

In-Situ



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INSIDE THIS ISSUE:

Eva Jensen, NAA President President's Corner

I guess I am part of the troop movements this issue. I am working at Great Basin National Park in east central Nevada, about as close as you can get to Utah without falling in. Spring and archaeology in the Great Basin and Mojave Desert doesn't get much better than this! I hope you are all enjoying the 'slightly cooler' season in the south and the pre-fire season in the north. It has been a great spring for NAA as well.

Lovelock

"Lock your Love in Lovelock" How could we go wrong? 2009 is the 85th anniversary of the original Lovelock Cave archaeology publication. The 38th Annual Meeting of the Nevada Archaeological Association held in Lovelock to commemorate the history of Nevada archaeology was a big success. Over 100 people registered for the conference. (I don't know how many registered to lock their love.) Mark Giambastiani did an outstanding job with the program fitting in 29 presentations in a day and a half. David Hurst Thomas of the American Museum of Natural History gave the keynote address discussing the history of archaeology of caves in Nevada and his work at Alta Toquima "Alta Toquima Archaeology: The Higher you Get, the Higher you Get". As a side note, Dr. Thomas graciously donated his time and travel to support the NAA. The field trip on Sunday included a guided tour to Lovelock Cave and Leonard Rockshelter with BLM Archaeologist Peggy McGuckian. This was a pilgrimage for about 45 Nevada archae-



Our fearless leader, President Eva Jensen.

ologists that day.

Awards

The Ting Perkins Award was presented to Donna Murphy of the Elko county chapter. Donna has been a guiding force for preservation and interpretation and a long time supporter of archaeology and one archaeologist in particular. Donald Fowler and Catherine Fowler were each presented with the NAA Lifetime Achievement Award for their significant contributions to Nevada archaeology.

The Board

Three new board members were elected during the general membership meeting. New to the board this year are Laurie Perry, Jeff Wedding, and Lynn Furnis. Laurie was on the board previously but had taken some time away from the board or maybe it was boredom. Laurie will be secretary this year. Jeff Wedding has been helping the last few years with the auction. He will be a member at large and continue to coordinate the auction as chair of the Committee for Auction Affairs. Lynn Furnis is starting her first term this year as a member at large (she agreed and we voted while she was gone). Continuing board members are Eva Jensen, president; George Phillips, treasurer; Daron Duke, membership; Hal Rager, web master, Elizabeth Russell, site steward liaison; and Greg Seymour, member at large, will coordinate the newsletter. Elizabeth Dickey has volunteered to act as editor in chief for the newsletter although she is not

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(President's Note, Continued from cover)

a formal member of the board....yet. If you have any comments or suggestions for the board please contact them through the NAA web site www.nvarch.org . Special thanks to departing board members, Suzan Slaughter, Mark Giambastiani, and Greg Haynes.

Money Matters

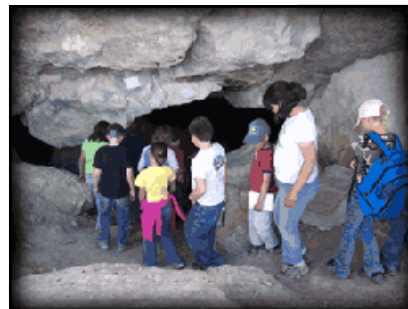
The Committee for Auction Affairs, Jeff Wedding and Diane Winslow, did an excellent job and coaxed \$\$\$\$\$\$ (much money) from your most prolific purses to support NAA programs. THANK YOU ALL for your donations! Thanks again to Peggy and Mark for the arrangements and especially the beautiful weather. Peggy has friends in high places!

Looking Forward

Next year's annual meeting will be a southern venue, either Las Vegas or Boulder City next spring. We will keep you informed. The 2008 Journal should be off the presses and in your hands in June and the 2009 edition will be ready in late 2009. The next Three Corners Conference proceedings volume will be printed this month and available for purchase through the NAA. Look for ordering information and details on the NAA web site.

Peggy McGuckian, Bureau of Land Management 350 CHILDREN FOUND IN LOVELOCK CAVE

Nearly 350 fourth-graders from Winnemucca, Lovelock and Imlay descended on the Marzen House Museum in Lovelock and Lovelock Cave for a day of fun-filled educational activities on May 6, 7, and 8 for the fourth annual Lovelock Cave fieldtrip. The event was sponsored by the Bureau of Land Management Winnemucca District Office and the Nevada Outdoor School as part of Nevada Archeology and Historic Preservation Month. This event was first held in 2006 in honor of the 1906 Antiquities Act Centennial and has since become an annual event which has grown in popularity with each passing year.



4th Graders at Lovelock Cave. Photo courtesy Nevada Outdoor School.

At the Marzen House Museum in Lovelock, the children saw artifacts from Lovelock Cave as well as learned about local history, vin-

Board Again

The next board meeting will be held at the Great Basin National Park visitor center education facility in Baker, NV on July 18th at 2:00 p.m. (Happy Birthday to me). There will be a field trip to archaeological and historic sites of Great Basin NP on Saturday morning at 9:00 a.m. Meet at the Lehman Cave Visitor Center in the Park. Bring a lunch or plan to have lunch at the café. All NAA members are welcome to attend board meetings and field trips. If you would like to schedule a regular cave tour on your own contact the park at 775-234-7331.

We have reserved the Graycliffs group camp area Loop B-1 for Friday and Saturday night if you would like to camp with the group for free. Other camp areas are available for the regular park fee of \$12.00 per site. There is no park entry fee.

FYI - National Register Sites of Great Basin National Park

Great Basin National Park has five historic sites listed on the National Register of Historic Places: Lehman Orchard and Aqueduct, Rhodes Cabin, Baker Ranger Station, Johnson Lake Mine and Historic District, and the Osceola (East) Ditch. We will visit some of these on the field trip (not Johnson Lake). Other things to visit while you are here are Wheeler Peak and the scenic drive, the Bristlecone Forest, and Lehman Visitor Center Café with terrific homemade ice cream sandwiches....not that I am partial but, chocolate chip cookies with Huckleberry ice cream are the best!

See you soon! ☺

tage houses, and how people lived in earlier times. When the fourth-graders arrived at Lovelock Cave they participated in interactive stations focused on the Paiutes, ethnobotany, emigrants, and the archeology and geology of the cave. Other popular activities included a simulated atlatl throwing game and a flint knapping demonstration. In the cave, a mock excavation unit was set up and the tools and techniques of archeology explained. The students received Lovelock Cave Junior Ranger Badges for their successful completion of the day's activities. ☺

Jeffrey R. Wedding, Harry Reid Center FROM THE AUCTION BLOCK

For the third consecutive year I had the pleasure of playing auctioneer, this time at the 2009 annual meeting in Lovelock. As I travelled north for the meetings I was unsure how the auction would fair given the current recession. Economic conditions can affect fundraising results in specific ways, and do not always impact on all aspects equally. As the NAA auction is really a grassroots effort of volunteers, a successful auction is exceptionally dependent on the generosity of all NAA members. NAA members both donate the auction items and give from their wallets to purchase the auction items. This year's auction is a testament to the commitment that NAA members have towards the organization. In total, the 2009 NAA auction raised \$1,138.00 (for those who know me, coincidentally, this amount total is a Star Wars reference!).

Thirty-nine auction lots were donated this year, including individual items and grouped items. Some of the items donated included: an original 1929 edition of the Lovelock Cave report by Loud and Harrington; a pair of English trowels; an assortment of jewelry items including earrings and necklaces; a copy of the new Great Basin book autographed by several of the contributors; a replica petroglyph rock; a collection of paper maché figurines;

and a number of homemade items including an afghan, banana bread, and pomegranate jelly. The highest priced item that sold was a copy of "Ceramics for the Archaeologist" by A. Sheppard. After a fierce bidding war, Greg Sey-



mour won the book, donated by Margaret Lyneis, for a cool \$120.00.

Item donors included: Lizzie Bennett, James and Liz Dickey, Don Fowler, Oyvind Frock, Lynn Furnis, the Harry Reid Center, Eva Jensen, Don Johns, Margaret Lyneis, Roberta McGonagle, Nevada Department of Transportation, Ron Reno, Paula Renosa, Barbara Rohde, Liz Russell, Suzan Slaughter, the University of Utah Press, David Valentine, Diane Winslow, and a few anonymous gifts. On behalf of the NAA, I want to thank you all for your generous support by donating auction items.

Thirty-two different auction bidders registered for the event, and 23 went home winners. All of the registered bidders contributed by participating, and the winners graciously contributed via their purchases as 100% of the proceeds go directly to the NAA. This year's winning bidders included: Alice Baldrice, Lizzie Bennett, Steve Daron, Lou Ann Speulda-Drews, Daron Duke, Susan Edwards, Mark Estes, Jerry Fuller, Lynn Furnis, Joe Griffin, Eva Jensen, Bob Leavitt, Spencer Lodge, Manetta Lytle, Laureen Perry, George Phillips, Kevin Rafferty, Jackie Raley, Paula Reynosa, Heidi Roberts, Liz Russell, Paul Scott, Greg Seymour, David Valentine, and Jeffrey Wedding. Again, on behalf of the NAA, I offer deepest and sincerest thanks for your participation, and congratulations to the auction winners.

If I have missed someone, or misspelled a name, please accept my apologies. As those in attendance are aware, we are making changes to the NAA auction process including the tracking of all donated auction items, item donors, bidders, and winners. If you have any suggestions you would like the auction committee to consider, feel free to email them to me, your favorite auctioneer, at boneman@unlv.nevada.edu. Once again I thank you all as we look forward to auction 2010! 🍀

**Kathryne Olsen, Director Lost City Museum &
Greg Seymour, Nevada Archaeological Association, Board of Directors**

EVA JENSEN- PRESIDENT OF THE NAA, A LOSS FOR THE NEVADA STATE MUSEUM SYSTEM, A GAIN FOR THE NATIONAL PARK SERVICE

It is with a mix of sadness and best wishes that we at the Lost City Museum say goodbye to Archaeologist/Curator Eva Jensen as she begins her new career as Cultural Resource Manager at Great Basin National Park. Sadness, because we will miss working with her, but we are happy for her to have this great opportunity.

In the eleven years that Eva was with the museum, she brought it to a high level of professionalism. She worked hard to expand relationships and partnerships with other cultural organizations and met with great success. She labored over scattered collections and missing data, to bring the information together in an organized manner.

Eva also worked on devel-

oping and curating the exhibits in the museum. She obtained funding for the overhaul of an entire gallery and contributed timely and accurate research on which to base all of our exhibits.

Most of all, she brought an excitement to her work that rubbed off on other staff members, volunteers and the public. Every year, she offered a training course for the volunteers and capped it off with a rollicking road trip throughout the state visiting other museums and cultural organizations. Needless to say, the volunteers love her!



Eva Jensen firing pottery at the Lost City Museum.

Her leaving is a great loss to the museum and to the State of Nevada, yet we take comfort in knowing that she is only 4 hours up the road

(Eva Jensen, Continued on page 5)



William G. White, Statistical Research Inc.

ABANDONED MINE CLOSURE PROJECT

Nevada abounds with many historic-period mine sites, up to 166,000 by some estimates, on public lands containing features hazardous to public safety. Under contract with the Army Corps of Engineers for the Bureau of Land Management, archaeologists from Statistical Research, Inc., under the supervision of William White, are once again in the field documenting abandoned mine features. Funded as part of SNPLMA-Round 7, the archaeologists will be working with 108 abandoned mines features located in seven widely spaced Lincoln County mining districts including the Chief, Comet, Delamar, Eagle Valley, Highland, Pioche, and Tempiute.

The photo at left is of a collapsed headframe associated with an inclined shaft near Pioche. The headframe probably dates from the 1920s-30s since a gasoline engine was used as the hoist motor. It is unusual since most shafts encountered are missing their headframe

Two years ago, William and his crew documented 380 mine features in Clark County. Though smaller in size, this project promises

(Mine Closure, Continued on page 5)

Dr. Kevin Rafferty, College of Southern Nevada

Valley of Fire Field School

The College of Southern Nevada conducted its fourth survey field school at Valley of Fire State Park in Clark County, Nevada. Thanks to the gracious support and interest of the park manager, Mr. Jim Hammons, the field school was a rousing success. Students learned about proper survey and site recording technique, while adding to the corpus of knowledge regarding Valley of Fire, which is still a poorly known archaeological entity. The survey examined a square mile of territory located east of and abutting Atlatl Rock, a major NRHP rock art site, plus a quarter mile square area south of and east of Atlatl Rock. Several interesting ar-

chaeological sites were recorded, including three campsites nestled amid sandstone outcrops in the northern portion of the project

area. One of these campsites was accompanied by two small panels of petroglyphs, that tentatively date that site to the Mid- to Late Archaic period (ca. 5500-2000 B.P.).

An additional site with two loci dissected by a campground access road was recorded just east of and adjacent to Atlatl Rock. It appears that this site was part of a larger campsite that was seriously disturbed by construction of the parking lot and picnic area next to Atlatl Rock. Despite these impacts there



2009 CSN Survey Area, Valley of Fire State Park, Clark County, Nevada

appears to be significant data remaining in this site that could yield important information on the pre-history of the Valley of Fire area. In addition more information was recorded on the Arrowhead Trail, an early transportation route (late 19th-early 20th centuries) that ran between the Muddy River Valley and the Las Vegas Valley. A project report is expected to be submitted by December of 2009 or January of 2010.

In addition, work is ongoing to develop an AAS degree in archaeology at CSN. It will hopefully be submitted to the CSN curriculum committee and the Board of Regents by late Spring of 2010. ☯



Detail of Atlatl Rock, Valley of Fire State Park, Clark

(Mine Closure, Continued from page 4)

to be equally rewarding in information collected with regards to historic mining activities, and will likely result in a paper presentation at the next NAA annual meeting. ☯

(Eva Jensen, Continued from page 4)

from us and that we can still enjoy her friendship and tap her expertise. But it won't be the same here without her.

On May 10th of this year, Eva filled the position of Cultural Resource Program Manager for Great Basin National Park. Among other things, the park is in the shadow of 13,063-foot Wheeler Peak and 5,000 year old bristlecone pine trees grow on rocky glacial moraines. Situated along the eastern border of Nevada and near the town of Baker, this part of the state includes some of the most beautiful scenery around. As the Park CRPM, Eva will continue to contribute to educating the public about Nevada's heritage as well as managing and protecting our cultural resources. ☯

Mini-Reports

Dr. Jeanne Schaaf, National Park Service

PRELIMINARY REPORT ON MACROFLORAL REMAINS FROM SITE 26LN2978

SOUTHERN NEVADA

Prepared for the Nevada Department of Transportation



Introduction and Methods

Preliminary identifications of carbonized and modern plant remains recovered from the floor of House Pit 2 (PH2), Site 26LN2978, are reported here. Site 26LN2978 is located in southern Nevada, between Crystal Springs and Ash Springs in Pahranaagat Valley, Lincoln County. The site was discovered and tested by Nevada Department of Transportation (NDOT) archaeologists Jim Bunch, Patti DeBunch and Steve Stearns. A 7-liter bulk sediment sample from a small feature on the house floor was processed using the water flotation technique described in Schaaf (1988). In 1-liter subsamples, the sediment sample was elutriated by DeBunch in a gallon glass jar by

directing a fine spray of water against the jar side. The angle and flow of the water was controlled to create a vortex, causing lighter particles to float off while gently churning the heavier residue. The light fraction was floated out of the jar and into a series of nested sieves grading from coarse to fine mesh, placed beneath the jar. For recovery of the smallest seeds, a sieve size of 0.25 mm (#60 U.S. Standard) was placed at the bottom of the nested sieves.

The floated fractions of the sample were air dried and sent to the author for recovery and identification of plant remains. Archaeologist Ann Biddle sorted the samples using a binocular microscope at 25x magnification. A stereo-zoom binocular scope

with the author's comparative collection of about 2000 specimens and references cited were used to make the preliminary identifications. Both of these collections were assembled by the author with the assistance of DeBunch and contain both vouchered and unvouchered specimens. The plants from which the seeds were collected are vouchered at the University of Minnesota herbarium in Minneapolis. Unvouchered seeds were contributed by Margaret Williams of the Northern Nevada Native Plant society, Dr. Fritz Went of the Desert Research Institute, Steve Sims of the University of Utah, and some were purchased from Plants of the Southwest in New Mexico. Vouchered plants were identified by Arnold Tiehm of the New York Botanical Garden, and by Jennifer Stephens and Jeanne Schaaf, both formerly with NDOT.

Results

More than 300 carbonized seeds and uncounted seed fragments were recovered from this small sediment sample from the floor of house pit 2. This conservatively represents a minimum of 10 genera tentatively identified here. At least six dis-

tinct seeds (all carbonized and not pictured here) remain unidentified, along with the unidentified grass and small oval seeds lumped with the *Juncus* sp. count. Modern contaminants are reported separately below.

Gramineae (Grass Family):

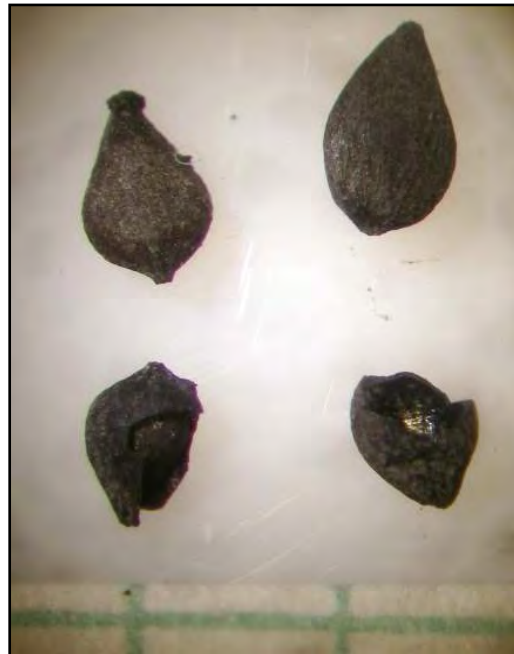
Sixty carbonized grass seeds and over 100 fragments found may represent more than one gen-



Unidentified Gramineae. Scale is in 2mm divisions.

Cyperaceae (Sedge Family):

Forty *Scirpus* sp. seeds plus seed fragments were identified. All are carbonized.



Scirpus sp. Bottom row seed fragments show seed coat thickness and charred endosperm. Scale is in 2mm divisions.

Dr. Jeanne Schaaf is the Chief of Cultural Resources at three Alaskan National Parks: the Lake Clark National Park and Preserve, the Katmai National Park and Preserve, and the Aniakchak National Monument and Preserve.

Juncaceae (Rush Family):

About 200 charred seeds are less than 1mm long, oval-shaped and round in cross section. Several are "bipointed" with terminal appendages and have a minutely reticulate surface texture characteristic of *Juncus*, but this group probably includes other small-seeded genera that should be further identified.



Carbonized *Juncus* sp. and unidentified seeds. Scale is in 2mm divisions.

Chenopodiaceae (Goosefoot Family):

Two carbonized seeds are small (less than 1 mm) *Chenopodium* sp. (not pictured here).

Fumariaceae (Fumewort Family):

One charred complete specimen has a small bit of reticulate outer seed coat adhering and is a close match with *Dicentra* sp. in the NDOT comparative collection.



Dicentra sp. Scale is in 2mm divisions.

Primulaceae (Primrose Family)?:

Three carbonized seeds are irregularly angled, finely reticulate and about 0.7 mm in size and share characteristics with seeds of this family.



Unidentified genera of Primulaceae family.

Compositae (Sunflower Family):

One carbonized seed is 2mm long and has a small pappus scar relative to most composites. It is very similar in size and appearance to *Madia* cf. *minima*



Compositae, cf. *Madia*. Scale is in 2mm divisions.

Solanaceae (Nightshade Family):

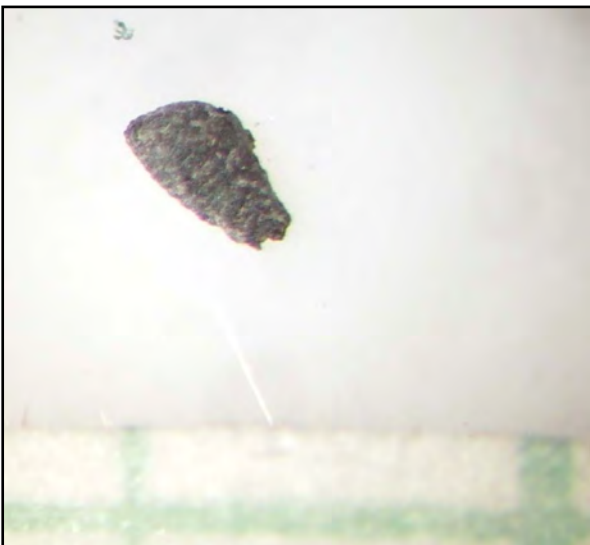
Two carbonized seed fragments have a surface reticulation that is characteristic of some genera in the Solanaceae family.



Solanaceae. Scale is in 2mm divisions.

Hydrophyllaceae (Waterleaf Family):

Two genera of the Waterleaf family are tentatively identified here: by five carbonized seed fragments: *Nemophila* cf. *menziesii* H. & A. with bullate surface texture and cf. *Eriodictyon* sp.



Cf. *Eriodictyon*. Scale is in 2 mm divisions.



***Nemophila* cf. *menziesii* H. & A on left, uncertain on right. Scale is in 2mm divisions.**

Unidentified Plant Parts



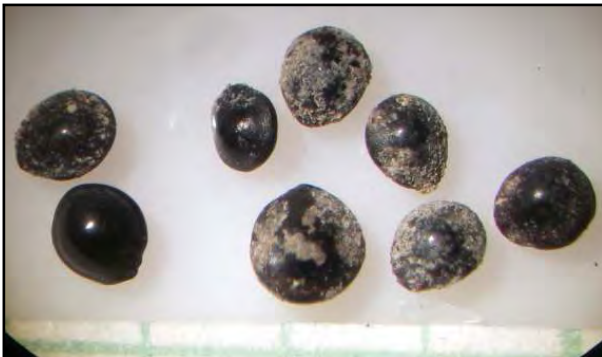
Unidentified carbonized spines. Scale is in 2mm divisions.



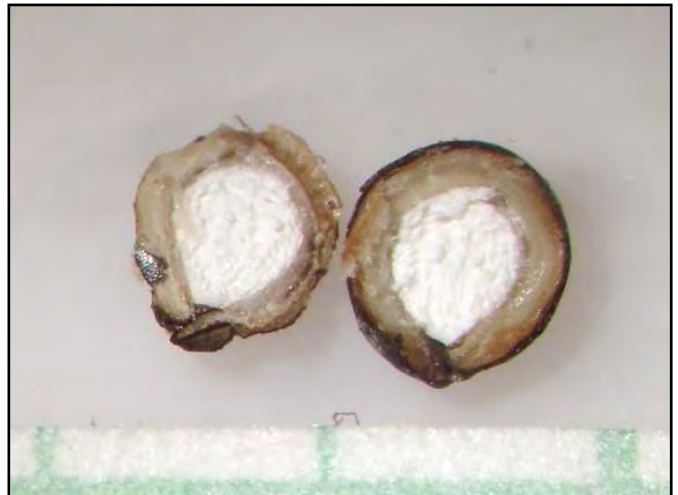
Unidentified carbonized plant remains. Scale is in 2mm divisions.

Modern contaminants *Amaranthaceae* (Pigweed Family) and *Chenopodiaceae* (Goosefoot Family):

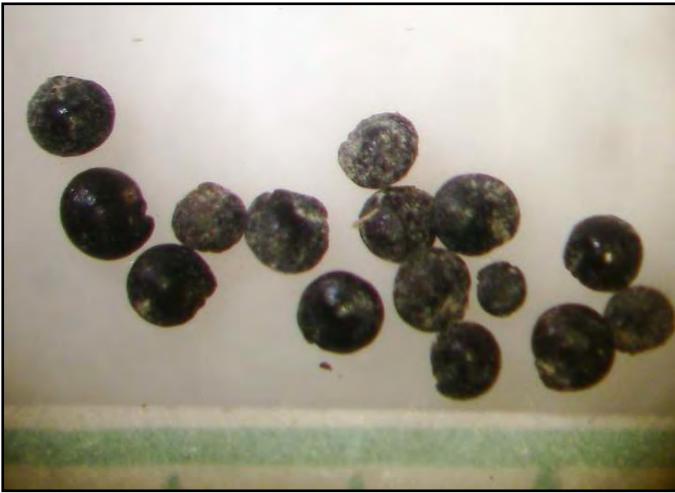
Sixteen uncharred and presumed-to-be-modern *Amaranthus* seeds were found in the sample. Further work including an inventory of modern vegetation at the site may verify an identification of *A. cf. graecizans* L.



Modern *Amaranthus* sp. Scale is in 2mm divisions.



Amaranthus sp. seed cross-section showing embryo and endosperm. Scale is in 2mm divisions.



Modern contaminant, *Chenopodium* sp. Scale is in 2mm divisions. There are 144 uncarbonized *Chenopodium* sp. seeds. This number probably includes some immature *Amaranthus* sp. seeds.

Recommendations

The small sediment sample collected from the floor of House 2 at Site 26LN2978 has yielded a surprising variety of carbonized seeds from wild plants. Several genera identified indicate a late summer/fall occupation near a wetland or marsh. Further work with an extensive comparative collection is needed to secure identifications of the seeds. This should be followed by a thorough literature review to understand their cultural and paleoenvironmental significance. If further work is conducted at the site, an inventory of the modern vegetation would be important. The variety and abundance of seeds in this small exploratory sample indicates that additional testing and collection of sediment samples from a variety of site features could contribute significant information about the site. While the modern unburned con-

taminants are easily recognized, the possibility of carbonized contaminants must be evaluated relative to modern site area fire history and exposure to other types of disturbance.



References

- Abrams, L. and R. Ferris
1960 *Illustrated Flora of the Pacific States*. Volumes II, III and IV. Stanford University Press.
- Cronquist, A, A. H. Holmgren, N. H. Holgren, J. L. Reveal, and P. K. Holmgren
1977 *Intermountain Flora: Vascular Plants of the Intermountain West, U.S.A.* Columbia University Press, New York.
- Lawrence, G.H.M.
1955 *An Introduction to Plant Taxonomy*. Macmillan Publishing Co., Inc. New York.
- Martin, A.C. and Wm. D. Barkley
1961 *Seed Identification Manual*. University of California Press.
- Moerman, D.E.
Medicinal Plants of Native America. University of Michigan
Museum of anthropology Technical Reports Number 19.
- Schaaf, J.M.
A Method for Reliable and Quantifiable Subsampling of Archaeological Features for Flotation, *Mid-continental Journal of Archaeology*, Vol.6, No. 2.

Robert L. Hafey

Using the GPS to Walk Transects

This paper will provide specific instructions or suggestions on how to setup the GPS to facilitate *transect walking* for field surveys.

Systematic field walking is essential to surveying an area of potential archaeological significance. This means the establishment of specific transects to be walked over a specific area. The area chosen for this paper is 1 sq. km located in Sand Spring Valley. Transects have been established at 20m intervals for pedestrian survey (Hester 1997, p54), the determination of 20 meter spacing was established because of relatively good surface visibility. This would permit one to observe and make collections of material approximately 10 meters to either side of the North South transect center.

Materials and equipment used:

- Garmin ETrex Vista GPS
- Mapping Program - *ALL TOPO MAPS: NEVADA* by iGage
- Poles with flags
- Walking stick or something to mark position when deviating from transect.

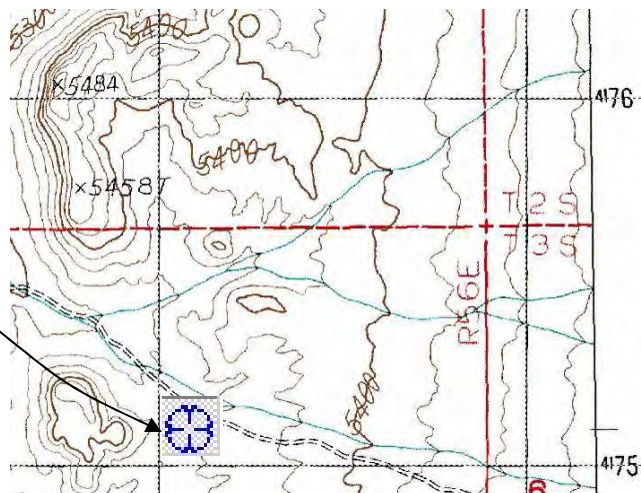
Methodology

Waypoints or PINS are entered into the mapping program or directly into the GPS along the ⁴¹75 Northing coordinate and along the ⁴¹76 coordinate at 20-meter intervals between the 620,000 and 621,000 Easting coordinate. The naming of each of these pins is based on their distance from their Easting number along that particular coordinate.

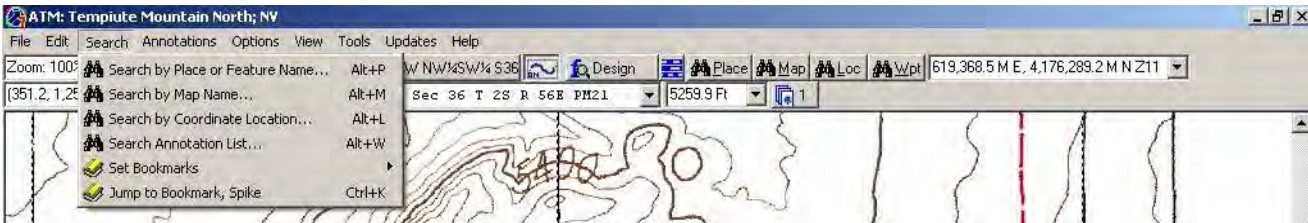
Using the iGage ALL TOPO MAPS program you would place a *bookmark* close to the intersection of the 620000E and 4175N quad. Next you would select "Search Annotation List..." then select "Options"...followed by "Arch-Grid"... then choose: "select bookmark" and: "Rnd", then after closing the this window the program will automatically generate all of the *pins* and *guide markers* for a 1 km square area. NOTE: By default in the "Arch-Grid", the settings for the "X" axis (north south) and the "Y" axis (east west) have been set to produce transects for 1 sq. km. You can change these settings to produce any sized search grid from the "Arch-Grid" menu.

EXAMPLE:

1. Setting bookmark as close as possible to south west corner of quad to be surveyed. (to set bookmark place cursor at this point and enter #1)



2. Select "Search Annotation List..."

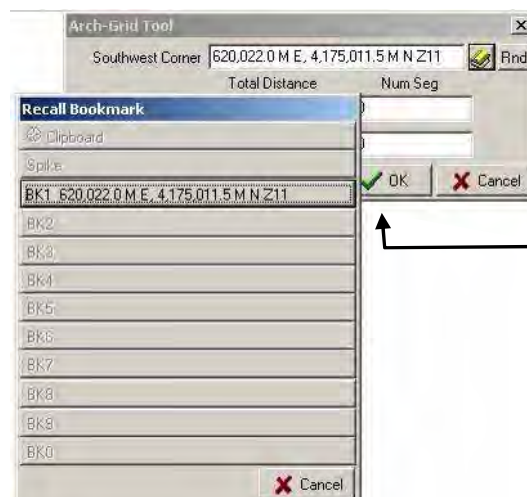


3. Select "Options"



4. From "Options" list select "Arch-Grid"

5. From the "Arch-Grid" select and load bookmark.



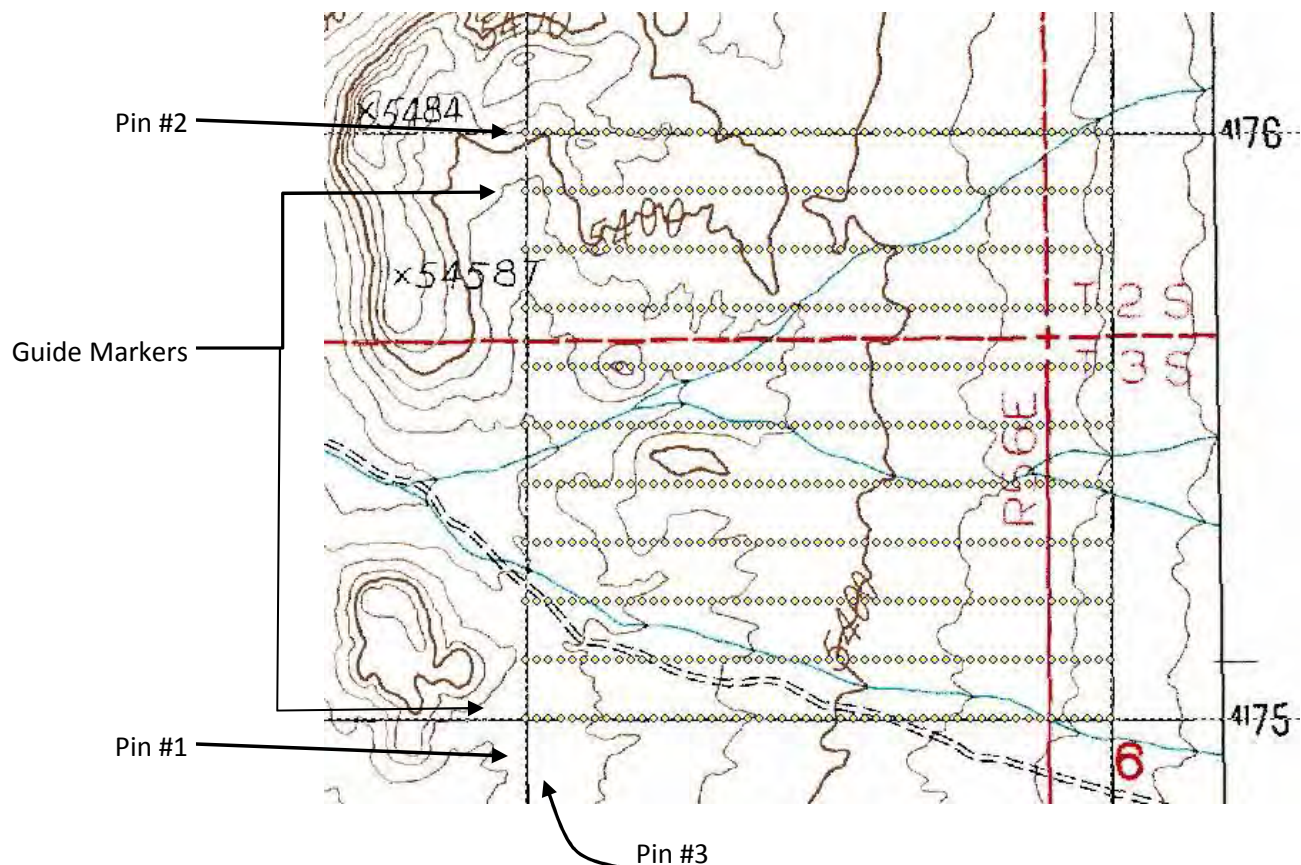
6. Next select :Rnd".

7. Next select "OK"

After selecting "OK" the following screen will be presented with all of the waypoints for the pins and guide markers listed. By closing this window all of the pins and guide markers will appear on the map.

Num	Inc	Line	Name	Description	Note	Location
1	0		0000ES	0000ES		620,000.0 M E, 4,175,000.0 M N Z11
2	0		G01_00	G01_00		620,000.0 M E, 4,175,100.0 M N Z11
3	0		G02_00	G02_00		620,000.0 M E, 4,175,200.0 M N Z11
4	0		G03_00	G03_00		620,000.0 M E, 4,175,300.0 M N Z11
5	0		G04_00	G04_00		620,000.0 M E, 4,175,400.0 M N Z11
6	0		G05_00	G05_00		620,000.0 M E, 4,175,500.0 M N Z11
7	0		G06_00	G06_00		620,000.0 M E, 4,175,600.0 M N Z11
8	0		G07_00	G07_00		620,000.0 M E, 4,175,700.0 M N Z11
9	0		G08_00	G08_00		620,000.0 M E, 4,175,800.0 M N Z11
10	0		G09_00	G09_00		620,000.0 M E, 4,175,900.0 M N Z11
11	0		0000EN	0000EN		620,000.0 M E, 4,176,000.0 M N Z11
12	0		0020EN	0020EN		620,020.0 M E, 4,176,000.0 M N Z11
13	0		G09_01	G09_01		620,020.0 M E, 4,175,900.0 M N Z11
14	0		G08_01	G08_01		620,020.0 M E, 4,175,800.0 M N Z11
15	0		G07_01	G07_01		620,020.0 M E, 4,175,700.0 M N Z11
16	0		G06_01	G06_01		620,020.0 M E, 4,175,600.0 M N Z11
17	0		G05_01	G05_01		620,020.0 M E, 4,175,500.0 M N Z11
18	0		G04_01	G04_01		620,020.0 M E, 4,175,400.0 M N Z11
19	0		G03_01	G03_01		620,020.0 M E, 4,175,300.0 M N Z11
20	0		G02_01	G02_01		620,020.0 M E, 4,175,200.0 M N Z11
21	0		G01_01	G01_01		620,020.0 M E, 4,175,100.0 M N Z11
22	0		0020ES	0020ES		620,020.0 M E, 4,175,000.0 M N Z11
23	0		0040ES	0040ES		620,040.0 M E, 4,175,000.0 M N Z11
24	0		G01_02	G01_02		620,040.0 M E, 4,175,100.0 M N Z11
25	0		G02_02	G02_02		620,040.0 M E, 4,175,200.0 M N Z11
26	0		G03_02	G03_02		620,040.0 M E, 4,175,300.0 M N Z11
27	0		G04_02	G04_02		620,040.0 M E, 4,175,400.0 M N Z11
28	0		G05_02	G05_02		620,040.0 M E, 4,175,500.0 M N Z11

Initial survey area of quad located at: UTM 620000E 4175N



Making entries into your GPS unit you would establish the pins and guide markers by entering individual waypoints. For Example Pins #1 and #2 would be located at:

- Pin #1 @ 620000E ⁴¹75N and would be NAMED: "ES" (representing zero East and zero North)
- Pin #2 @ 620000E ⁴¹76N and would be NAMED: "EN" (representing zero East one North.) This establishes your North South transect center line.

Additional Pins are established along the ⁴¹75 and ⁴¹76 coordinates at 20 meter intervals to establish the transects to be walked.

Then Pins #3, #4 and successively numbered pin would be numbered accordingly and spaced at 20 meter intervals.

- Pin #3 @ 620020E ⁴¹75N and would be NAMED 20ES (twenty East zero North)
- Pin #4 @ 620020E ⁴¹76N and would be NAMED 20EN (twenty East one North)

NEXT comes the 100 meter *guide markers*. ("Guide markers" assist in facilitating walking a straight line.) Even though you have now established transects spaced at 20 meter intervals walking a straight line for 1,000 meters over varied terrain from the south pin to the north pin would be nearly impossible.

Guide markers are placed every 100 meters between the ⁴¹75 and ⁴¹76 coordinates and numbered accordingly:

- *Guide marker #1* @ 620000 E 4175100N and name would be = g1
- *Guide marker #2* @ 620000 E 4175200N and name would be = g2
- #9 @620000E 4175900N and name would be = g9

Essentially what you have done is provided yourself with a line of markers spread out at 100-meter intervals for the 1,000 meters that you intend to walk. These markers provide you with a visual reference point (in the GPS screen) to see how far you are off the centerline of the transect you are walking. Without *guide markers* you would have to remember the two digits of the Easting number to see how much deviation you are making from the straight line.

Robert Hafey helped develop the Arch-Grid module to simplify laying out transects. The module is now used by iGage Mapping Company's "All Topo Maps". During the development of the Arch-Grid module, several Boy Scouts became lost in the mountains in Utah. The Search and Rescue units were about ready to give up the search when Mark Silver, owner of the iGage Mapping Company, introduced the Arch-Grid program to searchers. The method was implemented by the Search and Rescue units and the boys were found alive. The FBI also now utilizes this program for systematic searches over difficult terrain.

Operation

When you arrive at the area that you are going to survey turn on the GPS receiver. Wait until it has warmed up and be sure that the compass is calibrated. Remember that the compass needs to be re-calibrated each time the batteries are replaced.

After you locate the location of your first pin, which in this case is 0E0N or 620,000 4175000 stand at that location and select 0E1N for the GO TO location (see photo #1). Then on the TRACK screen you will observe a line has been drawn from your location to 0E1N that represents the transect you are to walk (see photo #2). The line is more like a rope that connects you to 0E1N and as you walk what appear as cracker crumbs will trace where you have walked.

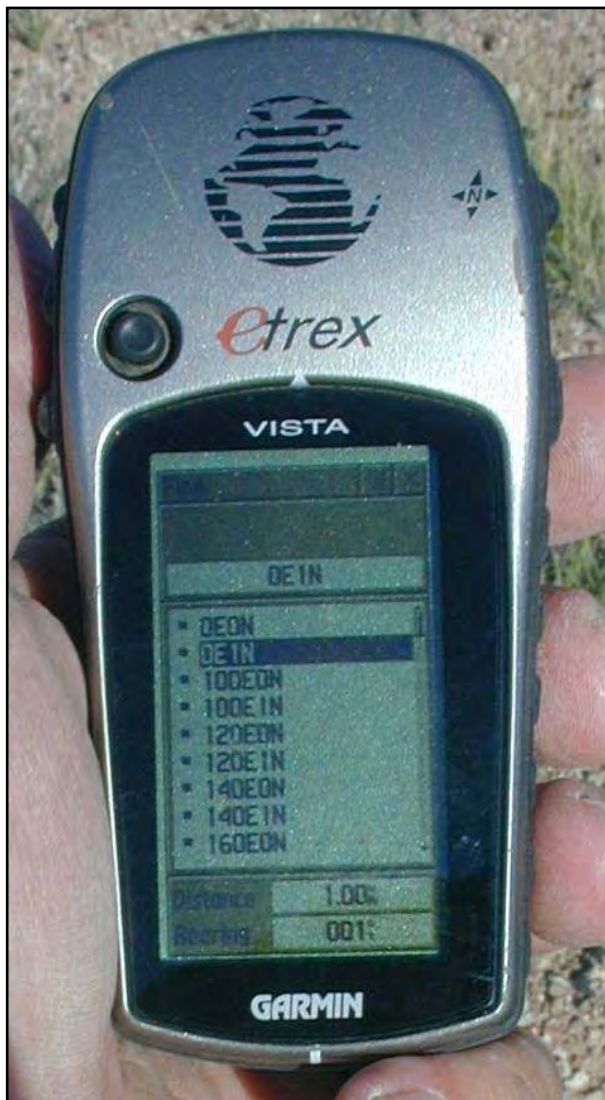


Photo #1

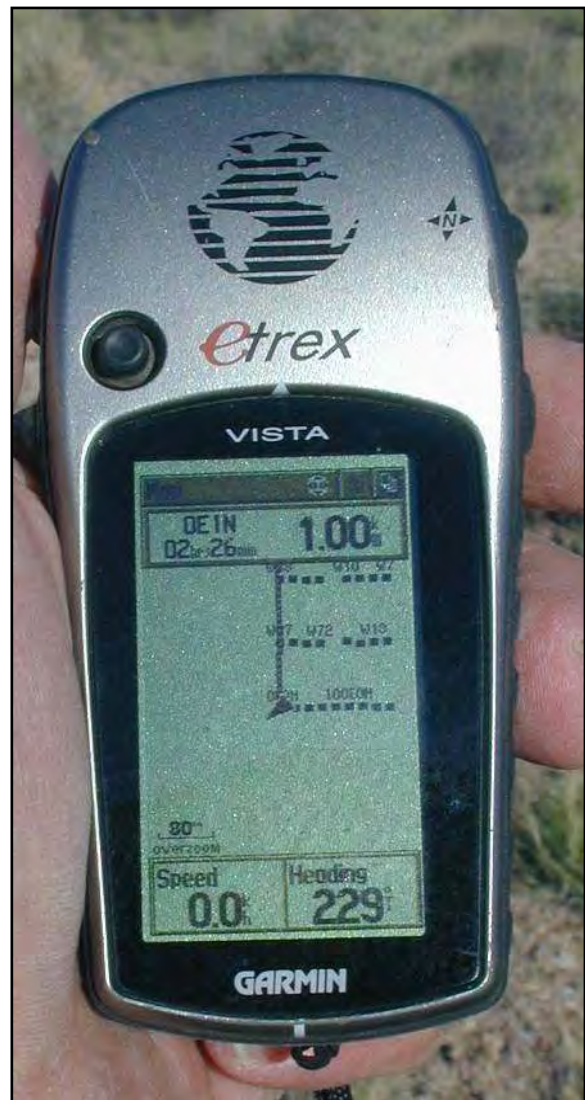

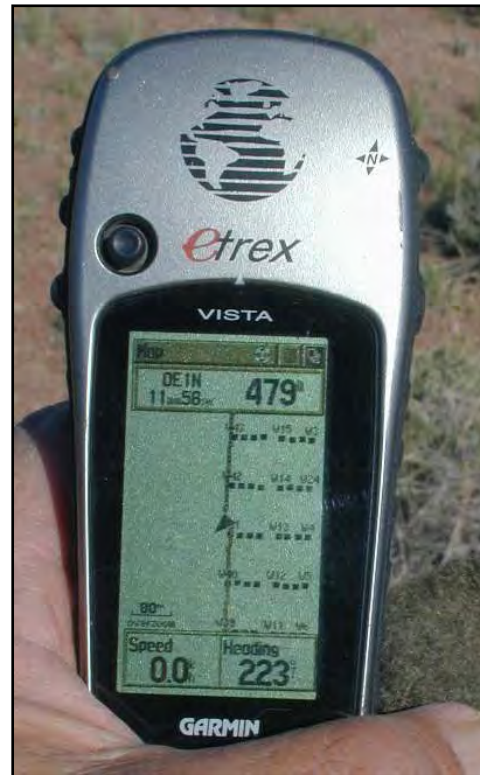


Photo #2

As you walk your transect you will need to occasionally glance down at the screen to check the alignment of the line that goes to OE1N over the *guide markers*. Here is where it is necessary to mark where you are on the line when you make a deviation from the line to observe or collect something. This will permit you to return to your spot of deviation and return to straight transect walking.

The picture to the right illustrates where a deviation has been made from the transect. You can easily see where the cracker crumb trail where you have walked goes over the *guide markers* and where the rope from your present position leading to OE1N has been pulled over to the left of the *guide markers* where the deviation has been made. It is easy to see how important the *guide markers* are. Especially if you are walking in a heavily wooded area.

As you approach OE1N there are no *guide markers* past that location to assist you in walking to your final destination. This is where it is important to have previously placed a readily visible object to align on otherwise it is essential to follow the exact Easting UTM number. 



Suggestions

1. After determining what area to survey make a thorough operational plan on how to conduct the survey. Especially visibility issues as visibility should be used as a guide to determining the width of the transects to be walked.
2. If you have a mapping program make a master waypoint file that has all of the *pins* and *guide markers* on it.
3. Prepare survey area prior to survey if possible. Set flags up prior to walking for assisting in visibility. (note: transect ending *pins* do not have *guide markers* past them and a pole with a flag on top would visually assist walking directly to the ending *pin*.)
4. Be sure that equipment is operational and that you have extra batteries for the GPS.

For assistance of further explanation feel free to call me.

Bob Hafey (775) 729-2561

Reports from Chapters and Affiliates



STATE HISTORIC PRESERVATION OFFICE:

Legislature Cuts Programs

By Alice Baldrice, Deputy SHPO

As I write this column, the 75th session of the Nevada State Legislature has almost completed its work and the State of Nevada has a budget for the next biennium. Aside from cutbacks in hours, it appears the State Historic Preservation Office lost program money but not staff. We are fairly certain that the new budget includes funding for the site stewardship coordinator but programs such as the Nevada State Register and the Historical Markers have been cut. We are using more federal funds to support staff too. Furlough days are required but at present it is unclear how furloughs will affect state agency work days. This comes at a time when the workload

created by federal stimulus dollars for all manner of construction, and geothermal, solar and wind energy projects is growing in volume. Review and compliance staff have seen a major increase in their work.

The good news in legislation comes from both state and federal governments. Congress passed the Omnibus Public Land Management Act of 2009 which provides protection for paleontological resources on federal land similar to that provided to archaeological resources. On the state level, Assemblyman Harry Mortenson sponsored AB 289, 305 and 306 which provide for a consideration of paleontological resources in local government planning, establish provisions for conservation easements on

paleontological sites, require the Division of Museums and History to designate an ex-officio state paleontologist, complete a database of fossil resources and names April as Paleontology Month for the State of Nevada. All three bills passed and have been signed into law.

The SHPO presented Historic Preservation Awards to Joanne and Don Murray of Sparks, Nevada for the hundreds of hours they have donated to the Nevada Rock Art Foundation, the Bureau of Land Management and the Nevada Archaeological Site Stewardship program. In addition, Don Hendricks was honored for his work as an advocate for archaeological sites in southern Nevada. ☺



NEVADA ROCK ART FOUNDATION:

Upcoming Events

Mark Boatwright (Las Vegas BLM) is looking for NRAF volunteers to help him with recording work at selected sites in Clark County. If you are interested in volunteering email info@nvrockart.org with your

contact details; you will be contacted with more information later when Mark Boatwright has finalized his fieldwork schedule.

We are also in the planning phase of the Lincoln County Rock Art Inventory Project. We expect to start making the site inspections to record baseline

information about site condition and characteristics in the late spring and during the Fall. More information will be forthcoming once the fieldwork schedule has been finalized. ☺



ELKO COUNTY CHAPTER:

Archaeology Fair

By Donna Murphy, Secretary/Treasurer

The Elko County Chapter members held their annual **Archaeology Fair** on May 9th. Approximately 150 people came through, looking at the exhibits and letting the children string

amulets and grind seeds. About 60 kids from another event at the museum came through and some of them were quite interested. We received three new memberships.

The group will be participating in the California Trail

Days celebration at the interpretive center here on May 29th and 30th. We will have Tim's Native Plant Foods Exhibit and a Seasonal Round food gathering demonstration and possibly some dogbane cordage making demonstration. ☸



NEVADA ARCHAEOLOGICAL SITE STEWARDSHIP PROGRAM:

Basic Prehistoric Lithic Technology Demonstration Workshop

By Sali A. Underwood

On May 16, 2009 the Nevada Archaeological Association (NAA) in conjunction with the Nevada Archaeological Site Stewardship Program (NASSP) and the Nevada State Museum, Las Vegas held a Basic Prehistoric Lithic Technology Demonstration Workshop at the Nevada State Museum, Las Vegas in honor of Historic Preservation and Archaeological Awareness month. Site Stewards, museum members and the general public learned how stone tools were manufactured by prehistoric cultures of Nevada.

The workshop focused upon safety, tools used in the making stone tools such as hammerstones, antlers, and pressure flakers, and demonstrated basic stone tool manufacturing such as; core reduction, flake production, and biface and blade development. The appro-

priate lithic material used in the making of tools was also discussed. The workshop empha-



Many Nevada Site Stewards look on as archaeologist Will Reed demonstrates prehistoric lithic technologies; May 16, 2009.

sized to not practice flint knapping on cultural sites and to make sure that raw materials are collected with permission from land managers and owners. The workshop was enthusi-

astically received by the attendees. Many questions were asked about the different methods, terminology, and raw materials which lead to a greater overall understanding of the different lithic artifacts found at the sites and the behaviors that are associated with these types of artifacts.

The workshop was taught by archaeologist and instructor of lithic technologies William G. Reed, Regional Heritage Program Leader for the USDA Forest Service Intermountain Region. Will was able to teach this workshop due to the generous support of the NAA for this type of continuing education of Nevada site stewards. Thank you NAA and Will for a great class. I hope that we can hold this same workshop in the northern region of the state soon. ☸



ARCHAEO-NEVADA SOCIETY:

OFFICERS SENTENCED

By Dr. Kevin Rafferty, Chairman

The Archaeo-Nevada Society (ANS) closed out its Spring 2009 lecture and meeting season with a talk on May 14th by Charlie Dietrich Professor of History at the College of Southern Nevada. His talk concerned an eclectic view of the history of Nevada from silver rush to just prior to the construction of Hoover Dam. It was followed up by an ANS field trip to the dam

conducted by the ANS Vice-President, Beth Young, who happens to be a Visitor Specialist at the dam. At the May 14th meeting the 2008-2009 slate of officers was re-elected for another sentence . . . er, term, of office. The 2009-2010 officers are: Kevin Rafferty, President; Bruce Holloway, Vice President; Beth Young, Secretary; and Charlie Rodewald, Treasurer.

The Society will go dark in Summer (June-August) but will have one board meeting in late July or early August. The date has not been set yet. We look forward to a new season of talks and field trips starting in September 2009. As was the case the last two years, ANS meetings will be held at the West Charleston campus of the College of Southern Nevada, in a location yet to be decided. ☪

LINCOLN COUNTY CHAPTER:

Up to No Good at Hell's Half Acre

By Barbara Rohde, Secretary/Treasurer

The Lincoln County Chapter was represented at the N.A.A. meeting in Lovelock by club president Elizabeth Russell, secretary/treasurer Barbara Rohde, and members Keith and MaryAnna Stever, and Farrell and Manetta Lytle. We enjoyed the papers presented, and especially enjoyed Sunday morning's field trip to Lovelock Cave.

(Hell's Half Acre, Continued on page 21)

Club president Liz Russell, and Vice President Sylvia Pierce, at the "Rattlesnake" site.



Lincoln County Chapter Mystery Photo!



For the record, this is a cow patty, with a fairly new penny, and a leaf placed inside the cup of the patty.

(Hell's Half Acre, Continued from page 20)

B.L.M. Archeology Technician Nick Pay gave a special presentation at our March meeting, on Stone Tools. Not only did we learn about the different kinds of “points” that were made in this area, but we also learned about the less-common “crescents,” drills and awls that are also found occasionally.

After the May 1 Site Steward Coordinators meeting at the ever-popular Windmill Ridge

restaurant in Alamo, we had a short excursion to look at a site about which Alamo resident Sylvia Pierce had expressed some concerns. Hell's Half-Acre is a rock-strewn landscape just east of Ash Springs, that has become popular with the Jeep “rock-crawling” enthusiasts. A gate had been taken down and left open, adjacent to a rock art site. While looking at the site, we also found where a trap had been set during the legal trapping season (trap was gone, thankfully). 🍁

The Nevada Archaeological Association

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Submit !!! To the NAA Newsletter

Submit your mini-reports (max. 5 pages), articles, chapter reports, pictures, and upcoming events to:

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NAA Code of Ethics

The purpose of the Nevada Archaeological Association (NAA) is to preserve Nevada's antiquities, encourage the study of archaeology, and to educate the public to the aims of archaeological research. Members and chapters of the NAA shall:

1. Uphold the purpose and intent of the NAA.
2. Adhere to all antiquities laws.
3. Seek the advice, consent, and assistance of professionals in archaeology and/or history in dealing with artifacts, sites, and other materials relating to antiquities.
4. Assist professionals and educators in accomplishing the objectives of the NAA.
5. Be a personal envoy of the NAA and responsible for conducting themselves in a manner so as to protect the integrity of the artifacts, sites, or other material.

UPCOMING EVENTS

3RD BIENNIAL THREE CORNERS CONFERENCE

Conference organizers: Eva Jensen, NAA President & Mark Slaughter

The Third Biennial Three Corners Conference will be held October 17, 2009 at Wright Hall on the campus of the University of Nevada, Las Vegas (UNLV). For more information please email threecornersconference@yahoo.com.

NAA BOARD MEETING BAKER

The next NAA board meeting will be at the Great Basin National Park visitor center education facility in Baker, NV on July 18th at 2:00 p.m. There will be a field trip to archaeological and historic sites of Great Basin NP on Saturday morning at 9:00 a.m. The Graycliffs group camp area Loop B-1 is reserved for Friday and Saturday night if you would like to camp with the group for free. Other camp areas are available for the regular park fee of \$12.00 per site. There is no park entry fee. All NAA members are welcome to attend board meetings and field trips.