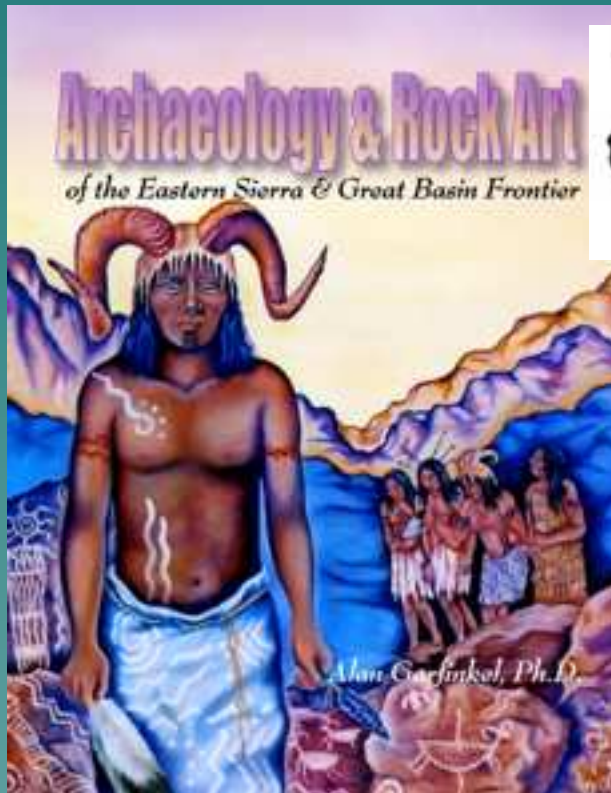


# Newberry Cave: Ritual, Ceremony and Symbolism of the Desert Bighorn Hunters

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# Newberry Cave



- ♦ Newberry Cave (CA-SBR-199 or SBCM 102) is a large, multichambered cavern located in the eastern Mojave Desert, just a short jaunt up a very steep and rather treacherous drainage in the Newberry Mountains.
- ♦ It is concealed by an enormous boulder that broke out of the east face of the drainage - that immense, school bus-sized, irregularly shaped rock is fashioned of a red-brown andesite - a volcanic stone.
- ♦ Wood rats still occupy the confines of the deep cave that has four "rooms".
- ♦ Bighorn sheep bed down in the cave finding the cool shelter to be rather beneficial.



# Newberry Cave: Quick Overview

- ◆ Newberry Cave is a rather special place.
- ◆ The prehistoric artifact assemblage is unique; as are its accompanying cave paintings
- ◆ We believe that the full import of this site has not been thoroughly brought to light.



# Newberry Cave

- ♦ It is our opinion that the location, archaeological assemblage, age and associated rock art argues for an interpretation that this was a rather distinctive site of great religious import.
- ♦ We argue that Newberry Cave most likely represents a particular striking and persuasive example of what Coulam and Schroedl talked about as “increase totemism”.
- ♦ This was the site for a men’s bighorn sheep totemic hunting society where rituals were carried out to promote the life and health of a key supernatural ancestral animal - the desert bighorn sheep.



# Newberry Cave

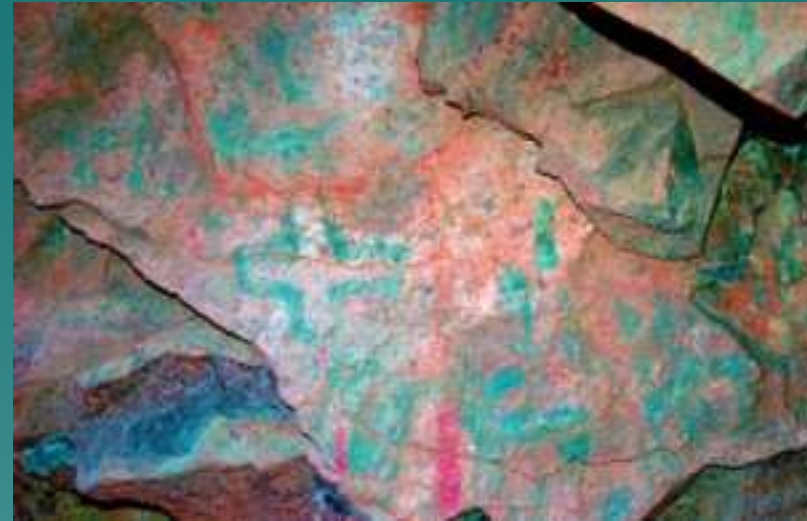
- ♦ Newberry Cave is special in many respects.
- ♦ Primarily, this is a dry cave where it is often the case that typically perishable artifacts that do not preserve well in open air sites still survive.
- ♦ This was the case at Newberry where a remarkable assemblage was discovered.



# Newberry Cave



- ♦ Newberry Cave is only cave in California where archaeologists have discovered split twig figurines.
- ♦ Further it is the only place where one can find the use of a pale green pigment. The use of the cave and the paintings dates to a time identified by prehistorians as the Archaic (ca. 2000 BC to AD 600).
- ♦ Other rock art found throughout California during this same time span is most often rock drawings (petroglyphs) rather than paintings.
- ♦ The use of green pigment in general in California Native paintings is rare and unusual. We believe that the color green and its use has metaphoric and cosmological significance.



# Newberry Cave: History

- ◆ Gerald Smith, former director of the San Bernardino County Museum first identified Newberry Cave in 1938 and brought the rich archaeological assemblage to light.
- ◆ Local residents already knew of the cave and in the 1940s workers from the Barrett Echo Ranch mined pack rat and bat guano from the cave to use as fertilizer.
- ◆ Artifacts were put on display for the Archaeological Survey Association of Southern California in 1953.



# Newberry Cave: History and Research

- ◆ In order to meet the vandalism problem and illicit collecting activity, Gerald Smith organized excavations at the cave and assembled a group of over 80 volunteers that worked the deposit and collected the artifacts.
- ◆ According to Smith about 70 cubic meters of deposit was excavated.
- ◆ That collection of artifacts is currently stored at the San Bernardino County Museum and a limited number of these artifacts are on display at the Victor Valley (Victorville) Museum





# Newberry Cave: History and Research



- ◆ In 1981 Alan C. Davis wrote his Master's Thesis on Newberry Cave
- ◆ He was fortunate to work directly with Gerald Smith to review the collection
- ◆ Their work was published by the San Bernardino County Museum.



# Newberry Cave: History and Research



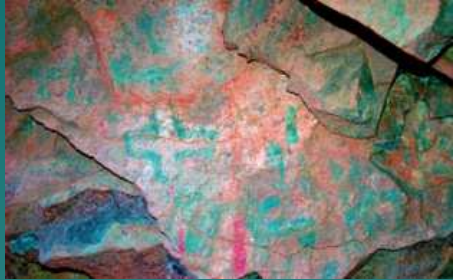
- ◆ In 2000 the Cave was placed on the National Register of Historic Places.
- ◆ Amy Leska is one of the most recent researchers to study the collection.
- ◆ Her impressive 2009 publication appears in the annual American Rock Art Research Association annual volume.

# Newberry Cave: History and Research



- ◆ Her work focuses on new discoveries including her identification of the source of the green pigment as celadonite.
- ◆ Additionally, she and her colleagues provide the first full and complete documentation of the remarkable rock art record.
- ◆ Our work (Paul Goldsmith, Don Austin and myself) included a review of the entire collection with, Dee Schroth and Justin Farmer).

# Newberry Cave: History and Research



- ◆ During our review we captured still and video photography and a short segment of our film, "Talking Stone" features a very brief discussion relating to Newberry Cave.
- ◆ Further we were fortunate to receive the original documentation by Amy Leska, Don Christensen, David Lee, and Jerry Dickey on the rock art of the cave.
- ◆ Don Austin used d-Stretch to enhance the photographs and bring out the elements on the painted figures of Newberry Cave.



# Newberry Cave: Layout

- ◆ Newberry Cave has been best described by the original researchers as having five sections: the entrance and four rooms.
- ◆ The entrance includes the cave apron or talus slope in front of the cave where the bulk of the paintings are arrayed.
- ◆ As one enters the cave it diverges with one room to the north (identified as Room One).



# Newberry Cave: Layout

- ◆ Room Two is a recess that bulges off to the south and is separated from Room One by a rock pillar. It is several feet higher in elevation than the adjacent Room One.
- ◆ Room Three is a rearward and eastern section of the cave that narrows.
- ◆ At the rearmost portion of the cave further to the east is Room Four forming the back end of the cavern. The latter is 27 meters from the entrance.



# Newberry Cave: Artifact Assemblage



- ◆ The total inventory of all artifacts is just shy of 2,800 (2,792 items).
- ◆ Those materials (in order of frequency) include: split twig figurines (1060), dart shafts (1019), projectile points, unmodified flake waste (310) (debitage), painted stones (34) (aka palettes).

# Newberry Cave: Artifact Assemblage



- ♦ The far less numerous but perhaps in some cases rather important items include: cordage (12), quartz pebbles (4), blocks of pigment (6+), leather scraps and thongs (4), bone/wood awl (2), bone flaking tool (1), quartz and calcite crystals (3), fire drill and hearth blocks (6), cut sticks (2), shell (2), grass bedding materials (3 concentrations), sandals (4), feathered plume (1), wand (2), sheep dung pendant (1), chewed yucca fiber (2) (quids) and a handstone (1).



# Newberry Cave: Artifact Assemblage

- ◆ The largest class of objects discovered within the cave, forming almost 40 % of the assemblage, are 11 nearly whole and 1049 split twig figurines.
- ◆ Almost of equal number are the dart shafts. A total of 1019 items were retrieved.
- ◆ Significantly, weighing in at about half the size of the figurines and darts, were many nearly complete and serviceable flaked stone dart points.



# Newberry Cave: Artifact Assemblage

- ◆ Compared to domestic/habitation sites the Newberry Cave artifact assemblage is highly divergent - having a very large number of points with a very modest assemblage of toolstone waste flakes.
- ◆ Typically far more debitage, unmodified flake waste, is characteristic of activities relating to stone tool production, finishing and repair of flaked stone implements.
- ◆ Yet at Newberry Cave only 319 pieces of toolstone flake waste were recovered.



# Artifacts Spatial Configuration: Cave Entrance

- ♦ At the Entrance of Newberry Cave, almost one-third of the entire cultural assemblage was recovered. This is partially explained by the size of the area and the degree of openness and light it provided.
- ♦ Over 200 dart shafts (213) were collected here.
- ♦ Also the largest number (157) of stone spear points was discovered.



# Artifacts Spatial Configuration: Cave Entrance

- ♦ Three of the five blocks of pigment were unearthed, all were of the green colored material.
- ♦ The bundle of feathers wrapped with green painted sinew was found here.
- ♦ Two of the four leather scraps were retrieved.
- ♦ Finally, the bulk (25 of the 34) of natural stones exhibiting paint were identified here on the apron of the cave.



# Artifacts Spatial Configuration: Room One

- ♦ Room One had an organic deposit that was minimally 30 cm in depth.
- ♦ Second only to the cave apron (Cave Entrance), it had the next largest amount of toolstone flake waste (109 items).
- ♦ Mirroring the flake waste element, complete or nearly complete dart points recovered from this area number over 100 (109).



# Artifacts Spatial Configuration: Room One

- ♦The only chewed yucca fibers recovered from the cave were discovered here in Room One (known as quids).
- ♦Also in Room One was an object interpreted as a hand sized stone for grinding seeds.
- ♦Significantly no objects identified as the accompanying milling slabs (metates) either portable or bedrock were recorded.



# Artifacts Spatial Configuration: Room Two



- ♦ Room Two is the largest area of the cave's interior. It is the only area of the cave that has an elevated floor.
- ♦ The room was the most disturbed by pack rat guano miners and by illicit artifact collectors.
- ♦ The deposit was very shallow with only about 10 cm in depth.
- ♦ However Room Two did contain 52 fragments of the split twig figurines and three dart shafts.
- ♦ No other prehistoric cultural materials were uncovered.

# Artifacts Spatial Configuration: Room Three



- Room Three is in fact a continuation and adjacent to Room One - from a narrow corridor it balloons to a full compartment.
- The cultural deposit was the deepest within this context at almost one meter and measuring on average 90 cm in depth.
- Three grass lined pits and a "bed" were located here and these may have been places of rest or sites for ceremony and rituals.



# Artifacts Spatial Configuration: Room Three

- ♦ One of the two red pigment stones were here identified.
- ♦ Both quartz crystals and the only quartz pebble with provenience were discovered in this room.
- ♦ One nearly complete and the largest of the split twig figurines was recovered from Room Three.



# Artifacts Spatial Configuration: Room Three

- ◆ The largest split twig figure is fully 22 by 15 cm in dimension towering over any comparable split twig figures recovered anywhere in the Far West.
- ◆ One hundred fifty dart shafts were retrieved from this part of the cave.
- ◆ Rounding out the collection from this location were nine dart points, two awls (one bone and one wood)



# Artifacts Spatial Configuration: Room Four



- ♦ Room Four is the smallest of all the Newberry Cave chambers.
- ♦ It was subject to extreme mixing due to extensive woodrat activity.
- ♦ It was filled to the very ceiling with woodrat midden and cultural remains.
- ♦ Among the remarkable artifacts discovered in this area of the cave was a sinew wrapped pellet of bighorn sheep dung.



# Artifacts Spatial Configuration: Room Four



- ◆ This area of the cave had the greatest number of both complete and fragmentary split twig figurines.
- ◆ This was also the darkest part of the cave and the three fire blocks or hearths were found here.
- ◆ An extensive inventory of dart shafts were recovered here - numbering 629 items! Some of these retaining original sinew wrapping and adhesive.
- ◆ Twelve of the shafts exhibited paint on their margins and were embellished with black and red bands.

# Newberry Cave: Rock Art



- ♦ In the 1950s some very preliminary and crude documentation was produced for the rock art of Newberry Cave.
- ♦ Later with the development of Alan Davis' MA thesis a bit more of the rock art assemblage was recorded but perhaps no more than a fraction representing perhaps 20 percent of the total assemblage.
- ♦ It was not until 2004 when Amy Leska , Don Christensen , David Lee and Jerry Dickey began their work that we had anything like a full and complete inventory of the rock art accompanying Newberry Cave.

# Newberry Cave: Rock Art



- ◆ Copies of their documentation were submitted to the Bureau of Land Management and are on file with the San Bernardino County Museum.
- ◆ Sixty six rock art panels were identified.
- ◆ A total of 364 individual design elements were documented.
- ◆ Nine panels lay outside the cave per se on the entrance on the south and east walls.



# Newberry Cave: Rock Art



- ♦ Most of the panels are in the first five meters inside the cave.
- ♦ Eight panels are in the dark zone at the back of the cave.
- ♦ Five design elements are polychromatic (red, white and green).

# Newberry Cave: Rock Art



- ♦ 61 design elements are white, 53 are red, and an impressive 255 are in green.
- ♦ All are painted elements with the exception of one aboriginal incised cross.
- ♦ The lion's share (75%) are abstract
- ♦ About 13% are representational with those being zoomorphic representations that appear to mimic the character and morphology of the split twig figurines.



# Newberry Cave: Dating



- ♦The most effective means of dating archaeological sites is using the radiocarbon dating method. The latter is a direct dating technique.
- ♦However we can indirectly get an estimate of the age of a deposit by evaluating the types or styles of artifacts that prehistorians have found to be temporally sensitive or time diagnostic.
- ♦Such artifacts include types or styles of projectile points.
- ♦The dart points discovered in Newberry Cave were overwhelming and with only one or two exceptions of the Elko, Gypsum and Humboldt Series. These points are diagnostic of the Archaic age or Newberry Period dating from ca. 2000 BC to AD 600.

# Newberry Cave: Dating

- ♦ Fortunately we also had organic material that was directly amenable to dating. In 1981 Davis ran eight dates on five dart shafts and two split twig figurines.
- ♦ One date had been run earlier in 1965
- ♦ They range in age from 3765 to 2970 years before present or ca. 1700 BC to 970 BC
- ♦ All those dates (save one early outlier) when calibrated at two sigmas and identifying their midpoints fall within an 800 year period.
- ♦ Alan C. Davis thought that the cave could have been used most intensively for a period of perhaps 500 years.



# Newberry Cave: Prehistoric Lifeways



- ◆ Just what were those Native people doing at Newberry Cave for 500 years?
- ◆ Why such an unusual array of artifacts?
- ◆ It seems rather transparent that these artifacts are overwhelmingly related to men's activities.

# Newberry Cave: Prehistoric Lifeways



- ♦ Notably absent are baskets, milling equipment and items that could be associated with the feminine gender.
- ♦ The location of the site is significant, since it is difficult to access, is not near a potable water source and does not contain a cultural deposit or midden with organic materials and food refuse.
- ♦ All of those attributes would argue for a site not oriented towards conventional village or even temporary camp occupation.

# Newberry Cave: Prehistoric Lifeways



- ♦ The presence of extensive rock art, substantial quantities of hunting weaponry (both dart points and dart shafts) would support the notion that this was a site associated with the hunting of game animals.
- ♦ Further, we have several kinds of artifacts that are typically identified as religious or ideological expressions
- ♦ Such items are associated with indigenous rites (ceremonies and rituals).
- ♦ These include: split twig figurines, paint and painted stones, crystals, wrapped feathers, wrapped sheep dung and quartz pebbles.

# Split Twig Figurines and Increase Totemism



- ◆ Split twig figurines are found throughout the Great Southwest but in California only at Newberry Cave.
- ◆ The ones at Newberry Cave are the largest figurines ever crafted.
- ◆ They approach two to three feet in length and width.
- ◆ They are made with a single willow branch and are bent into the shape of an artiodactyl (deer or sheep).
- ◆ The style like those at Newberry Cave are called Grand Canyon. Those don't show horns.
- ◆ The other smaller Green River style do show horns.

# Split Twig Figurines and Increase Totemism



- ◆ When examining desert foragers worldwide for an analog for hunter-gatherers producing such miniature sculptures, one finds that these are best equated with the cultures of Australia.
- ◆ These figurines are trans-generational symbols, not just fetishes of ritual adepts (shamans), but rather representation of animal-human ancestors.
- ◆ They are associated with systems of kinship known as clans and with what anthropologists call “increase totemism”.

# Split Twig Figurines and Increase Totemism



- ♦ The similar societies who employ such objects, forager groups, trace their ancestry to a totem - typically an animal or plant.
- ♦ They represent their affinity and connection to this ancestor through representations that symbolize group unity.
- ♦ This increase totemism includes magical rites and rituals.
- ♦ The magical rites are intended to ensure the increase of the totem animal or plant species.

## STUDIES IN AUSTRALIAN TOTEMISM

By  
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*The Oceania Monographs, No. 2*

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# Split Twig Figurines and Increase Totemism



- ◆ The cultures who have practiced such “increase totemism” travel to sacred sites that they believe are the origin or creation sites for their ancestor.
- ◆ There they dance, sing, and act out rituals and ceremonies designed to remind attendees of the sacred narrative of their tribe.
- ◆ These rituals are performed to maintain and propagate the species and to renew and assure the cosmological order of nature.
- ◆ Since this is a time of great religious veneration and ancestor worship, it seems sensible that Native peoples often initiate young men at this time into adulthood.

# Split Twig Figurines and Increase Totemism



- ◆ At the sacred totem creation site the foragers engage in acts of homeopathic or imitative magic.
- ◆ By acting on a thing that represents a living being (bighorn sheep) they believe that they can influence or control that animal and in general the elements of nature that relate to it.
- ◆ The magic principals are that "Like begets like". "As you envision and speak it, so it shall become."

# Newberry Cave: A Search for Meaning



- ◆ Newberry Cave is the perfect expression of this Desert West increase totemism site...
- ◆ Archeologists discovered examples of ancient Pleistocene megafauna in Newberry Cave and in other sites hypothesized as expressions of Increase Totemism
- ◆ At Newberry there were Giant Ground Sloth bones!
- ◆ Such big game animal bone has been likened to discovering an ancient or primeval creation site where one grows the mythical ancestral beast to an excessively large and grand size

# Newberry Cave: A Search for Meaning



- ♦ The inaccessibility of the site is just such a setting for religious centers, it increases the awe and drama of the journey to the creation site.
- ♦ Newberry Cave is located in good bighorn sheep hunting territory, desert bighorn still bed down in the cave.
- ♦ About 15 nearly complete and over a thousand fragmentary split twig figurines were discovered.
- ♦ These were made over many generations and discarded there at the site.
- ♦ This is the exact pattern that such sites display.

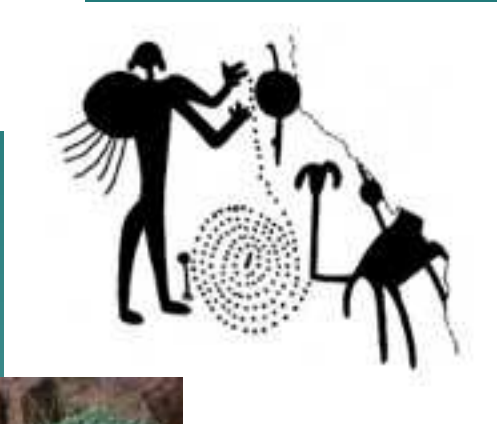


# Newberry Cave: A Search for Meaning



- ◆ One of the split twig figurines from Newberry Cave was found to have grass in its interior and a toolstone flake inside its belly.
- ◆ Grass perhaps a metaphor for food for the animal and the flake a representation of the stone weaponry used to slay the animal.
- ◆ A wrapped sheep dung “pendant” was also recovered from Newberry Cave.
- ◆ This is perhaps a talisman something from the interior of a once living animal, a part for the whole - this piece of dung is encased with animal sinew perhaps created to contain or compartmentalize the beast or to magically ensoul its life essence and carry it with the hunter.

# Newberry Cave: A Search for Meaning



- ◆ These actions appear to us to be attempts to both increase the animal numbers and also allow them to be hunted and slain through ritual and magic.
- ◆ Similarly, what a better way to get into the mindset and connect with an animal than to fashion them as a three dimensional figure and to paint their likeness on the cave walls of their creation site.
- ◆ Further, we wonder out loud if the unusual green pigment might in fact be a representation of "life", "springtime and new green growth of plants" or even "the lambing season for bighorn sheep animals"

# Newberry Cave: A Search for Meaning



- ◆ Perhaps this is why there is such an emphasis on the use of green pigment - green meaning increase, growth, life, fertility and fecundity.
- ◆ Further it is interesting that black is not used as a color on the wall paintings at all but is employed to decorate dart shafts on hunting weaponry used to slay game animals.
- ◆ If the ancient cosmology of the Newberry bighorn hunters was anything like that of the historic Numic/Uto-aztecan desert foraging people who occupied that same region, then black was a color of death and war.

# Newberry Cave: A Search for Meaning



- ♦ Green was seen as a life-affirming hue - associated with water, new vegetation, growth and power.
- ♦ That seems a sensible assumption and interpretation since that color was also used to heavily adorn the quartz crystals that were deposited at the cave.
- ♦ It also covered the sinew wrapped feathers found in the deposit.



# Newberry Cave: Summary and Conclusion



- ◆ So it seems rather amazing that at a now dry eastern Mojave Desert cave, archaeologists could have discovered so central a place for so many generations of ancient desert foragers.
- ◆ We find it interesting and important to commemorate the vitality and strength of such a remarkable people who lived nearby and worshiped there at the cave.
- ◆ They left a tantalizing testament to their religious feelings and a rich record of their activities.
- ◆ Isn't it a priceless gift that we are able to piece together the past and tell the story of this venerable band of desert bighorn hunters and their society that flourished nearly 4,000 years ago!