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WE WANT YOU!

To
Join the
IPCAS BOARD
See the CALL for
NOMINATIONS
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CHECK OUT THE
UPDATED IPCAS
WEBSITE & GIVE US
FEEDBACK

From the President

By Rosi Dennett

As the summer season winds down, we turn to our busy fall schedule with a variety of activities for our IPCAS members and friends. Our lecture series continues on September 14 with Jessica Hedgepeth Balkin's presentation of her recent PhD work in Oaxaca. Our free lectures will continue to be held at the CU History Museum in Boulder, beginning at 7 pm, generally on the 2nd Thursday of each month through May.

For those of us who are "a bit challenged electronically," Chris Kerns will be leading a social media workshop for IPCAS members at the Gunbarrel fire station on September 30, 1:00 to 3:00 pm. I plan to be in the front row!

We have almost 20 people registered for the IPCAS Cedar Mesa field trip on September 17 - 23. We will be staying at the Sand Island Campground and have a variety of hikes to various ruins and rock art sites and will have local archaeologists guiding us and providing campfire talks. We also have a raft trip on the San Juan River that will take us to more remote sites. Some members will also be assisting Ann Phillips with rock art documentation at Sand Island.

Besides the lecture on October 12, we also have scheduled a guided tour for IPCAS members of the City of Boulder's White Rocks archaeological/historical site on October 21. We still have a few openings, so let me know (rosidennett@gmail.com), if you are interested in participating.

Mark your calendars for the annual CAS meeting at History Colorado in Denver on October 28. The Denver CAS chapter is organizing an interesting group of lectures for us as well as a mammoth-site field trip!

Our site stewards will be visiting their assigned sites (mostly in Pawnee Grasslands and Arapahoe USFS land) in September and October. and we should have a PAAC class available this winter for additional site

stewardship training.

In July, some of our members participated in the PCRG/PAAC site survey and rock art documentation project in the San Luis Valley. All reports from those who participated have been enthusiastically positive, despite the daily rainstorms!

Gretchen Acharya and I have been assisting NAGPRA Liaison Sheila Goff at History Colorado with documentation and preparation of approximately 220 unassociated funerary items to be repatriated in accordance with the Native American Graves Protection and Repatriation Act. These are items from private collections or excavations conducted in the 1920s (primarily from the Mesa Verde region) that were donated over the years to History Colorado and have been noted in museum documentation to be associated with burials. We were honored to participate in the Native American consultation in August to determine the final steps of the repatriation project. Attending the consultation were representatives from five tribes including Hopi, Acoma, San Felipe, Santa Clara and Ute Mountain Ute.

Some of our IPCAS members attended the quarterly CAS meeting in Dolores in July. CAS continues to work on developing an electronic membership registration system and still plans to have IPCAS be one of the trial chapters for 2018. We'll keep you posted! Also, a new advocacy policy was discussed and will be finalized at the annual meeting. Archaeologist Neil Hauser introduced the Projectile Point Project that provides a process to CAS chapters to document diagnostic points in private artifact collections recognizing that even with little documentation of exactly where the items came from, some value can be attributed to types of artifacts, etc. The documentation consists of a photograph of each point with a scale and color card, and the documentation will be archived at History Colorado. Let me know if you are aware of any collections or are interested in assisting, and we can pursue the training of volunteers.

Be sure to check out the updated IPCAS website which includes past issues of Calumet newsletters and a listing of past lectures and officers. Thank you to Chris Kerns for updating the website and Archivist Kris Holien for pulling together all of the Chapter History information for us!

And finally, we are looking ahead to 2018, and we will have a number of Board vacancies to fill (including President, Outreach Coordinator, Calumet Newsletter Editor, and Website Editor). Please let me or any Board member know, if you are interested in this incredibly rewarding opportunity!



IPCAS members Karen Kinnear and Delane Mechling enjoying a unique artifact near Cortez. Photo courtesy of Rosi Dennett.



Jessica D Hedgepeth Balkin. Photo courtesy of Jessica D. Hedgepeth Balkin

About Jessica D. Hedgepeth Balkin

Jessica Hedgepeth Balkin received her B.A. in Anthropology from Brandeis University in 2003, and her M.A. in Anthropology at the University of Colorado at Boulder in 2009. Currently, she is completing her doctoral degree with Dr. Arthur Joyce at CU Boulder. Her research focuses on human land use in the lower Río Verde Valley of Oaxaca, Mexico using geospatial techniques (GIS). Hedgepeth Balkin carried out her dissertation fieldwork over three seasons (2012, 2013, and 2016). This fieldwork was supported by several sources, including: the National Science Foundation (NSF), the Colorado Archaeological Society (CAS), the CU Graduate School, the CU Anthropology Department, and the CU Latin American Studies Center.

IPCAS Lectures

When: Thursday, September 14th at 7:00 pm

Where: CU Museum, Dinosaur Room

Cost: Free and Open to the Public

Jessica D. Hedgepeth Balkin - PhD Candidate - University of Colorado - Boulder

Ancient Settlement Pattern Changes in Coastal Oaxaca, Mexico: Recent Findings from the 2016 Río Verde Settlement Project (RSVP)

Between the Early and Late Formative periods (1800-150 BCE), major landscape changes occurred in the lower Río Verde Valley of Oaxaca, Mexico. Highly productive ecological niches developed due to floodplain expansion and the formation of resource-rich estuaries. To investigate how prehispanic settlement patterning in the lower Verde region was affected by shifts in resource availability, I conducted an interdisciplinary dissertation study from January-June of 2016. The Río Verde Settlement Project (RVSP) included a continuation of the regional archaeological survey as well as a systematic soil sampling program to examine variation in soil fertility. This presentation provides details on the project methodology and presents preliminary conclusions on changes in settlement ecology after the environmental changes took place (c.a. 150 BCE). The project results include promising information for answering two major research questions. First, did settlement concentrate around the floodplain and estuaries after they formed? Second, if people did indeed congregate in these resource-rich areas, was there a time lag between the ecological changes and settlement shifts? The final portion of the presentation will discuss promising future research applications of my dissertation data related to settlement scaling theory. Ortman and colleagues argue that settled area and population density are linked mathematically in settlements around the world (e.g., the ancient Andes and the Basin of Mexico) Do lower Verde settlements exhibit similar properties?

NEXT MONTH...

Thursday October 12, 2017 at 7:00pm

John Wagner - University of Colorado - Denver

Economic Change and Trade among the Teuchitlán

Summer Travels: Lynda McNeil

By Lynda McNeil

For a week in June, I visited several sites in the northern Rio Grande area of New Mexico that are central to the research I'm doing on the possible influence of a 17th century Spanish Christianized "Cinderella" folk tale on several northern Pueblo variants of the tale. Specifically, I visited the Puye Cliff Dwellings, the ancestral home of Santa Clara Pueblo people and important ceremonial site, which is mentioned in the Tewa version of the tale. I also found Zuni and Keresan variants of the tale showing that it was widely diffused among northern Pueblo people, possibly in relation to their efforts to preserve native ceremonies and religious beliefs during the period of overt religious oppression prior to the Pueblo Revolt of 1680.

I'll be sharing my progress on this topic, based upon published materials and analysis of the Spanish and Puebloan tales, at the Southwest Seminar series in Santa Fe in February 2018. At that time, I also plan to visit with Pueblo community members who are interested in the topic to get their perspectives and advice on the work and to seek their help in locating a rock art site that may be relevant to the topic.



Puye in the northern Rio Grande area was inhabited between 900 and 1580 A.D. by up to 1500 Puebloan people. It was the ancestral home of Santa Clara Tewa people.

IPCAS wants you to help shape our FUTURE...

The Indian Peaks Chapter of the Colorado Archaeology society is currently seeking nominations for its open board positions. Join in shaping this 100% volunteer-run organization that brings local archaeological programming to members and interested public participants. We're looking for motivated volunteers to help us pursue IPCAS's mission to advance archaeological education, interest, participation, research, and conservation. Self-nomination is permitted and encouraged. The incoming volunteer board will play a pivotal role in shaping the future of IPCAS and archaeology in the local area. Serving on the board can enrich your personal and professional

OPEN POSITIONS

- ◆ **President**
- ◆ **Outreach Coordinator**
- ◆ **Newsletter Editor**
- ◆ **Website Content Manager**
- ◆ **At Large Positions**

life, providing board members an opportunity to meet accomplished industry professionals and network with up-and-coming talent. Board nominees need not be IPCAS members at the time of nomination, but elected nominees are required to join and maintain their memberships for the duration of their terms.

This year, there are several opportunities to quickly become involved as we have several open positions, including Chapter President. Nominations close and elections/appointments will take place at the IPCAS Annual meeting on November 9th.

Social Media, Mobile Technology and Archaeology Workshop

By Chris Kerns

IPCAS has a social media, mobile technology, and archaeology workshop planned for Saturday, September 30th at the Gunbarrel Fire Station from 1 to 3pm. Bring you laptop and smart phones with you to this workshop and learn how to use social media and technology for archaeological endeavors. This workshop is aimed at anyone from the complete novice to proficient user of these technologies and may even be of interest to the most advanced users of mobile technology and social media. If you are interested in this workshop and would like to be kept up-to-date contact Chris Kerns at ChrisJKerns@gmail.com.

KEY TOPICS COVERED

- ◆ **Setting up social media accounts and getting started**
- ◆ **Keeping up with Archaeology News**
- ◆ **Generally useful mobile applications for archaeology**
- ◆ **Specific applications for use in:**
 - **Photogrammetry**
 - **D-Stretch (Rock Art)**
 - **GPS Recording**

Aboriginal Edible Plant Use in the Indian Peaks Wilderness

By Spencer R. Pelton

If you've spent enough time hiking in the subalpine and alpine regions of the Indian Peaks Wilderness (IPW), you may have run across large pieces of sandstone slabs and river cobbles at archaeology sites, the fragments of ground stone tools (e.g., Figure 1). Ground stone tools are found in around 40 percent of prehistoric sites in the IPW, and were likely used to grind edible plants such as tubers, berries, and pine nuts. Although ground stone tools can be less than inspiring to the average passerby ("it's a smooth rock, so what?"), the ground stone tools from the IPW are more impressive considering most of them were carried no less than 15 miles from the sandstone outcrops in the Front Range foothills. I don't know what you carry on hiking trips, but I certainly don't bother with a 10-pound rock. More intriguing, the subalpine and alpine regions of the IPW are not the most ideal places to forage for wild plants. Foragers would be far better off staying low, where there's less snow and more productive plants resources, yet they carried these cumbersome ground stone tools to many High Country archaeological sites. I was intrigued enough by this to devote my Master's thesis to it.



Figure 1: Ground stone artifacts collected from the Olson game drive site (5BL147) and published in LaBelle and Pelton (2013).

The large number of ground stone tools in IPW archaeology sites intrigued Jim Benedict as well. During his 40+ years of archaeological research in the region, Benedict documented ground stone tools in many dozens of archaeological sites, so many that he eventually stopped collecting them. They are, after all, very heavy to pack out. In a classic study of Colorado Front Range prehistory, Benedict attempted to explain the ubiquity of ground stone tools in the High Country by suggesting “The abundance of grinding-slab fragments above timberline, where plant-food resources are relatively limited, is best explained by their wholesale discard at this stage in the seasonal transhumance cycle.” (Benedict 1992:13). Perhaps dissatisfied by this explanation, Benedict later returned to the subject of edible plants.

Benedict (2007a, 2007b) found that edible plants, although there are many types in the subalpine forest and alpine tundra, are unpredictable from year to year. A blueberry patch may be laden with fruit one summer, but completely barren the next. Root crops, such as mountain potato (*Claytonia lanceolata*), may be easy to dig one year and deeply buried the next. Limber pine nuts (*Pinus flexilis*) may flourish one year, but not again for another several years. In other words, the IPW has enough plants to make foraging for them worthwhile, but you really have to know what you’re doing. There is quite literally no ‘low-hanging fruit’.

In a recent study (Pelton 2017), I attempted to make some sense of IPW plant use through a synthesis of Benedict’s work combined with some foraging theory. I entered the study with the basic assumption that ground stone tools in IPW archaeological sites are located in the places to which they were transported, used, stashed for later use, and perhaps eventually discarded. In other words, once someone carried a sandstone slab 15 miles, they probably left it in camp, knowing they would return later, a behavior known to behavioral scientists as ‘provisioning place’ (Kuhn 1995).

I envisioned the provisioning of IPW camps could be accomplished in a couple ways. If you were a forager focused on one staple plant crop, such as pine nuts, you might choose to provision a small number of camps close to pine nut stands with a large number of ground stone tools, a strategy I call ‘specialist’. If, on the other hand, you are a forager that utilizes a diversity of plant resources, you might choose to provision a small number of tools among each of a large number of camps near a diversity of plant resource patches. I call this a ‘generalist’ strategy, and hypothesized that it might best explain the distribution of ground

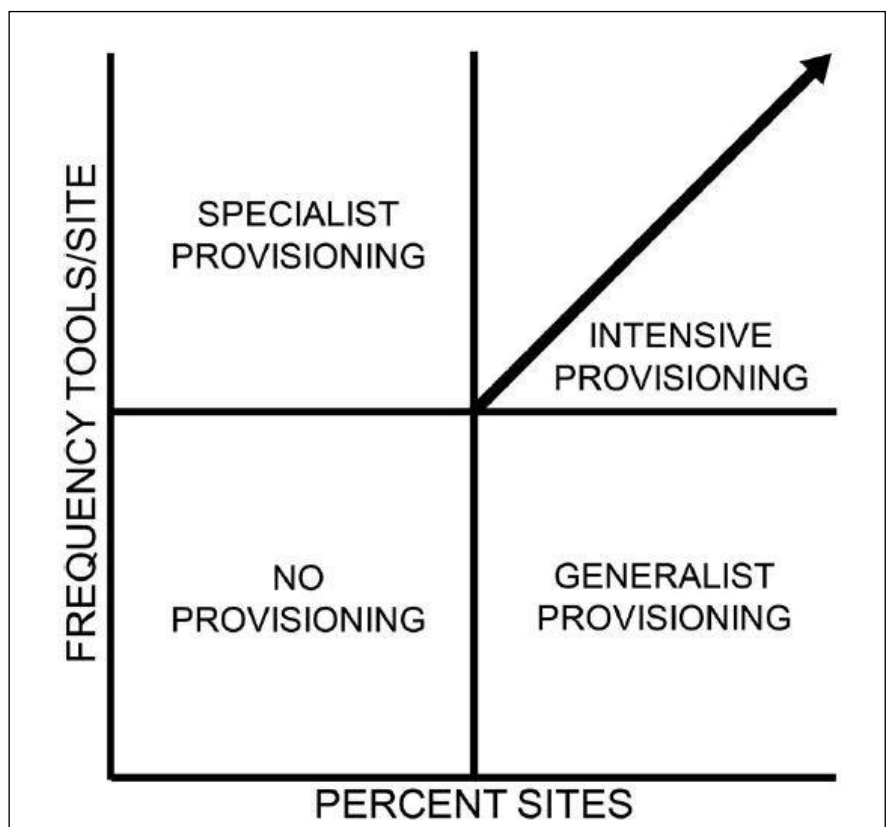


Figure 2: Conceptual foraging model for different place provisioning strategies.

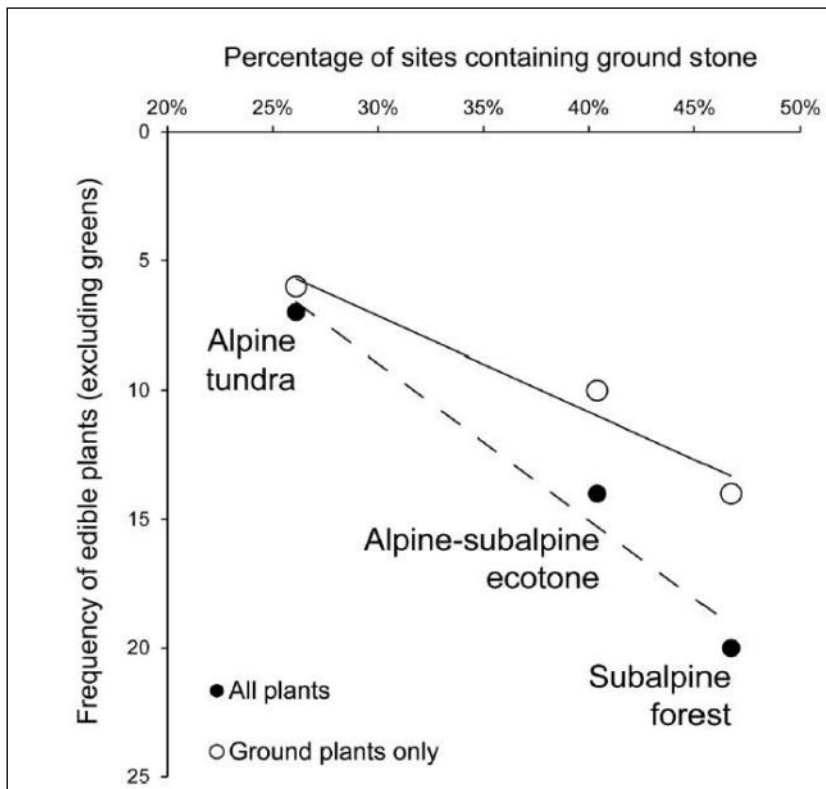


Figure 3: The relationship between frequency of edible plants and percent sites containing ground stone tools for three ecological zones in the Colorado Front Range.

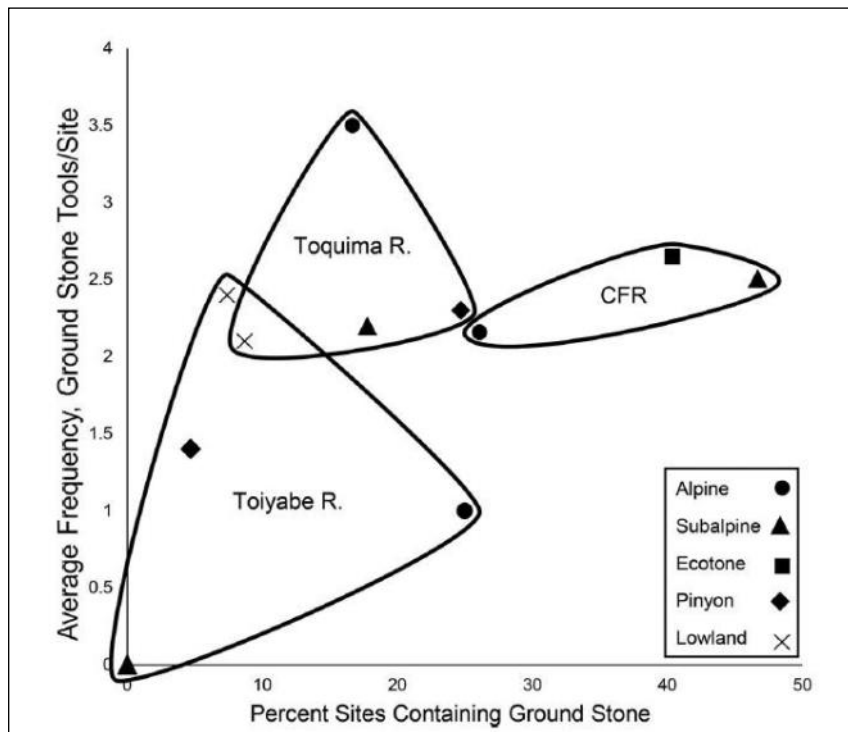


Figure 4: Comparison of ground stone tool abundance between the Colorado Front Range and two central Nevada mountain ranges. Nevada data from Hildebrandt (2013).

stone tools in the IPW, given its unpredictable plant resource base. These basic predictions are depicted graphically in Figure 2.

By compiling geospatial and ground stone data for IPW archaeology sites, I found a couple of interesting things. First, I found that the percentage of sites that contain ground stone tools in an ecological zone is related to the diversity of edible plants in that zone. The more kinds of plants, the more sites have ground stone tools (Figure 3). I concluded that this pattern is supportive of a generalist foraging strategy, in which the places with the greatest diversity of plants are provisioned with the most ground stone tools. Perhaps this was a response to annual resource unpredictability.

I found further that the distribution of ground stone tools in the IPW when compared to other mountainous regions is most comparable to a generalist strategy in which a large number of sites are each provisioned with a small number of tools (Figure 4). In fact, in comparison to the Toiyabe and Toiyabe Ranges of central Nevada, the Colorado Front Range has a very large number of ground stone tools, suggesting that it was, on the whole, more intensively provisioned with ground stone tools than other High Country regions.

Consider for a minute the differences between how prehistoric foragers used the IPW and how we do today. We typically enter the High Country with all we need to survive strapped to our backs. We establish a base camp and then maybe go fishing,

climb a peak, or explore a glacier, but then return to our camps at night to eat and sleep. Prehistoric foragers in the CFR High Country did things differently. They would have entered the High Country knowing which edible plants were worth pursuing on a given year and likely would have positioned their camps accordingly. Perhaps they had stashed ground stone tools at those camps during previous years, and some member of their group possessed the cultural memory to recall that. Once all the berries were picked or roots were plucked, they would have moved camp, following the ripening of resources uphill throughout the spring and summer. What is clear is that the distribution of ground stone tools in the Colorado Front Range reflects an intimate knowledge of the IPW landscape accumulated over many generations of use.

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SEPTEMBER EVENTS CALANDER

Lectures			
9/11/2017 7:00pm	Who's in Charge here? A look at Fremont community layout, organization, and activities	Lindsay Hamilton	Denver Museum of Nature and Science, Ricketson Auditorium (Denver CAS)
9/13/2017 7:00pm	Chronological Reconstructions at High-Altitude: Results of the 2017 Field Season at the 5BL148 Game Drive, Rollins Pass, Colorado	Kelton A. Meyer	Medical Center of the Rockies, Arapahoe Room (Northern Colorado CAS)
9/14/2017 7:00 pm	Ancient Settlement Pattern Changes in Coastal Oaxaca, Mexico	Jessica D. Hedgepeth Balkin	University of Colorado Museum, Paleontology Hall (IPCAS Lecture)
9/15/2017 7:00pm	Forensic Investigation of the 17th Century Chesapeake: Colonial Jamestown and Historic St. Mary's City	Dr. Douglas Owsley	Forth Lewis College Student Union, Ballroom. Durango, CO. (San Juan Basin Archaeological Society CAS)
Events and Conferences			
9/7/2017 - 9/10/2017	ACRA Annual Conference	Philadelphia, PA	http://www.acra-crm.org/annual-conference
9/9/2017 10am to 3pm	Wyoming State Archaeology Fair @ Wyoming Territorial Prison State Historic Site	Laramie, WY	http://www.wyomingarchaeology.org/2017-archaeology-fair.html
9/9/2017 9:00am to 10:30 am	History Hounds: South Mesa in Boulder County	Boulder, CO	http://www.historycolorado.org/event/history-hounds-south-mesa-boulder-county-0
9/23/2017 - 9/24/2017	Stone Age Fair	Loveland, CO	http://www.stoneagefair.com/2017_saf/index.htm
Workshops			
9/30/2017 1:00pm to 3:00pm	Social Media, Mobile Technology and Archaeology Workshop	Gunbarrel Fire Station - Gunbarrel, CO	http://www.indianpeaksarchaeology.org/archaeology-events-boulder/workshops

2017 IPCAS Board & Supporting Members

Board Members

President	Rosi Dennett	rosidennett@gmail.com
Vice President Elect	Lynda McNeil	lynda.mcneil@colorado.edu
Secretary	Debbie Smith	debbiesmithcmc@gmail.com
Treasurer	Hal Landem	hal963landem@gmail.com

At Large Board Members

	Cheryl Damon	cheryl_damon@msn.com
	Joanne Turner	joanne.turner@colorado.edu

Appointed Positions

PAAC Coordinator/CAS Rep	Delane Mechling	mechlings@hotmail.com
Outreach Coordinator	Allison Kerns	AllisonMKerns@gmail.com
CU Liaison	Gretchen Acharya	gacharyafinearts@gmail.com
Archivist	Kris Holien	kjholien@aol.com
Calumet Editor/News & Events	Christopher Kerns	ChrisJKerns@gmail.com
Website Administrator	OPEN	
Professional Advisor	Bob Brunswig	robert.brunswig@unco.edu

Editor: Christopher J. Kerns

Members are encouraged to send ideas or material for The Calumet. All content is subject to review and approval by the IPCAS Board.

The submission deadline is the 3rd Monday of the month for the next month's issue.

Send to indianpeaksarchaeology@gmail.com or ChrisJKerns@gmail.com

