



UNIVERSITY OF WYOMING

THE FRISON INSTITUTE OF ARCHAEOLOGY AND ANTHROPOLOGY



Bulletin 23  
Fall, 2010



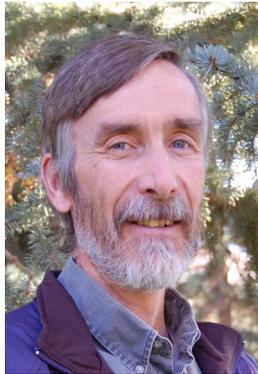
## From the Director, Robert L. Kelly

It's my pleasure to introduce myself to the Friends of the George C. Frison Institute of Archaeology and Anthropology. I am very much looking forward to this new opportunity.

I've been working in archaeology since 1973, beginning on an excavation in Nevada. I received my BA from Cornell University in 1978, my MA from the University of New Mexico in 1980, and my doctorate from the University of Michigan in 1985 (all in anthropology).

From 1986 to 1997, I taught at the University of Louisville in Kentucky. After moving to Wyoming in 1997, I helped create our doctoral program and served as department head from 2005-2008, overseeing the planning and move to our new anthropology building. I have also served as president of the Society for American Archaeology, secretary of the Archaeology Division of the American Anthropological Association, and on National Science Foundation and other grant review panels.

My interests lie in hunting and gathering peoples of western North America, though I've worked on archaeological projects throughout the U.S. I also conducted ethnographic research with the Mikea, part-time hunter-gatherers in Madagascar. In Wyoming, I've researched the Pine Spring site in southwest Wyoming, and rockshelters in the Bighorn Basin. This year I began a project in Glacier National Park (see next page). I've authored several books, including *The Foraging Spectrum: Diversity in Hunter-Gatherer Lifeways*, and, with David Hurst Thomas, the popular textbooks



*Archaeology and Archaeology: Down to Earth*. I also created the Explore Wyoming's Cultural Heritage website ([www.wyomingheritage.org](http://www.wyomingheritage.org)), which promotes

## *George Frison receives A&S Medallion Award*

At Homecoming this year, Professor Emeritus **George C. Frison** received the College of Arts and Sciences' Medallion Award for outstanding service and dedication to the university. This goes along with his previous recognitions: the first UW professor elected to the National Academy of Sciences, the Society for American Archaeology Lifetime Achievement award, and the UW Distinguished Former Faculty award.

A ranch kid from Ten Sleep, George was the first Head of the Anthropology Department and Wyoming's first state archaeologist. He also literally wrote the book on Wyoming archaeology.

The normal Medallion Award consists of a silver cake server. Somehow, this just did not seem appropriate for



### *The Institute Endowment*

A major goal of the director is to grow the Institute's endowment to \$1 million. We deeply appreciate the gifts we receive to help support current research projects; nevertheless, a healthy endowment is essential to the Institute's future. A healthy endowment will allow us to expand our programs, to plan multi-year projects, and to tackle some research topics that are difficult to fund — such as searching for evidence of a coastal Pleistocene migration along the coast of Baja California. And so, I am asking for your help: any contribution you can make to the endowment demon-

## Research Highlights

Part of the Frison Institute's mission is to support the department's archaeological research programs. Here are some of the exciting things that are happening:

### *Ice Patch Survey in Glacier National Park*

This summer, Institute director **Robert Kelly** began a three-year survey of the ice patches in Glacier National Park. The world over, ice and snow patches are receding with global warming. As these patches melt, they expose organic artifacts as well as "paleobiological" materials—sticks, bones, tree stumps, and animal feces. Research in Alaska, Norway, Switzerland, and the continental U.S. has made some remarkable finds. You've perhaps heard of Ötzi, a 5000-year-old man found in the Italian Alps, or Kwäday Dän Ts'ínchi ("Long Ago Person Found"), a 500-year-old man found in the mountains of British Columbia. Kelly's colleague on the Glacier project, Craig Lee (University of Colorado), in fact, found a 10,300-year-old atlatl dart in the Beartooth Mountains north of Yellowstone a few years ago.



*Glacier Park team members survey an ice patch's forefield*

The artifacts and paleobiological materials also provide evidence of climate change. Since organic artifacts decay after only a few years exposure, the Beartooth's 10,300-year-old

### *New Work at Fort Sanders*

Graduate student **Joe Wheeler** is conducting new fieldwork at Fort Sanders, just south of Laramie. Wheeler matched historical surveys of the fort to modern aerial imagery in GIS, and with 35 volunteers surveyed 60% of the fort. Aided by Dr. **Danny Walker**, and UW students, Joe conducted a soil resistivity as well as a gradiometer survey over several acres, tested the blacksmith's shop, and excavated test pits elsewhere in



### *Last Canyon Cave*

**Marcel Kornfeld** and **Mary Lou Larson** continued to investigate the 10,800-year-old feature in the back of Last Canyon Cave, taking high resolution samples for pollen and other paleoclimatological studies, and re-evaluating the shelter's



*Paul Pluta, Temple University, breaks up a roof fall to make*

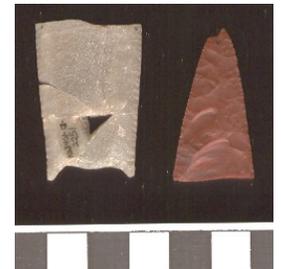
stratigraphy. In addition, they recorded a surface site just below the shelter where they mapped 17 tepee rings, including one that contained a stone bead (shown on the address page).

Two students identified a change in the level of grit in prehistoric sheep dung from the pre- to post-Last Glacial Maximum, a finding with paleoecological implications for animal behavior. The archeological record in the shelter is sparse, but the team recovered a large metate below a pit feature in the shelter's front. The crew included graduate and undergraduate students from UW, University of Colorado, University of Kansas, and Temple University, as well as members of the Wyoming Archeological Society.

### *Black Mountain Archeological District*

**Marcel Kornfeld** and **Mary Lou Larson** also conducted the 17th season of fieldwork on Black Mountain, focusing this year on BA Cave and Two Moon Shelter. The field team included graduate students from Texas A&M, high school students from Colorado, and volunteers from Colorado and Wisconsin.

The deeper cultural components in BA Cave are yielding significant quantities of bone allowing the previous interpretation of human paleodiets to extend deeper in time. The cave's records show a link between periods of poor environmental conditions (e.g., droughts) and the intensity of human use until about 4000 years ago. New samples will allow the correlation between the intensity of human use



Research projects such as these are made possible in part by your generous support. *Thank you!*

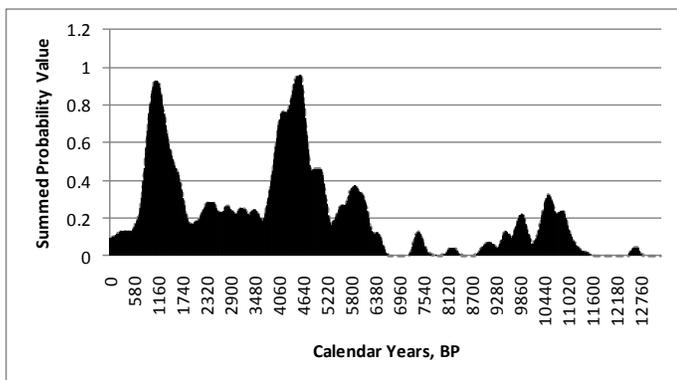
*Please help us reach our endowment goal of \$1M.*

---

## *Ancient Human Demography and Climate Change*

Archaeologists have long sought to understand how climate change affects the size of human population. But the lack of a good way to measure the size of ancient human populations has hampered efforts to do so. Now, however, it looks like faculty member **Todd Surovell** has found a way to use radiocarbon dates to create just such a measure.

Archaeologists know that the older a site is, the greater the likelihood that it has been destroyed or buried very deeply by Mother Nature. Surovell found a way to mathematically convert frequencies of calibrated radiocarbon dates from open-air sites in such a way as to account for site loss over time, using a worldwide dataset documenting volcanic eruptions of the past



40,000 years. He then tested this method on the open-air site radiocarbon record from the Bighorn Basin against that of rockshelters in the same region—which are not affected by erosional processes—finding a nearly perfect fit. When corrected, the radiocarbon date frequency looks like this:

Those peaks and valleys track changes in the size of the human population living in the Bighorn Basin. People arrived there about 13,000 years ago. Their population grew until about 10,500 years ago, when it declined. Humans then nearly disappear from the Bighorn Basin between 9500 and 6500 years ago. Population then grew until 4200 years ago, when it catastrophically collapsed. It remained low, until 1700 years

### *Coming Attractions*

This coming summer, **Nicole Waguespack** will be working with Yellowstone’s wolf researchers. Why? Wolves were re-introduced to Yellowstone some years ago, so Nicole aims to see what zoologists have learned about how a “social carnivore” colonizes a landscape. She hopes it will suggest new models for understanding how Clovis hunters colonized the New World.

**Todd Surovell** is seeking funding to conduct ethnoarchaeo-

logical research with reindeer herders in northern Mongolia, to study how nomadic peoples use space in their camps. He



---

### *Employment!*

Doctoral graduate **Geoff Smith** was hired as assistant professor and director of the Sundance Archaeological Foundation at the University of Nevada,



Reno. He hit the ground running, conducting excavations at several sites in Nevada this summer.



UW PhD student **Patrick Mullen** is now compliance archaeologist at Wrangell-St. Elias National Park in Alaska. He

---

## *Farewell to a friend ...*

This year, the Institute bid farewell to its secretary and accountant **Willa Mullen**. Willa’s husband decided to follow her husband, Patrick Mullen, to his new job in Alaska. Willa’s remarkable competence will be impossible to replace, and we wish her all the best in her new “Northern Exposure” home. With the next Bulletin, we hope to introduce her replacement

---

## *Institute Fall Lecture*

The Institute lecturer this fall was Professor **Ted Goebel**, an archaeologist from Texas A&M University and associate director of the Center for the Study of the First Americans. He gave an excellent talk demonstrating the linguistic, genetic, and

The Institute annual lecture is made possible by your generous support. *Thank you!*



College of Arts and Sciences  
 Department of Anthropology

Yes, I would like to make a gift of \$ \_\_\_\_\_ to the George C. Frison Institute of Archaeology and Anthropology in the form of a

Name \_\_\_\_\_

\_\_\_\_ Check (enclosed, payable to UW Foundation, earmark for endowment or discretionary fund), or

Spouse's Name (if joint gift) \_\_\_\_\_

\_\_\_\_  
 Credit  
 card

Address \_\_\_\_\_

\_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Exp. Date \_\_\_\_\_ Signature \_\_\_\_\_

Home phone \_\_\_\_\_ Business \_\_\_\_\_

*Clip and mail with your donation today to UW Foundation, 1200 E. Iverson, Laramie, WY 82071-3963.*

N11FR

VISIT US AT: [HTTP://WWW.UWYO.EDU/ANTHROPOLOGY/GEORGE%20C.%20FRISON%20INSTITUTE/INDEX.HTML](http://www.uwyo.edu/anthropology/george%20c.%20frison%20institute/index.html)

Frison Institute of Archaeology & Anthropology  
 University of Wyoming  
 1000 E. University, Box 3431  
 Laramie, WY 82071



To: