

BURKE ARCHAEOLOGY NEWSLETTER

Spring 2008

Indonesia's First Farmers

Curator Peter Lape has spent some of this past year investigating the origins of agriculture in the eastern Indonesian province of Maluku. In August 2007, he excavated an early agricultural village site in the Banda Islands with an international team, funded by



Drs. Peter Lape and Daud Tanudirjo (Universitas Gadjah Mada) excavate on the island of Ay

grants from the National Geographic Society and the Henry Luce Foundation. The site, on a small (1-mile in diameter) limestone island dates to about 3200 years ago. It has some of the clearest evidence for early farming in Island Southeast Asia. Dr. Lape and his students and colleagues are currently analyzing the finds from the excavation to find out what kinds of plants and animals these first farmers were using, and how they were connected to other people in the area via trade. They are looking at preserved seeds, microscopic pollen and phytoliths and starch grains preserved on cooking pots for evidence of plant use. DNA from animal bones will provide information about whether domestic pigs came originally from New Guinea or China, and chemical analysis of obsidian will provide information about trade networks. Dr. Lape will be returning for more excavations in February-March 2009 to co-direct an archaeology field school with students from the US and Southeast Asia.

Repatriation News

The Archaeology Department recently completed two large repatriations to the tribes of Eastern Washington and the Plateau region, returning human remains representing approximately 180 individuals and over 20,000 funerary objects held by the museum. This was conducted in compliance with the federally mandated Native American Graves Protection and Repatriation Act (NAGPRA). These historic repatriations are the culmination of over a decade of cooperation between the Burke Museum and six tribes: Confederated Tribes of the Colville Reservation, Nez Perce Tribe, Confederated Tribes of the Umatilla Reservation, Confederated Tribes of the Warm Springs Reservation, Confederated Tribes and Bands of the Yakama Nation, and the Wanapum Band. These tribes welcomed the return of their ancestors, some of whom have been kept at the Burke Museum for nearly 100 years. Human remains and cultural items have also recently been repatriated to the Puyallup Tribe of Indians, the Nooksack Indian Tribe, and the Suquamish Indian Tribe.



Tribal and Burke staff coordinate a historic repatriation, the largest to date from the Burke

The Burke Archaeology Department will continue to work closely with other tribes throughout Washington State and the Northwest region to complete this important work.

Honoring Dr. Harold G. Bergen 1910 – 2007

Dr. Harold (Hal) Bergen, a dear friend of the Burke's Archaeology Department, passed away at his home in Yakima. He inspired Burke staff and students to work with local communities to strengthen heritage education and archaeological site preservation. In 1989, Dr. Bergen, a retired obstetrician and avocational archaeologist, donated



Dr. Bergen sharing his love of archaeology on a fieldtrip with Burke Archaeology students and staff

14,000 artifacts and associated field records to the Burke Museum. Since then, Dr. Bergen provided funding for the establishment and ongoing support of our public outreach program and for collections care. His friendship and support of our programs have left a lasting impact.

In addition to sharing his love of archaeology, he also told inspiring stories of his journey to become a doctor. He grew up very poor on a homestead in Southern Idaho, left home when he was 12, supported himself through college by milking cows, chopping wood, and mopping floors at a local soda fountain. He eventually went to medical school at Columbia University, graduating Phi Beta Kappa in 1939. He was drafted in WWII, and was a field surgeon for General Patton's Third Army on the front lines. His greatest love was his wife Marjory, whom he met while donating blood to finance medical school; she was the nurse in charge. Together they spent their free time exploring the Pacific North

west, hunting, fishing, and picking blueberries, as well as recording archaeological sites and collecting artifacts. Dr. Bergen spent his retirement years overseeing his fruit orchard and lecturing on the subject of osteoporosis, the disease that took Marj's life. We will miss his annual box of crunchy, sweet apples, and we remember him fondly for his love of archaeology.

Tug Tour a Success!

Now a well known industrial area of Seattle that is still used as a Native American fishery, the Duwamish River once supported a healthy delta environment and was a center of Native American settlement. In September 2007, Dr. Peter Lape, Curator of Archaeology, led a tour of the archaeological heritage of the Duwamish River. The trip was purchased by a lucky bidder at the Burke Museum's annual Curators Dinner. The tour was conducted from onboard the *Newt*, a tugboat built in 1924 and lovingly restored as a home for Collections Manager Laura Phillips and her husband, Captain Eric Rasmussen. The tour participants gamely clambered into a small zodiac mid-trip to gain a closer look at a few archaeological sites. The interesting, and sometimes industrial, scenery was complimented by the outstanding culinary creations of Chef John Sundstrom of the Seattle restaurant Lark.



Exploring the Duwamish

Curation Summit

Washington State has a curation problem: more archaeological collections are being produced than repositories can store or process. The Burke Museum, a repository meeting federal curation standards, is working on solutions. The Archaeology staff is working to identify key issues and create regional solutions to the mounting curation problem through participation in the Curation Summit, a task

force consisting of curators, archaeologists, museum professionals, and cultural resource specialists from Tribal, federal, state and private organizations throughout the state. The group is currently working to identify the volume of extant collections needing curation statewide, and to create a directory of repositories meeting federal standards and able to accept archaeological collections. At the more local level, the Archaeology Department is developing plans to expand capacity. Placing current cabinetry on rolling compactors and replacing existing cabinets with higher capacity units would increase current capacity by 50%, a much needed improvement, but only a stop-gap measure in the ongoing effort to address the curation problem in Washington State.

Return to San Juan

This summer archaeologists from the Burke Museum will return to the San Juan Islands of Wash-



Dr. Julie Stein, Stephanie Jolivette, and Amanda Taylor in Garrison Bay, San Juan Island

ington for a new season of the San Juan Islands Archaeological Project (SJIAP). Burke Museum Director Dr. Julie Stein and graduate student Amanda Taylor will continue their ongoing project to sample and date coastal shell middens throughout the islands. Shell middens, which are ancient dumps where food refuse and broken tools were left by Native Americans, are both sacred ancestral places and a source of data for archaeologists. The research team is targeting sites that are actively eroding into the ocean, and investigating the impact of erosion on the archaeology of the San Juans. So far, 24 sites have been sampled. Additionally, this year graduate student Stephanie Jolivette will begin her

search for inland sites in the San Juan Islands. The vast majority of archaeological sites recorded with the Washington State Department of Archaeology and Historic Preservation in the San Juan islands are on the coast, but ethnographic research by early anthropologists, as well as Native American oral histories of the region tell us that the inland areas of the islands also provided important resources to past peoples.

Biderbost Basket Project

In our last newsletter, we wrote about the significant donation of the Biderbost collection by Dr. Astrida Blukis Onat. Since then, archaeology staff and students at the Burke have been working to conserve and upgrade storage conditions for the 2,000-year-old basketry artifacts from this site. Work to rehabilitate the collection began in the spring of 2007 and is approximately 60% complete.

Allison Deep, a UW Museology graduate student, recently completed a thesis project to improve public access to the basketry from the Biderbost site. She worked to interpret and digitize the collection to minimize handling and maximize public accessibility of these very fragile objects. The goal of the project was to design a web site model



Twined spruce root basket from the Biderbost Site

where objects can be conveniently accessed to view intricate details. The web site goals are to improve public access to the collection, and generate new research interest.

The Burke Museum Archaeology Division is asking for donations to help with the cleaning, conservation, and rehousing of the Biderbost Site basketry. The Adopt-a-Basket program allows the public to help save artifacts from this significant Washington State archaeological site. For more information go to our website at <http://www.washington.edu/burkemuseum/collections/archaeology/adopt-a-basket.php>

Bainbridge Island Spear

Kenneth Enright, a resident of Bainbridge Island, was digging out blackberry bushes on his property last summer when a long metal spear-like object emerged from the sediment. Mr. Enright brought the nearly 17 inch long spear tip to the Burke Museum's Archaeology Department and later donated it, hoping that the story of how such an object might have ended up on Bainbridge Island may be revealed.

Several experts examined the spear tip and determined that, as strange as it sounded, the object's design was of Zulu origin. Further research pointed to a style popularized by late 19th century battles between Zulu warriors and British infantry, called the "Iklwa stabbing spear."

How did a Zulu spear find its way to Bainbridge Island? Burke archaeology staff had many theories, but a former neighbor recently revealed that a statue he owned while living next to Mr. Enright's property lost an important attachment in its hand and was never located: a Zulu spear tip. Given this new information, the Archaeology Department will be returning the spear tip to be reunited with its statue.

Burke Archaeology Awarded King County Grant

In 2007 the Burke Archaeology Department was awarded a 4Culture grant in the amount of \$4635 to rehabilitate collections from the Duwamish No. 1 (45-KI-23) site, a large Native American shell midden in South Seattle.

The Duwamish No. 1 site was excavated by two prominent archaeologists, Sarah Campbell and Astrida Blukis Onat, in two projects in the late 1970s and mid 1980s. Radiocarbon dates from the site indicate occupation from at least 1280 B.P. (years

before present) until 250 B.P. The large size of the site and resulting collection make it an important scientific collection. This site provides important evidence about the past environment and tectonic activity of the Duwamish River valley, as well as

the cultural heritage of the Duwamish people.

In 1987 the Burke Museum was contracted by the Port of Seattle to store and provide access to the 149 cubic feet collection. While research interest in the collection is already strong, only a few research projects have

been conducted due to the collection's lack of organization and the outdated storage methods and materials. Without rehabilitation, the research and exhibition potential of this collection is severely limited and will continue to decrease over time as the labels and storage materials deteriorate further.

The Archaeology Department is using 4Culture funds to pay for supplies necessary to replace and upgrade storage containers and labels. We are also cataloging the collection, creating an accompanying professional-standard archive and will provide access to this information through the Burke's website. All labor costs are being supported by the Burke Archaeology Department (grant restrictions prohibit the use of those funds on labor). Work to rehabilitate the collection began in the spring of 2007 and is approximately 60% complete.



How did a Zulu spear get buried on Bainbridge Island?



From left: Paige Eley, Kelsey Keizur and David Wood rehabilitating the Duwamish No. 1 collections

2007 Archaeological Collections Research Fellowships

Thanks to the support of our generous donors to the Burke Archaeology Endowment, we have been able to offer a new series of Research Fellowships to students since 2006. In 2007 the fellowship supported a stipend and research expenses for one graduate and one undergraduate student to conduct research on Burke archaeological collections.

Graduate Award

UW graduate student Phoebe Anderson used her fellowship to reconstruct past sea surface temperatures during the last 1,500 years in the San Juan Islands.



Phoebe Anderson excavating in the San Juan Islands. Photo courtesy Marcus Donner

Phoebe cut thick sections of 47 shells dug from archaeological sites that are currently housed at the Burke Museum and then drilled into the annual growth bands to extract samples of calcium carbonate. The stable oxygen isotope ratio of these samples was then measured using a mass spectrometer at the Woods Hole Oceanographic Institute. Stable oxygen isotopes have long been used as measures of ancient climates, and by measuring clam shells that lived near the shoreline Phoebe was able to reconstruct past sea surface temperatures. Her results for the San Juan Islands correlated well with larger regional temperature reconstructions, but the shell measurements failed to find evidence for cooler temperatures during the Little Ice Age (1350-1900AD). The possibility that the waters surrounding the San Juan Islands region may have been somehow sheltered from the effects of this global cooling event is intriguing, but additional research will be needed to verify these results.

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Phoebe will be publishing her results in her dissertation which will be completed in the coming year.

Undergraduate Award

Brian Durkin conducted research on the animal bones found at Cattle Point (45-SJ-1), an archaeological site located on San Juan Island. The site was excavated in the 1940's, but the resulting collection had received little attention since. It was not until the fall of 2006 that Brian and another alumna, Kate Trussler, managed to break a mysterious code that had been used to label the artifacts that the collection became useful for modern research questions. Brian then utilized his fellowship funding to ana-



Brian Durkin at work on Cattle Point bones

lyze the mammal bone collections from the site to determine whether or not Mountains Goats (*Oreamnos americanus*) were originally living in the area. Since the 1940's, a heated debate has arisen over whether these goats are a native or exotic species in Olympic National Park. The only way to settle this debate is through archaeological evidence from the area. Brian found no bones in the collection that could be positively identified as Mountain Goats, suggesting that they were more recent introductions.

For 2008, we have awarded fellowships to graduate student Grace Sullivan (Harvard University), who will be analyzing archaeological textiles from South America, and undergraduate Lori St. Kitts (UW), who will be dating stone tools from Washington using thermoluminescence methods as part of her honors thesis. Look for reports on their results in our next newsletter or at www.washington.edu/burkemuseum/collections/archaeology/.

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Archaeology Department

Box 353010
University of Washington
Seattle, WA 98195
206-685-3849
www.burkemuseum.org