



## Nevada State Museum Newsletter

Volume XXX, Number 1  
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### Museum's 60th Anniversary Photograph

The Nevada State Museum staff, docents, volunteers and friends gathered in the Museum's auditorium to celebrate the 60th anniversary of the opening of the Nevada State Museum on October 31, 1941. The group enjoyed the refreshments of cake and punch provided by the Docent Council and served by Docent Phyl Stewart. After the party Museum Photographer Scott Klette got the group organized for a photograph commemorating the celebration on October 31, 2001. The photograph was taken around 1:00 p.m. on the stairway leading to the second floor just below the Ichthyosaur exhibit.



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### Views of the Past...



The crowd awaits the arrival of the regular morning Virginia & Truckee Railroad Train No. 2 pulled by V&T locomotive No. 26 at the Carson City V&T Railroad Depot. The train was expected to arrive at 10:30 a.m., and the crowd was awaiting to see the arrival of the French Train 40 & 8 boxcar on February 23, 1949. The French people sent the gratitude train to the United States to thank the American people for their \$40 million in relief supplies sent to their war-torn country. The French gave a 40 & 8 boxcar to each state and Nevada's was displayed at the Nevada State Museum for a time, and the car is presently at the Nevada State Railroad Museum in Carson City. The Carson City High School Band was present to play at the arrival of the train with the French Car on a railroad flat car. Bernie Allen, a longtime resident,

provided the information for the photograph and noted that the old Virginia & Truckee Railroad Mound House Station which had been moved to Carson City can be seen to the right behind the Safeway Store. In addition, parked north of the depot and across the tracks is the V&T Transit bus and a Railway Express Agency truck. This photograph comes from the Daun Bohall photograph collection.

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### Message From Our Director Jim Barmore

Thank you for contributing to the Annual Appeal 2001! If you haven't made a donation and want more information, please call Jim Barmore at (775) 687-4810 ext. 226 or e-mail at [jbarmore@clan.lib.nv.us](mailto:jbarmore@clan.lib.nv.us).

This year's fund drive supports the museum's education programs, exhibits, and the preservation of collections. The museum receives funding from state government, but this covers only a portion of operating expenses. More than one quarter of costs are funded by the Private Dedicated Trust Fund. During recent months, the museum has suffered a series of cuts due to general economic conditions. To avoid additional cuts, we must raise \$10,000. Contributions support such needs as:

- \$1,000 Frances Humphrey Lecture Series presenting eleven programs on Nevada's heritage
- \$500 History Day Competition for students from across the State of Nevada
- \$100 Plexiglas for an exhibit case
- \$50 Acid free textile box for preserving a quilt at the Clothing and Textile Center
- \$25 A book for the Museum's History Research Center

The success of the Nevada State Museum depends on your continued support. Thanks again for your help!

### Ghost in the Courtyard

October 20, the courtyard had an eerie feeling throughout the grounds, as we hosted Carson City's 8th Annual Ghost Walk. More than 600 visitors attended the event. It featured singing, a seance, witches, ghosts, a book signing, face painting, and a pancake breakfast. Carson City was so pleased with the plaza that they requested the Nevada State Museum to host the event again next year.

## The Color of Daffodils, the Smell of Rotten Eggs

By DOROTHY NYLEN

Exhibit Preparator II

The December 2001 issue of *Smithsonian* magazine features an article on sulfur mining in Java. Miners there ascend a treacherous pathway climbing some 700 feet carrying 100 pound loads of sulfur from a live volcano crater. Rags serve as gas masks. The colorful photographs showing hills of yellow, close-ups of eyelashes and other facial hair replete with soft caustic powder, hint of the hellish lives of the miners. Sulfur is also highly volatile. It is a common element found in abundance throughout the world, including Nevada. Why would Javanese workers risk their lives daily to procure the stuff? They use it to refine raw sugar, process rubber and as an ingredient in medicines and pesticides.

Sulfur is one of the most important elements used as a raw industrial mineral and sulfuric acid (a derivative) ranks as the most produced chemical in the United States. Surprisingly, pure or elemental sulfur is mined in few places in the United States today. Environmental Protection Agency restrictions on sulfur content of gasoline have instead served to make the oil industry the largest producer of sulfur in the United States. Gas and coal industries also produce sulfur as a by-product.



This solitary boiler marks the location of the railroad station at Sulphur in Humboldt County.

Before the era of the EPA, Nevada did indeed mine sulfur in a number of places. The Sulphur, or Black Rock Mining District on the northwest flank of the Jackson Mountains (formerly the Kamma Mountains) is one area where sulfur was mined. Remnants of the Western Pacific station at Sulphur still remain, although one building burned this summer and the other collapsed. Paiutes showed miners this Humboldt County location in the 1870's. Deposits of the Lewis Mine were distributed over several square miles. The Pacific Sulphur Company constructed a refinery and produced 6 to 7 tons daily for about eight years. The Nevada Sulphur Company of San Francisco took over the deposits in 1900. California Rex Spray Company purchased the property in 1917. In 1937 all mining, milling and power equipment were auctioned. At least 40,000 tons of sulfur were produced from this site. The content of the ore that included alunite and gypsum, ranged from 15 to 85 percent sulfur.



Sulfur ore sample from the Hycroft Mine.--Photo by Sue Ann Monteleone

As with many sulfur rich sites in Nevada the Lewis Mine and the adjacent Crofoot Mine became the site of gold and silver mining in the 1980's. It is now known as the Hycroft Mine and is operated by Vista Gold.

America's top producing sulfuric acid plants are associated with copper mines, but BHP, Nevada's largest recent producer of copper, suspended operations near Ely a few years ago. Our state has no ranking among states producing sulfur or sulfuric acid today. Some Nevada gold mines take advantage of sulfur which can occur with their gold ore. The mineral's volatile qualities are utilized to help produce greater and more sustainable heat in the autoclaving process. This oxidizes the ore making gold recovery easier.

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## Coming Events

### NEVADA STATE MUSEUM

**January 22:** The Ghost of Mark Twain presents *The Wild Humorist of the Pacific Slope*, a performance by McAvoy Lane. The performance is funded by the Bretzlaff Foundation.

**February 26:** *Gen. Benjamin O. Davis, Jr.: Tuskegee Airman*, Chautauqua Presentation by James Armstead; program funded by Nevada Humanities and Bretzlaff Foundation.

These programs are part of the Museum's Frances Humphrey evening lecture series held on the fourth Tuesday of every month from 7:30 to 8:30 p.m. There is no charge for the programs. The Loftin Park entrance on the north side of the museum complex will be used for all programs. For more information call 687-4810, ext. 239.

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### NEVADA STATE RAILROAD MUSEUM

**January 9:** *The Kimball Carriage & Car Manufacturing Company*, by Randy Hess

**February 13:** *Railroad Dining Cars*, by Bob Nysten, Curator of History at the Nevada State Museum.

Programs at the Nevada State Railroad Museum are held in the Interpretive Center at 7:00 p.m. on the second Wednesday of each month, and are sponsored by the Friends of the Museum. Admission is free.

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## Natural History Spotlights: Kangaroo Rats

By GEORGE D. BAUMGARDNER, Ph.D.  
NSM Curator of Natural History

Many years ago Professor E. Raymond Hall, of the University of Kansas, told of the wonder to be found walking the sand dunes of Nevada in the early morning. In his introduction to *The Mammals of Nevada* (Univ. Kansas Press, 1946) he writes the following about what can be learned from studying marks in the sand. "More informative than the animals themselves, ..., is the maze of their footprints and tail marks on the sand. The tracks of a *Dipodomys* [kangaroo rat] reveal where it paused to dig for a morsel of food, and at another place show where the animal leaped out of the way of a larger cousin the tracks of which continue on in a straight line; a little further on, the smaller "Dipo's" feet sank deeply in the sand and thereafter the tracks are further apart and the tail no longer drags as the speed was increased. There, ahead, one sees the tracks of a kit fox. Marks farther along in the sand clearly tell of a fatality."

I find it interesting that of all the mammals that live in Nevada, Professor Hall chose to highlight kangaroo rats in the introduction to his landmark book. Kangaroo rats (genus *Dipodomys*) have been studied for a number of decades, yet there is still much to learn about these intriguing creatures. When Dr. Hall finished his book there were five species of these animals known to live in this state. Despite the extensive work by mammalogists in Nevada, it was not until recently that a sixth species (*Dipodomys californicus*) was discovered here (see Table). In the United States, California is the only state to have more types of kangaroo rats living within its boundaries.

These animals occur throughout Nevada in suitable areas. An apparent requirement for their habitat is that the ground is soft enough for them to dig burrows. Most live on obviously sandy soils but some also occur on fairly gravelly desert hardpan. The vegetation in these areas tends to be sparse.

Obvious distinguishing characteristics of kangaroo rats relate to their posture and locomotion. These animals have a body shape that is rather distinct for North American rodents. Their bodies are somewhat rounded and they have hind feet that are considerably longer than their front feet. Kangaroo rats will walk on all fours, but they also hop on their back feet. If disturbed, these creatures can move quite rapidly in hops that can be as long as 10 to 12 inches. In these ways, they resemble tiny kangaroos.

The kangaroo rats of Nevada can have a nearly five-fold difference in body size (almost 1 to 5 ounces). Except for this size variation, these species are very similar in appearance. The dorsal pelage (fur on their backs) is grayish to dark tan in color. Their bellies are white and they have a few white spots around the nose, eyes, and hind legs (see photo). The back of the head is noticeably wider than the front, making the head triangular when seen from above. Their eyes are large and slightly bulging and their ears are small. These animals have remarkable tails that are generally longer than the rest of their bodies. There are four distinct lines that run the length of the tail. The top and bottom lines are the same color as the back but the "racing stripes" on each side are white.

Kangaroo rats have fairly extensive under ground burrow systems having openings 1 1/2 to 2 1/2 inches in diameter that are located under brush or in the open. Burrows frequently have shallow depression-like paths extending from their entrances. These animals spend nearly all of their daylight hours in their burrows where they presumably sleep or are otherwise inactive. At night they move around on the surface to forage. Kangaroo rats eat primarily seeds and green vegetation but occasionally consume insects. If they do not eat a food item immediately they will push it into pouches that lie under their cheeks. Such items are transported elsewhere to be eaten or are stored for later consumption. Food storage occurs in either shallow holes on the surface or in pantry-like chambers in the burrows. Kangaroo rats will drink surface water but most can live for some time off of water in their food. Another nocturnal, above ground activity of these animals is sand bathing. They do this by rubbing their bodies in shallow depressions of sand. This helps remove oil from their fur.

There is no evidence that these animals hibernate. They are not known to be active above ground when the weather is at its coldest in northern Nevada but their tracks have occasionally been seen in the snow in other western states. Kangaroo rats are active year-round in southern Nevada.

Most animal species that have similar life styles and live near one another are likely to compete for the things they need to survive. Unlike many groups of animals, several species of kangaroo rat can live in the same area. As much as three species of *Dipodomys* have been caught near one another in Nevada. This ability to tolerate each other makes them a good group for researchers studying how similar species coexist. For such animals to live near one another they must each "do something different." It can be difficult to determine what each kangaroo rat species "does differently" but it often has to do with their having different body sizes, eating slightly different foods, or using slightly different sub-portions of the habitat. These types of separation can be seen among the kangaroo rat species of Nevada.

There are two types of *Dipodomys* living around a group of large sand dunes called "Big Dune" located a little south of Beatty. I have caught the large-bodied Desert kangaroo rat near the main dune complex, and I have been told that the much smaller Merriam's kangaroo rat can only be caught in the surrounding flat where the sand shifts less and there is more vegetation. Near Misfits Flat, northeast of Dayton, I have caught both Ord's and Chisel-tooth kangaroo rats within 50 yards of each other. Despite their being nearly identical in body size, the two seem to do fine living in the same area. This coexistence is probably facilitated by an adaptation possessed by Chisel-tooth kangaroo rats. Unlike other *Dipodomys*, which have rounded front surfaces on their lower incisors, these incisors of the Chisel-tooth form have flat fronts. This "chisel-like" modification allows this species to strip the highly salty outer surface of saltbush. Once this is done, the rat can eat the nutrient rich water-filled inner layers of this bush and receive nourishment from a plant that no other kangaroo rat can eat. The other plants in the area are, thereby, more available for Ord's kangaroo

rat to eat. In this way, these two species "do something different." [Side Note—I have caught a third species of similar body size, the Panamint kangaroo rat, near Sutro. This spot is about 10 miles from Misfits Flat, but I have not yet been able to determine if all three kangaroo rats live together in Dayton Valley.]

I have studied kangaroo rats for over 25 years, and I am still fascinated by these creatures. Living in Nevada allows me to continue to learn more about these animals so that I can, in turn, pass on education to the public. If you enjoy learning more about the animals you share this state with and like to camp in the desert, perhaps we will meet one day as we both walk the early morning dunes to see the stories in the sand.

If you wish to learn more about other plants and animals that live in Nevada, feel free to contact us at the Nevada State Museum, 600 North Carson Street in Carson City.

**Table—Kangaroo rat species that live in Nevada.**

Common Name	Scientific Name	NV Distribution
California Kangaroo Rat	<i>Dipodomys californicus</i>	extreme northwest NV
Desert Kangaroo Rat	<i>Dipodomys deserti</i>	far west NV
Merriam's Kangaroo Rat	<i>Dipodomys merriami</i>	south & west NV
Chisel-tooth Kangaroo Rat	<i>Dipodomys microps</i>	most of NV
Ord's Kangaroo Rat	<i>Dipodomys ordii</i>	northern 2/3 NV
Panamint Kangaroo Rat	<i>Dipodomys panamintinus</i>	southwest NV + a spot in Clark Co.

## Fire Department Training at the Nevada State Museum



Carson City's firemen were starting to suit up for their training at the Nevada State Museum in November. --Photo by Scott Klette

On November 28th, the Nevada State Museum, North Building was turned into a training location for the Carson City Fire Department. The fire department training involved more than five fire trucks, two rescue units and thirty firemen. The fire department used an old abandoned shaft located behind the North Building as well as the second floor for their main control station.

The firemen became "victims" stuck in the shaft and other personnel used a variety of techniques to rescue them. This exercise provided an excellent training opportunity as these techniques are used when people are trapped in drains, mines and other confined areas. They suited up in full gear, including oxygen tanks, and cordless microphones. Air quality monitors were inserted into the shaft to monitor air quality. They (fire department) are required to keep time records that include arrival time, entry time (into building), suited up time, time finished, and air quality.

The fire department stated this exercise was a huge success and they are looking to utilizing the Nevada State Museum for future training exercises. —Mark Falconer, Facilities Supervisor III

## Letters of Thanks Received from CC Convention & Visitors Bureau

Mr. Jim Barmore  
 Nevada State Museum  
 600 N. Carson Street  
 Carson City, NV 89701

Dear Jim:

I can't thank you and your staff enough for making the 48 tour operators day in Carson City a memorable experience.

Your staff did an excellent job of showing this large group through the museum. They were true professionals, as the group's experience was rich and enjoyable. It went like clock work!

This June Fam has proven to be extremely successful. It is unusual that Carson City gets to be showcased as it was on this Fam. Because of everyone's hard work we have booked over 16 tours in the first two weeks after the Fam from this group. And every tour includes the Museum!

It was a pleasure to work with your staff, and I was impressed with how easily such a large crowd was handled by them. Please thank them all for making this Fam a great success!

Sincerely,  
Janet Jones, Group Sales Manager

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## **Marjorie Russell Center Receives Library**

By JAN LOVERIN  
NSM Curator of Textiles and Clothing

The Marjorie Russell Center has been the recipient of a large, substantial library of costume history books. The donor, Marilyn Horn, former UNR professor, gave her extensive collection to the Center several weeks ago. This collection is significant because many of the texts are out of print and therefore difficult to acquire otherwise. Marilyn Horn founded the University's Jessie Pope costume collection which is now housed at the Center. In addition she and her husband, Dale Bohmont, have funded our computerization project of the university collection.

As many of you computer buffs know, the Marjorie Russell Center's website now includes "Virtual Exhibit" which features photographs and catalog data of select fashion artifacts. This expansion of our website and the corresponding catalogue data has been funded by the Horn/Bohmont Foundation. The staff at the Center gratefully acknowledges this wonderful library and encourages students, researchers, scholars, and the public to utilize this valuable resource.

This past few months have been very hectic at the Center. We are preparing for the opening of The Endless Quilt Odyssey, which is scheduled for Friday, January 18, 2002 at the Nevada Historical Society in Reno. The exhibition will feature historic quilts from the Nevada State Museum, the Nevada Historical Society, and the University collections as well as select quilts from the Churchill County Museum. The exhibition will feature such unique quilts as the "Lander County Election Quilt of 1896", a "Puss in the Corner" crib quilt from 1860, Frances Humphrey's crazy quilt, and a quilt made by Snow Shoe Thompson's wife, Agnes Singleton. This exhibition will be in three parts, with the historic segment closing in March, followed by quilts from local guilds in the two following segments. I encourage all quilt lovers to attend this exhibition in Reno.

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## **Seales Lake Halite Sample Donated**

Vickie Hargrove of Verdi, Nevada, recently donated these mineral specimens to the museum. Vickie's Truckee Meadows Community College geology class collected them at Searles Lake in southeastern California on a recent field trip. The large "flat" specimen is pink halite (salt). The other three specimens are hanksite. The color of hanksite can range from clear, white, gray, green or yellow. It is rarely black. Hanksite is an unusual mineral because its formula contains both carbonate and sulfate ion groups. In the Dana system of mineralogy it could be placed in either group. Searles Lake is the type locality, but it has also been found at Mono Lake. Some specimens of hanksite are fluorescent. You can view these specimens in our earth sciences gallery.

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## Mints and Mint Marks Trivia

Mint marks are small letters designating where coins were made. Those struck at Philadelphia before 1979 (except 1942-1945 five cent pieces) do not have a mint mark. Starting in 1979 a letter P was used on the dollar, and thereafter on all other denominations except the cent. Mint mark position is on the reverse side of nearly all coins prior to 1965 (the cent is an exception), and on the obverse after 1967.

C—Charlotte, North Carolina (gold coins only) 1838-1861.

CC—Carson City, Nevada, 1870-1893.

D—Dahlonaga, Georgia (gold coins only), 1838-1861.

D—Denver, Colorado. 1906 to date.

O—New Orleans, Louisiana. 1838-1909.

P—Philadelphia. 1793 to date.

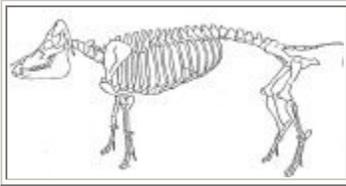
S—San Francisco, California. 1854 to date.

All dies for United States coins are made at the Philadelphia Mint. Dies for use at branch mints are hand stamped with the appropriate mint mark before they are shipped from Philadelphia.—[Source: A Guide Book of United States Coins, 36th Edition 1983, by R.S. Yeoman, p.59]

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## The Pig Dig

By KELLY DIXON



"But how are we gonna get a pig skeleton?" The question plagued anthropology students as they worked on various faunal collections in the UNR Historical Archaeology Lab. Anthropology student Lisa Rizzoli-Potts was working on the Virginia City Chinatown's Neighbors faunal collection while Jerry Jerrems was helping Kelly Dixon with a final collection from the Boston Saloon. Thankfully Dr. Stephanie Livingston was guiding this group through the travails of faunal analysis and she even provided some of her own specimens for use as a comparative collection. But they still lacked a pig

skeleton for comparative faunal analysis.

Surprisingly, it was proving to be quite difficult to find a pig skeleton. Then one day, Jerry Jerrems was talking to someone from the Nevada State Museum and got word that they buried an entire pig on the annex property over ten years ago after someone had a festive barbecue and pig roast. "Aha!" we exclaimed, "there's our pig!" All we had to do was go down to the museum and dig it up—it was surely in skeletal form after all this time.

Apparently there were many more natural history specimens buried with that pig, including bears, birds, coyotes, and bobcats. These specimens and the pig were stored in a freezer that broke down over ten years ago. However, the freezer problem was not discovered for several days. Poor Maggie Brown, working at the Annex, discovered the problem first by the smell and then by observing a "liquid-like ooze emerging from under the freezer door." Needless to say, the Museum staff at the time had to deal with several severely decaying animal carcasses rather quickly. The staff dug a backhoe trench, placed all the carcasses in that trench, and buried them. This allowed nature to do its own job of breaking down the tissues on the animals while leaving behind clean bones for display and analyses. All the staff had to do as wait for several years for the bones to "get done." And they also had to wait for someone as desperate as these pig-seeking UNR students to come along.

Needless to say, the pig-seeking UNR students were ready to dig up that pig and appeared on the doorstep of the Museum annex—armed with shovels, trowels, and screens—early in the morning of Thursday, November 15, 2001.

Fortunately, Amy Dansie had made a map showing where all the animals lay in the trench when they were buried over ten years ago. Alanah Woody and Maggie Brown pointed out the trench and the UNR students began to dig where the map said "pig." Actually the students were also digging where the map said "bear" and "bison leg" because the pig lay between those two animals on the map.

Hunkered down in the trench, Lisa Rizzoli-Potts and Stephanie Livingston exposed the clean, bare bones of the bear. The large animal was lying on its back in the trench, spread-eagle. This provided a textbook means for faunal recovery and exposure of a fully-articulated skeleton. It also helped the screeners to be aware that they should be looking for small finger and toe bones, depending on which part of the bear the buckets of dirt were coming from. The screeners and other helpers included UNR students Jerry Jerrems, Larry Buhr, Kelly Dixon, Lorraine Plympton, Kristin Connell, Krisstin Sibley, and Paul Adcox. This was the first "dig" experience for students Connell, Sibley, and Adcox.

The pig skeleton was by far, more elusive than the bear. The crew had to dig deeper in the trench until they questioned whether they were even digging in the right place. At that point, Dr. Livingston's trowel exposed and punctured an edge of plastic sheeting. The crew anxiously huddled and hovered around the strange discovery in the trench. As they peered closer, a tan-colored, pudding-like liquid substance suddenly gurgled up from the trowel puncture in the plastic. The stench of this substance caused the curious group to disperse in all directions. "Schwoooooee, what a stench!" someone exclaimed.

Alas, our long-sought pig skeleton was there—but it was wrapped in plastic that caught and contained water seepage and other liquid products of decay. Thus, our elusive pig bones were encased in a rank, soupy quagmire. The odor was such that most of us had to turn away, breathe gulps of fresh air, and return. Nevertheless, Stephanie Livingston and Larry Buhr gallantly set out to pull the bones from their stew-like deposit. Kelly Dixon was sent on an emergency trip to get bleach (Dixon of course was secretly grateful for this assignment). The bleach was used to make a solution to "freshen up" the bones.

Livingston and Buhr donned latex gloves. Their glove-covered hands disappeared into the murky substance, and they literally fished for pig bones. Each time they discovered a bone, they would place the ooze-dripping faunal remain in the bleach solution. They did this until they had all of the bones fished out. Then they dumped the bones in the bleach solution into a second solution for another cleaning. At this point, the rest of us began to backfill the pungent trench.

As the sun dipped lower on the horizon, we realized that it had been a long and outrageous day. But at least we were walking away with a pig skeleton. Recall that this was the first "dig" experience for UNR students Connell, Sibley and Adcox. At the end of the day they eagerly asked when they could do something like this again.