if you play well with others? Nothing is worse than having a jerk or a prima donna on set. It will kill the fun, and believe me, bad karma is something you do not want following you around. Someone will remember you in the future and clue in the director. The last thing you want is a rep for being difficult. We would all prefer it if you just don't audition.

Did you really read that audition notice? It said 60ish, balding man. Or maybe it said this was a Shakespearean period piece. If you cannot do the accent or at least learn it, or if you don't resemble the characters in the least, Just Don't Do It! You could show up and hang around in the back. If no one shows with those qualities, the director may change the characters, but usually directors are looking for a certain type. Don't be disappointed if you don't get the part because

you have a full head of hair and are an 18-year-old female.

If at all possible, find the script and prepare for the audition by finding a monologue your desired character says in the play. Also try to read the play ahead of time. This will really impress the director. I have never been

to an audition where we did not do readings from the script. Please, oh please, do not show up and perform the monologue from *Gone with the Wind*. The director will not pick you on principle alone!

During the auditions, listen to directions. Even though you are not performing, you are being watched and judged by the director and his or her staff. If you cannot follow directions, cannot really whisper and are a distraction, you can bet you will not get the part.

The final and most difficult thing is waiting to hear if you got a part. I cannot offer any advice on this topic. I can tell you what not to do. Do not bug the theater or the director or, guess what ... you will not get the part. Guaranteed!

Leslie O'Connor is a travel enthusiast living and working in Fort Yukon. You can read about her latest adventure at www.leslieoconnor.tk.



How to interview your hero

By Gwen Blackburn, '96

It was 1996 when a Civil Rights icon walked through the halls of the KTVF studios. Rosa Parks was actually in Fairbanks, Alaska, my hometown. And, I would have the honor of interviewing her. However, I was still seeing Mrs. Parks through the pages of a history book.

She had a few appearances to make before I would actually get to interview her. I was at every one of those appearances, studying her movements and mannerisms. She greeted everyone with a big smile and seemed surprised at the warm welcome she received.

So, finally I got my chance to come face to face with Mrs. Parks. I was nervous at first, but because she was so well



known, the first few questions were easy for me to ask. Then it dawned on me: I was a part of her ongoing historic journey. This young black journalist was sitting in FRONT of a television camera interviewing the black woman who set the Civil Rights movement in motion by not sitting at the BACK of a bus. However, when you hear her talk about her journey, the words *civil rights* transform into *human rights*. Her experience blends issues divided by the color of one's skin.

It's easy interviewing your heroes when you know your future is embedded in their past.

Gwen Blackburn is a producer for Your News Now in Austin, Texas. See excerpts from her interview with Rosa Parks at www.youtube.com/user/GwendolynBlackburn/.

1960s

Syun-Ichi Akasofu, '61, was awarded the 2011 Hannes Alfvén Medal by the European Geosciences Union for innovative achievements in the area of aurora borealis.



Photo courtesy of IARC.

1970s

Brenda Hewitt, '73, is the special assistant to the commissioner for the State of Alaska Department of Transportation and Public Facilities.

1980s

Michael Travis, '80, '86, won a national and a state award for his memoir *Meloz: A Teen's Summer Job Lands Him in the Alaska Bush*, now in its second printing. He also wrote *El Gancho: An Immigrant Family's Journey Out of Mexico*.

Michael Godbey, '83, is a regional director of corporate security at Coca-Cola Enterprises Bottling Cos. in Cincinnati.



UAF photo by Todd Paris.

Theresa Arevgaq John, '83, '92, '10, was appointed by President Barack Obama to the National Advisory Council on Indian Education in spring 2011.

Kathryn Johnson Strle, '84, became general manager of the *Fairbanks Daily News-Miner* in July. She had been the *News-Miner's* chief financial officer since 2002 and previously was the human resources director at Tanana Chiefs Conference.

John Smelcer, '86, '87, in the introduction to his book *Alaskan: Stories from the Great Land*, recounts some of his time at UAF, including encounters on campus with author James Michener, who was conducting research for his novel *Alaska*.



Blanche Wilson Vest, '80, '93, retired from the Fairbanks Native Association in 2004, then worked part-time for Tanana Chiefs Conference until her "real" retirement in 2010 at age 74. She was also a tribal court judge for Nenana.

1990s

Kurt Borchard, '90, is a professor in the Department of Sociology at the University of Nebraska at Kearney. His book *Homeless in Las Vegas: Stories from the Street* was published in April 2011.

Karen Gaborik, '91, was named the 2011 Alaska High School Principal of the Year.

Gregory Owens, '91, received the 2011 Emil Usibelli Distinguished Teaching Award at UAF.

Jeremy Vermilyea, '92, took a new position in spring 2011 in the construction group for the law firm Schwabe, Williamson & Wyatt.

Vladimir Romanovsky, '96, received the 2011 Emil Usibelli Distinguished Research Award at UAF.



Melissa Osborn, '97, is the airport safety and security officer for the Alaska Department of Transportation and Public Facilities' Northern Region Rural Airports team in Fairbanks. She is a lifelong Fairbanksan and previously was an operations officer at the Fairbanks International Airport.

Don Rearden, '97, had *The Raven's Gift* published by Penguin Canada in spring 2011. Read more about it at www.adn.com/2011/03/20/1766862/well-received-book-hard-to-find.html.

Michelle Renfrew, '98, is the marketing and community relations manager for UAF Community and Technical College. She completed the test for public relations accreditation, one of just two Alaska candidates to earn the accreditation since 2005.

2000s

Matt Carle, '00, is chief of staff at Alyeska Pipeline Service Co.

Rob Jordan, '04, '08, is the executive director of Alaska Craftsman Home Program, a nonprofit organization that provides education in energy-efficient building technology throughout Alaska.

Esther McCarty, '04, '06, was elected to the Doyon board of directors in March 2011.

Jason R. Gootee, '05 — "My sister-in-law surprised me with this at our wedding a couple weeks ago. You can't quite tell from this angle but it was an exact replica of the inflatable bear that the team goes through at the Carlson Center. It was very impressive ... but I would have felt far better carving it up and eating it if it was a Seawolf replica (whatever that might look like)."



Celeste Leroux, '06 — "I wanted to take a moment to let you know that I am leaving my position at [the National Oceanographic and Atmospheric Administration's] Office of National Marine Sanctuaries ... and starting a new position with NOAA's Office of Response and Restoration working on external engagement and policy for oil spill response, offshore drilling and marine debris. My duties will include work on Alaska's offshore



Tweeted by UAFAdmissions June 13, 2011: "You know the awesomely huge train wreck at the beginning of the new movie *Super 8*? It was created by UAF alumnus **Chris Ledoux, '01**, and his team."

2011 - 2012 UAF Alumni Association Board of Directors

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www.uaf.edu/alumni/

drilling policy, and I will be able to continue the ongoing pursuit of D.C. internship programs for UAF students, and continue taking on interns of my own."

2010s

Inna Ishchenko, '10, is an HR consultant for UAF Human Resources.

Leonard Ward, '10, had several paintings displayed at the Interior AIDS Association in June 2011 in his show "Emotions." Visit www.newsminer.com/view/full_story/13542206/article-Emotion-a-guiding-force-in-artist-Leonard-Ward-s-work for more information about his work.

Matriculates

Iryna Green works as a Russian-language translator for SCAFCO Grain Systems in Spokane, Wash.



Got job changes, family changes, awards to brag about, or do you want to become a member of your alumni association? Visit www.uaf.edu/alumni/ to stay connected. Tell us your good news and we will publish it in the next issue of *Aurora* or the *Alumnus* newsletter. Send photos, too!

Anna Godduhn, '96, '03, '11, wrote the following ode to **Larry Duffy, '72, '77**, who mentored her throughout her years at UAF:



UAF photo by Todd Paris.

Ode to Larry Duffy

Through two degrees you've mentored me.
 You taught me much and helped me see
 that integration is the key!
 Between cultures and disciplines
 you willingly venture —
 in research, administration, and lecture after
 lecture.
 Words will never ever convey
 how much you've helped along my way:
 anticipating needs and finding my pay.
 And now we've reached this surreal day ...
 I'll miss you Dr. Duffy,
 I really will.

In memoriam

Anatoly Antohin, retired professor of theatre,
 July 28, Addis Ababa, Ethiopia

Louise Augustsson, '70, June 6, Anchorage

Daniel Owen Baum, '73, April 15, Fairbanks

Philip J. Carboy, Matric., June 5, Fairbanks

Georgette Cheek, '72, May 4, Fairbanks

John S. Conover, '73, May 4, Anchorage

Clara May Cooper, '70, April 14, Maryland

**Thaddeus Dumas, '67, '72, and Alumni
 Achievement Award winner**, July 22, 2010,
 Smithfield, Ky.

Joseph A. Enzweiler, '82, April 16, Fairbanks

Lora Lee Evans, Matric., April 22, Fairbanks

Frank Charles Foster, '66, '70, '85, April 10,
 Fairbanks

Daniel Amasa Jones, '49, April 4, Austin, Texas

**Angayuq Oscar Kawagley, '58, '68, '87,
 and associate professor emeritus**, April 24,
 Fairbanks

Sharon Kern, Matric., May 10, Palmer

John Patrick Lee III, '71, June 16, Anchorage

Ingrid K. McSweeney, '94, April 11, North Pole

Jane Medaris, Matric., May 2, Conroe, Texas

Michael Murray, '09, June 4, Fairbanks

Alice S. Oates, '84, April 11, Port St. Lucie, Fla.

John Steve Sherwood, '93, June 5, Fairbanks

Alfred W. Smits, '10, and OIT staff member,
 April 30, Fairbanks

Walter A. Soboleff, '68, May 22, Juneau

Wieslawa Hanula Wajda, '92, April 7, Fairbanks

Brent L. Whitmore, '69, April 24, Seward

**Helga I. Wilm, Matric. and executive officer
 emerita**, July 22, Fairbanks

President's column

By **Derek Miller, '03, '11**

UAF conferred almost 1,200 degrees last May, and it gives me great pleasure to welcome these new graduates to the active network of alumni who support UAF and the alumni association.

September is a big month for us. Alumni reunion weekend is our signature event of the year, and kicks off with the chancellor's reception at 5:30 p.m. on Sept. 22 at Wood Center. The following day we celebrate the achievements and contributions of several alumni at the annual awards luncheon at the Princess Riverside Lodge. We will be celebrating alumni in the areas of business and professional excellence, university support, and community support. We will also be awarding the association's highest honor, the Distinguished Alumnus Award. The weekend culminates with the lighting of the Starvation Gulch bonfires on Saturday night, Sept. 24. Please visit www.uaf.edu/alumni/reunion/ for event details.

My thanks to all of you for supporting UAF and the alumni association. It's our aim to provide you with a lifelong, meaningful involvement with the university and each other. One way we do this is by identifying, supporting and funding student-focused projects. At our board meeting last spring, Vice Chancellor for Students Mike Sfraga presented to us the concept of the outdoor recreation facility. The project includes building an outdoor climbing wall (already underway), ropes course and snow terrain park on the Fairbanks campus, next to the Student Recreation Center. You'll be reading more about this concept soon. Look for the alumni association to play a leading role in making this facility a reality.



September 22 – 24, 2011

Letters *continued*

about that. But they didn't intend to give up their scientific, professional or personal integrity to obtain and retain the contract.

The faculty 50 years ago was composed largely of individuals who believed that their research belonged to them and they determined how to use and disseminate it. I'm not sure that the faculty and administration had much experience with contract work and the concept of proprietary information and its associated legal ownership requirements. It turned out to be a steep, difficult learning curve. I am sure that Dave Klein and the other faculty members who worked under contracts for the petroleum industry on the North Slope also learned about the processes surrounding the use and publication of proprietary data, especially data the sponsor might not be inclined to immediately release to the public.

After reading your article, and again reviewing the history of the Project Chariot affair, I am convinced that, to paraphrase the words of the warden in *Cool Hand Luke*, what we had 50 years ago was a failure to communicate, not an abuse of academic freedom.

Sincerely,

Tom O'Farrell, '60

Evans responds: The problems and questions surrounding Project Chariot and the University of Alaska are still debated — about what really happened, what should have happened, and what parties had what measure of guilt and innocence. What struck me most while interviewing UAF faculty (not all of whom were mentioned in the article) was the immediacy and forcefulness with which so many of them cited Project Chariot as the seminal, watershed moment for academic freedom at UAF.

Thanks for this important story. I read *The Firecracker Boys* long after my own experience of being wolf-packed for exercising my responsibility to both my art and my profession. I saw in the book what might easily have happened to me and why many in the state could believe that they still could pull political levers behind the scenes to do their dirty work without facing consequences. President Hamilton's immediate and strong defense of my work not only kept me employed, it kept me standing.

F.I.R.E. — founded by two intellectuals, one on the Left and one on the Right — took up my case as an instance of “the Left eating its own.” Rich Seifert refers to the trauma of the attack on him, and the word applies to mine as well: a two-year investigation by OCR [Office for Civil Rights, U.S. Department of Education] for my temerity in introducing class and gender as topics for discussion in a graduate seminar called Left Out: Poets of the Political Imagination. And an endless cesspool of harassment that a theologian friend called “an ecstasy of sin” and to which the *Anchorage Daily News* actually had to declare a halt after a particularly ugly diatribe on me and my French and Indian grandparents from the stage of the Alaska Native Heritage Center. It was a soul-jacking, and I was an easy target: alone in Alaska, aging (called “the old white hag of the North”), and working-class, having come to the state not for adventure but for work.

Since my case, UAA has tried to raise issues of student bullying, especially of women faculty, and to put into place policies that

rebalance student rights with those of faculty. Things had to be very out of whack in that regard for my story to have happened as it did. When people speak of the “responsibility” end of academic freedom, they generally do not consider that the greatest responsibility an artist or a professor has is critique of the close-by hypocrisies that are sustained by the fear of standing out among one's peers, but making nice is not necessarily making art.

“Indian Girls” is not a very “literary” poem, but it is a bardic one, public speech, uttered for the sake of the tribe. I did not escape the attacks on me at all unscathed, but I would publish the poem again (that only I, and not the publishers, was the object of vengeance, gives the lie to the alleged rationale for the siege) because it is part of the effort to bring human rights to those most in need of protection. The protections of tenure allowed me to do that. Demanded that I do that. President Hamilton's immediate call to cease “investigation” (and the public re-education I was being set up to experience) gave to the state and the university a very different public face and to tenure a rare championing by administration.

— Linda McCarriston

“The future of Alaska food,” spring 2011

These folks seem ignorant of the tradition of gardening among the Tlingit and Haida, particularly potatoes, which they acquired from the Russians in the 19th century. And they seem ignorant of the importance of marine proteins and fats to Alaska. The project seems limited in scope to the Interior, as is much of the activity of the experiment station.

— Anonymous

Editor's note: Craig Gerlach's work focuses primarily on communities in Interior Alaska. He is one member of the Food Systems Group at UAF; other researchers study different aspects of food production and consumption in Alaska, including marine resources and Southeast agriculture. Master's degree candidate Elizabeth Kunibe, who is affiliated with the University of Alaska Southeast but is doing her work through UAF's Center for Cross-Cultural Studies, has discovered that some types of potatoes grown for centuries in the gardens of Southeast's Alaska Natives predate Western contact and are genetically linked to potatoes found in Chile.

“The man with messy hair,” spring 2011

Thank you, Jerry Lipka, for seeing Yup'ik traditional knowledge as a different worldview and knowledge system and incorporating it in such a culturally appropriate way. Alaska is better because you made it your home.

— Shelley Woods

Wonderful story on research, community and education with a glimpse into a researcher's soul. Looking forward to seeing more of this research at [the School of Education] in the next years. Jerry, please come and share, guide and mentor. The doors are open again.

— Ute Kaden

athletics

For the complete women's volleyball schedule, see page 6.



Oct. 14 – 15
Brice Alaska Goal Rush men's hockey tournament

Oct. 15
Swim: Blue/Gold

Nov. 18
Rifle vs. Air Force

Nov. 18 – 19
Alaska Invitational men's basketball tournament



- Nov. 18 – 20
Ski Nordic Cup
- Nov. 24 – 26
Mt. McKinley Bank North Star Invitational women's basketball tournament
- Dec. 3
Women's basketball vs. UAA
- Dec. 10
Men's basketball at UAA
- Feb. 16 & 18
Rifle NCAA qualifier vs. Jacksonville State/Nebraska
- Feb. 23
Men's basketball vs. UAA
- Feb. 23
Women's basketball at UAA
- Feb. 24 – 25
Alaska Airlines Governor's Cup (two-game men's hockey home-and-home series) in Anchorage/Fairbanks
- Feb. 25
Women's basketball at UAA

special events

- Sept. 13
Convocation
- Sept. 22 – 24
Alumni reunion weekend and Starvation Gulch
- Oct. 5 – 6
Alaska Native Claims Settlement Act's 40th anniversary celebration (see bottom of page)
- Oct. 15 – 23
KUAC FM fall fundraiser

exhibitions

- Through Jan. 3
UA Museum of the North special exhibit "Power Play: Energizing Our Lives, Fueling Alaska's Future"
- Jan. 4 through May 2012
UA Museum of the North special exhibit "Leggy! Spiders and Their Myriad Relatives"

arts

- Sept. 24
Strange and Sacred Noise film premiere



- Dec. 10
University Chorus holiday concert, directed by Jaunelle Cellaire
- March 1 – 3
Festival of Native Arts



For more events, visit www.uaf.edu/events/.

The College of Rural and Community Development and the Department of Alaska Native Studies and Rural Development invite you to

Celebrate ANCSA at 40

Come hear the voices of those involved in the land claims effort. Presenters from the era and today's leaders will discuss the social, economic, educational and political effects of the Alaska Native Claims Settlement Act.

When: Oct. 5 – 6, 8 a.m. – 4:30 p.m.

Where: Wood Center
Carol Brown Ballroom
Fairbanks campus



UNIVERSITY of ALASKA FAIRBANKS



For more information or to view a recording of this event, visit <http://anrsa.community.uaf.edu>.

