

ESRARA NEWSLETTER

Quarterly of the Eastern States Rock Art Research Association
30th member of IFRAO - International Federation of Rock Art Organizations

Volume 9, Number 1

Spring 2004

Mark your calendars for May 19-22, 2005!

The next **2005 ESRARA Conference** is fast approaching--less than a year left! The conference will be held in the Spring on the beautiful Upper Campus of Ripon College in eastern Wisconsin.

A series of Field Trips (see p.5) to view some of the best rock art in Wisconsin has been organized for Friday, May 20th, the day before the Eastern States Rock Art Research presentations. These rock art locales include a rock shelter at the confluence of two rivers, effigy mounds, a quartzite quarry overlooking the confluence of a river and creek, and beautiful Roche a Cri State Park.

Saturday, May 21st will be a full day of speakers on the rock art of the eastern United States--and elsewhere--and there will also be an opportunity on Sunday, May 22nd to see local Wisconsin Petroforms and Effigy Mounds. (It may be time again to start thinking about those presentation topics!)

In this Issue

News and Announcements p.3

New publication: The Rock Art of Eastern North America p.4

2005 ESRARA Conference Field Trips p.5

Culturally Modified Trees in the NE Woodlands by Edward J. Lenik p.8

The Symbolism of the Sun, Moon, and Planetary Halo, Corona, Pillar, and Ray in Global Rock Art by Kevin L. Callahan p. 10

Petroglyphs at the Spring Valley Road Cave in the Driftless Area of Southwestern Wisconsin

By: Mandy Georgeff p.18

Order form: Rock Art of the Eastern Woodlands p. 20

Top Ten List of fascinating things to know before visiting Ripon, WI, the venue for the 2005 ESRARA Conference!

1. **Jack Steinbring** lives in an eight sided **Octagon House** purchased by his Dad for his first wife as a Christmas surprise on December 24th, 1906.

2. In 1844, a portion of the "**Wisconsin Phalanx**," organized to put into practical operation Utopian Socialist, Charles Fourier's principles of social philosophy, came to the western part of what is now the City of Ripon and started the place up.

3. John S. Horner, who owned part of the hill, suggested the name of Ripon in honor of a **Ripon, England** ancestor.

4. On March 20, 1854, in Ripon's Little White Schoolhouse (now a National Monument), Alvan Earle Bovay, a local lawyer, led fifty-four of the area's one hundred eligible voters in forming a new political organization--the **Republican Party**.

5. Ripon is home to **Ripon College**, one of the country's finest liberal colleges.

6. Ripon is also known as "**Cookietown USA**," the home of the world's largest baked cookie.

7. It is a good idea to make time to walk or drive around the **numerous historic neighborhoods** and the Watson Street Commercial Historic District. A large number of the buildings in Ripon are on the National Register of Historic Places.

8. Ripon is approximately **65 miles North of Milwaukee, 157 miles North of Chicago and 70 miles Northeast of Madison**. Ripon is located approximately 18 miles West of Fond du Lac accessed via Highways 23, 44, and 49.

9. It is nice there in the Spring.

10. In case you are unfamiliar with the **Utopian Socialists, Charles Fourier's** passion for numbers led him to predict that the ideal world he was helping to create would last 80,000 years, 8,000 of them in an era of Perfect Harmony in which: · six moons would orbit the earth · the North Pole would be milder than

the Mediterranean

- the seas would lose their salt and become oceans of lemonade!
- the world would contain 37 million poets equal to Homer, 37 million mathematicians equal to Newton and 37 million dramatists equal to Molière, although "these are approximate estimates"
- every woman would have four lovers or husbands simultaneously. This was quite a Utopian vision!

ESRARA

Quarterly Newsletter Editors

Winter: Mark Hedden
Spring: Kevin Callahan
Summer: Carol Diaz-Granados
Fall: Nancy Bryant

Send Items for the Summer Newsletter to:

Carol Diaz-Granados
7433 Amherst Avenue
St. Louis, MO 63130-2939
or e-mail:
cdiazgra@artsci.wustl.edu



Venezuelan thunderbirds with three concentric circles representing "a picture of the sun" and "arranged like those that form the eyes of the jaguars of Calcara" (Mallery 1893:Figure 684; c.f. accompanying descriptions of Ernst and Marcano)

ESRARA Contacts

Mark J. Wagner, President
P.O. Box 4527
Carbondale, IL 62901
mark@esrara.org

Ed Lenik, Vice President
100 Deerfield Road
Wayne, NJ 07470
edlenik@hotmail.com

Iloilo M. Jones, Treasurer
P.O. Box 4335
Helena, MT 59604
ilo@esrara.org

Dr. H. Denise Smith, Secretary
4035 Kessler Avenue #702
Garden City, GA 31408
denise@esrara.org

The opinions expressed in this newsletter are those of the individual contributors or editor and not those of the ESRARA organization.

This issue of the newsletter is being printed by **Prairie Smoke Press**. PSP specializes in books on archaeology, rock art, and related fields.

NEW! The second enhanced edition of ***The Jeffers Petroglyphs*** by **Kevin L. Callahan**

The Gottschall Rockshelter by
Robert Salzer and Grace Rajnovich

Robert Bozhardt's *Deep Cave Art in the Upper Mississippi Valley*

For information on these and other books from PSP please write:

Prairie Smoke Press, Inc.
7125 Willow Lane
Brooklyn Center, MN 55430

email: cbailey@tcinternet.net
website: www.prairiesmokepress.com

News and Announcements

New Illinois Rock Art Web Site

Len Stelle (Parkland College, Illinois) and **Mark Wagner** (Southern Illinois University) have collaborated in setting up the first rock art web page for Illinois. Len, who is in charge of the **Illinois Archaeological Survey** (IAS) web site, provided the technical expertise while Mark furnished the rock art information and photographs. To view the web page first go the main page for the Illinois Archaeological Survey web site at <http://virtual.parkland.edu/IAS/mainmenu.htm>. Then click on "Illinois Archaeology – E- Publications" which will take you to the rock art web page. This site currently contains only one item, an article written last year by Mark Wagner for the Living Museum, the popular publication of the Illinois State Museum, entitled *Visions of Other Worlds: The Native American Rock Art of Illinois*. The web page currently contains 16 color photographs of various Illinois rock art sites as well as two line drawings.

They are planning to expand this web site in the future into a virtual photographic archive of the rock art of Illinois. Their plans at the moment are for Len to scan in Mark Wagner's color slide collection and add these to the Illinois rock art web site. They are most likely going to do this by site, so that a person interested in particular site can look at all of the available images from that site. Len also is interested in setting up the site in such a manner that it can be searched by technique (pictograph or petroglyph), motif (anthropomorph, avimorph, etc.), age (Mississippian, historic, etc.), and other criteria. So stay tuned and be sure to check back from time to time, this site is very much a work in progress and should (hopefully!) change into much more of a research tool over the next year.

News from Wisconsin

Gottschall Rock Shelter

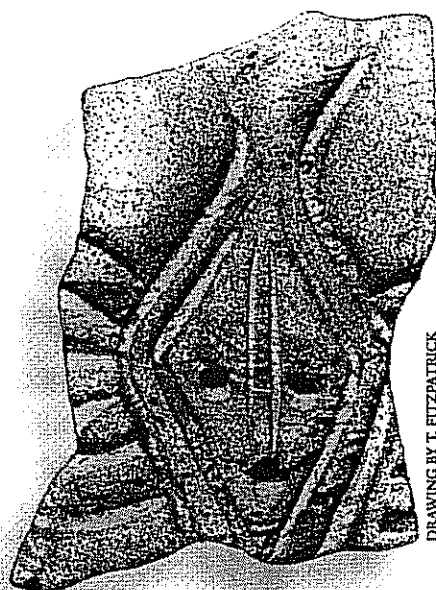
The summer of **2003 field season** resulted in the discovery of tantalizing evidence suggesting earlier use than previously expected. Convincing evidence of rituals were found. There were at least three fires found on top of each other in all of the units. At the close of the 2003 field season they had a total of 29 instances of ritual burnings in the O zone (Archaic period) at the site. All of these were located in the eastern end

of the shelter. The O zone is only found in this area. They therefore have found evidence for a basic ritual pattern that was in place as early as 500 B.C. (possibly earlier) and that lasted until A.D. 1050. This is a span of almost 1600 years! They have artifacts and two radiocarbon dates from one fireplace that argue for at least the nonritual use of the shelter to go back to the 1500-1000 B.C. period. - Condensed from **Bob Salzer and Grace Rajnovich's** *Legacies News*, April 2004

News from Canada

During the week of July 24 to 31, an archaeological team from the **University of Quebec at Montreal** will be conducting archaeological fieldwork at Oiseau Rock/Rocher a la Oiseau. **Oiseau Rock**, only accessible by boat, is a sheer rock face which rises straight out of the Quebec side of the Ottawa River directly across from Chalk River, Ontario. The Rock is located approximately nine miles down-river from Deep River, Ontario and 18 miles upriver from Pembroke, Ontario and eight miles upstream from Fort William, Quebec. The Rock was a sacred site for Aboriginal people who have left behind a remarkable legacy of pictographs which may still be seen today. It continues to be part of the sacred landscape for the Algonkians of Pikwakanagan First Nation near Golden Lake, Ontario of the Kitigan zibi First Nation (Maniwaki, Quebec).

Dr. **Daniel Arsenault**, the archaeologist who studied the site since the end of the 1990's, will bring his team to the site in July. He has called it the "**biggest rock art site known in the Quebec part of the Canadian Shield** and among the few with paintings on a huge outcrop within the Canadian Boreal Forest." Unfortunately, a majority of the pictographs are covered with hundreds of graffiti. Yet there is much to learn about the pictographs and the week's work at the site will involve recording the pictographs, analyzing them and taking samples for AMS-dating in order to determine the age when the pictographs were produced.



Quarried fish petroglyph from Bald Friar.

"Anyone with an interest in rock-art must own this book!"

— F. Kent Reilly III, Southwest Texas State University

September

520 pages, 182 illustrations

6 1/8 x 9 1/4

ISBN 0-8173-1394-X

\$65.00s unjacketed cloth

ISBN 0-8173-5096-9

\$34.95s paper

The Rock-Art of Eastern North America Capturing Images and Insight

EDITED BY CAROL DIAZ-GRANADOS AND JAMES R. DUNCAN

Showcases the wealth of new research on sacred imagery found in 12 states and 4 Canadian provinces.

In archaeology, rock-art—any long-lasting marking made on a natural surface—is similar to material culture (pottery and tools) because it provides a record of human activity and ideology at that site. Petroglyphs, pictographs, and dendroglyphs (tree carvings) have been discovered and recorded throughout the eastern woodlands of North America—on boulders, bluffs, and trees, in caves and in rock shelters. These cultural remnants scattered on the landscape can tell us much about the belief systems of the inhabitants that left them behind.

The Rock-Art of Eastern North America brings together 20 papers from recent research at sites in eastern North America, where humidity and the actions of weather, including acid rain, can be very damaging over time. Contributors to this volume range from professional archaeologists and art historians to avocational archaeologists, including a surgeon, a lawyer, two photographers, and an aerospace engineer. They present information, drawings, and photographs of sites ranging from the Seven Sacred Stones in Iowa to the Bald Friar Petroglyphs of Maryland and from the Lincoln Rise Site in Tennessee to the Nisula Site in Quebec.

Discussions of the significance of artist gender, the relationship of rock-art to mortuary caves, and the suggestive link to the peopling of the continent are particularly notable contributions. Discussions include the history, ethnography, recording methods, dating, and analysis of the subject sites and integrate these with the known archaeological data.

Carol Diaz-Granados is Research Associate and Lecturer at Washington University in St. Louis and coauthor with **James Duncan** of *The Petroglyphs and Pictographs of Missouri*.

CONTRIBUTORS

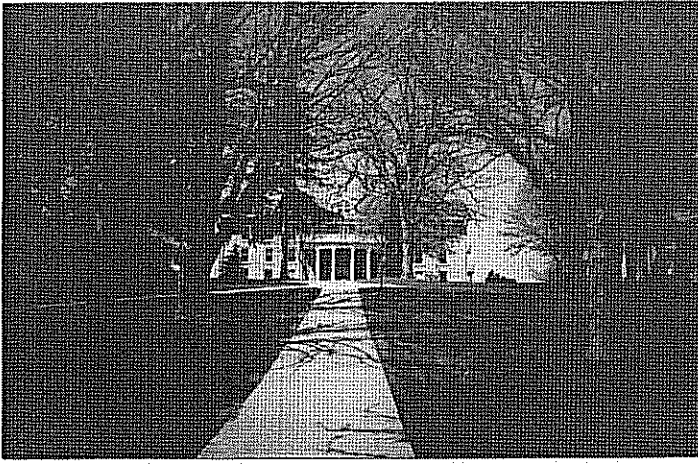
Steven R. Ahler	Fred E. Coy Jr.	Mark Hedden	Jan F. Simek
Daniel Arsenaault	Alan M. Cressler	Cecil R. Ison	Lori A. Stanley
Robert F. Boszhardt	Carol Diaz-Granados	Edward J. Lenik	Jack Steinbring
Kevin Callahan	James R. Duncan	Johannes H. N. Loubser	Charles A. Swedlund
Tommy Charles	Richard Edging	Mary R. McCorvie	Joan M. Vastokas
Robert A. Clouse	Charles H. Faulkner	Paul Nevin	Mark J. Wagner
	Rex Weeks		

Of Related Interest

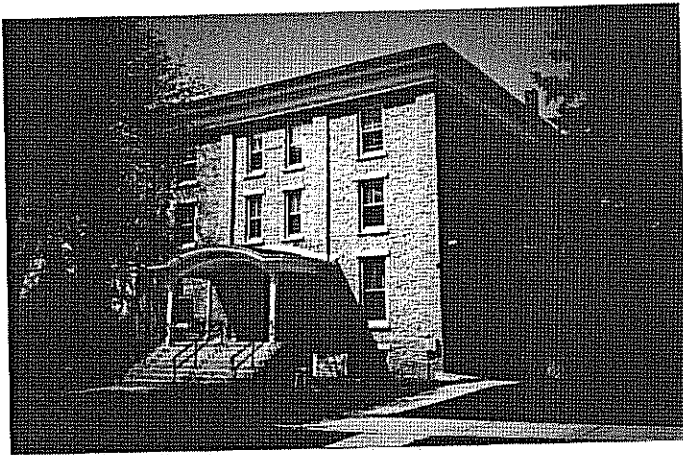
The Petroglyphs and Pictographs of Missouri

CAROL DIAZ-GRANADOS AND JAMES R. DUNCAN

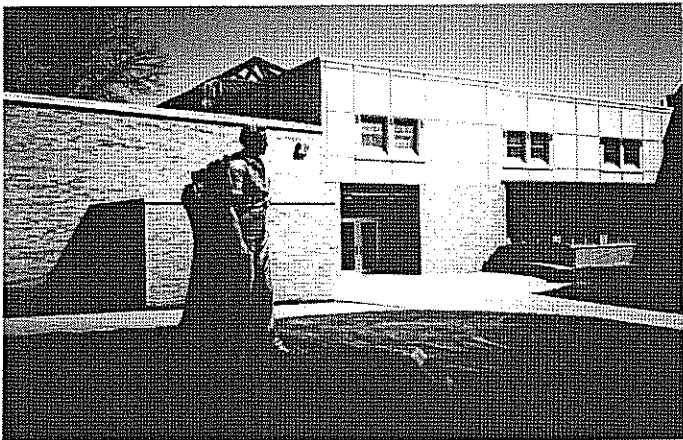
360 pages ISBN 0-8173-0988-8 \$34.95s paper



2005 ESRARA Conference venue. Middle Hall, built in 1855, Administrative Offices. This building is centrally located on the "upper campus" where all 2005 ESRARA events will take place.



West Hall, built in 1867. It houses the Anthropology Department, the site of a Rock Art of Wisconsin exhibition.



Farr Hall of Science, the location of Bear Hall Auditorium, site of ESRARA Formal Program, May 23, 2005.

Field Trips: 2005 Conference of The Eastern States Rock Art Research Association

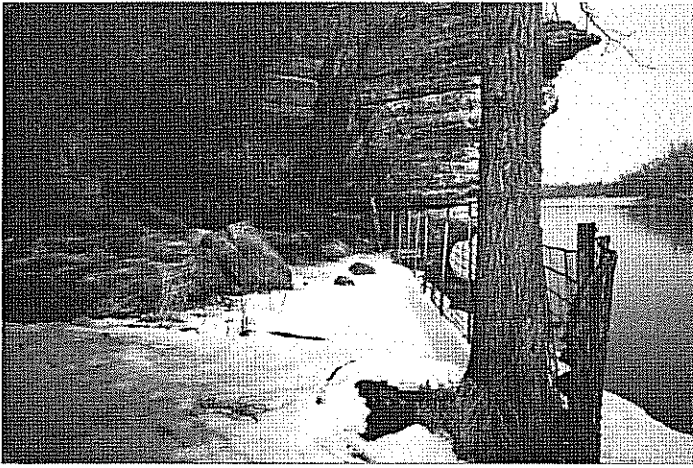
The following sites are some of those that will be on the fieldtrips for the 2005 biennial conference of the Eastern States Rock Art Research Association. The trips will take place on May 20 and May 22, 2005. Their exact position on the field trip itinerary will be determined at a later date.

The **Hensler Petroglyph Site** is located in southern Dodge County. It consists of 20 petroglyphs carved into a seam of andalusite schist between two masses of Waterloo Quartzite. The site has been known since the 1950's, and was formally reported in 1987 (Steinbring & Farvour 1987:396). The figures include solidly pecked animal and human figures, geometrics, a spiral, a "weeping eye," a thunderbird, etc. The site lies in the western edge of a quartzite quarry, and overlooks the confluence of the Crawfish Creek and Mauneshsha River. It is close to transportation and reasonably accessible. It is closed during the work week, and cannot be visited apart from the tours.

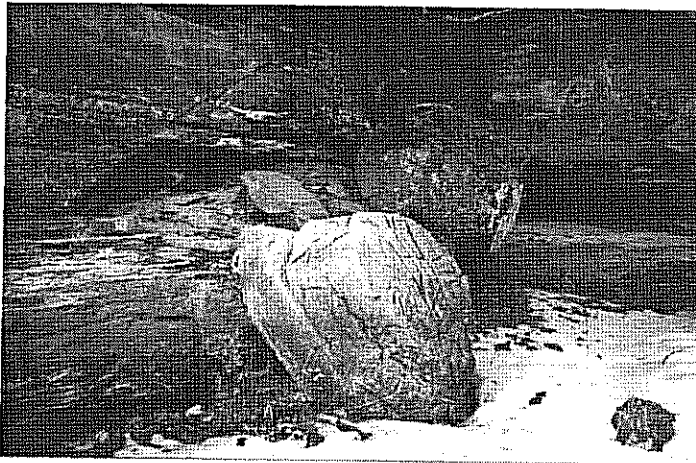
A related site a half mile to the north is presently being explored, and may be added to the Hensler area visit.

The **Lemonweir Site** lies near the confluence of the Lemonweir and Wisconsin Rivers, southeast of Mauston, Wisconsin. The site (arguably the "best" in the state) has carvings, paintings, and spectacular natural features. Styles range from "Pit and Groove" to representational. There is a remarkable sculpted face, examples of which are also expressed in rock art sites along the Mississippi drainage in Western Wisconsin. The site is owned by the Ho-Chunk Nation. The site is not difficult to approach, and not far from a parking area. Rules will apply. The guide for this site is Joe O'Hearn, President of the Rock River Archaeological Society. The site is not open to the public.

Lizard Mound County Park This well preserved effigy mound site lies about 5 miles north of West Bend, Wisconsin. It is located one mile east of State Hwy 28/144, on County Road A. The complex includes some 30 mounds including "lizard" effigies, linears, conicals, as well as less definitive shapes. A level trail, one mile in length, loops through the mounds which are identified with informational plaques. This is one of the best preserved effigy mound concentrations in



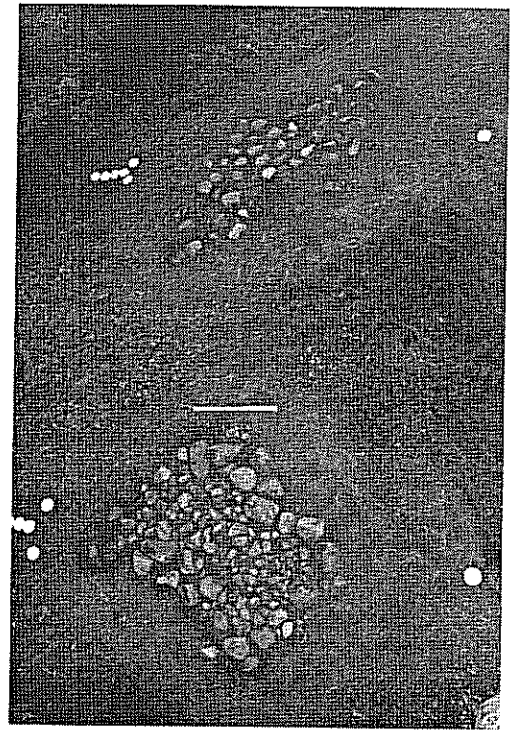
The Lemonwier Site. The protective fence was installed by the Ho Chunk Nation which now owns the site. Photo 2004.



This monolithic rock slab has a profusion of intricate carvings on its crown and around its sides. It is remarkably similar to one in Southern Saskatchewan near the city of Swift Current. The Saskatchewan site has been excavated and found to be at least 1,400 years old. Photo 2004.

Wisconsin. it is a county park, and can be accessed independently. Almost anyone can make it through the entire site from a convenient parking lot.

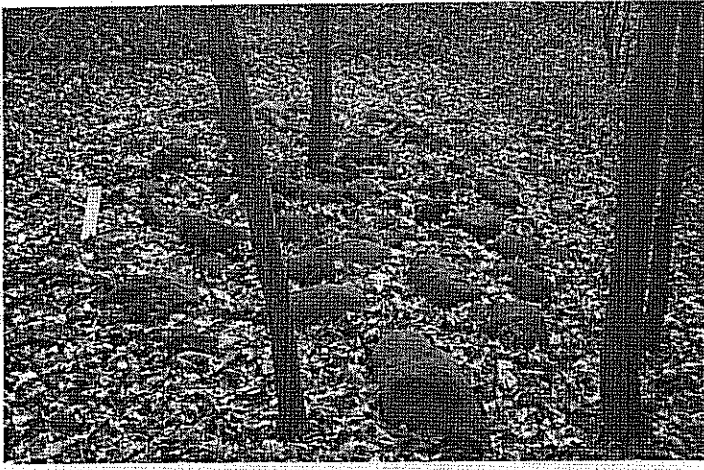
The **Roche a Cri Site** is located about 10 miles north of The Lemonwier Site. It is in a State Park, and consists of many carvings in the face of a soft sandstone monadnock. While there has been extensive vandalism at this site, it is still an important Wisconsin site, with well over 100 carvings, some of them unique. This site has ramps and viewing platforms, and is not far from the parking lot. It can be accessed independently.



Features #1 (lower) and #3 (upper) of the Peachy Petroform Site near Rosendale, Wisconsin. Archaeological studies suggest an Archaic provenience. Aerial photo by David Tovar 2003.

The Bell Coulee Sites are small shelter and cave sites with many pristine petroglyph panels. They are near the town of West Salem, Wisconsin (Boszhardt 1995: Figs. 8-20). Grooving is a common form, some of it on the ceilings! There are bison images, as well as non-representational art. The sites are under the control of the Archaeological Conservancy. Rules will apply. **Robert (Ernie) Boszhardt** of the Mississippi Valley Archaeology Center will be the guide to these sites. They are close to transportation and require only modest climbing. These sites are not open to the public. A visit to the **Mississippi Valley Archaeology Center** may also be planned

The **Gullickson's Glen Petroglyph Site** is located a few miles west of Black River Falls. It lies in a very scenic canyon formed in soft sandstone. The carvings are mostly beneath shallow overhangs along a relatively easy path. This site has been barricaded to prevent further vandalism (which is extensive), but some outstanding petroglyphs are still visible, including a large fish figure and a beautiful deer profile (pictured in **Klaus Wellmann's** epic book on North American Indian Rock Art, 1979). Some moderately steep climbing is required. It is not open to the public and can only be visited on the tour.



The Ladoga petroform, possibly a turtle. This site also contains a decorated monolith. It is a privately owned site and is not accessible independently of the tour. Photo by Randall Maurer 2003.

Petroform and Effigy Mound Field Trips

In addition to petroglyph and mound sites, the 2005 field trips will include a number of boulder sites, and some sites which contain both petroforms and mounds. Also, some petroform sites feature petroglyphs on some of the boulders. Only clear, and indisputable petroforms will be included on the field trips.

The Peachy Site

This site features three large pristine petroforms, and several indistinct and damaged ones. The site has been undergoing archaeological investigations for the past three years. Materials yielded by the surrounding area are predominantly mid Archaic (3,000 - 5,000 B.C.). This site lies near the west branch of the Fond du Lac River, halfway between Fond du Lac and Ripon, 2 miles north of State Highway 23. Access requires a .8 mile trip through farm buildings, along a farm lane. It is NOT open to the public and cannot be accessed independently of the field trip. J. Steinbring will act as guide for this site.

The Ladoga Site

This site contains one large and well-formed petroform, as well as a related monolith with a petroglyph on it. The site lies on the Rock River, and is one mile east of the hamlet of Ladoga on State Highway 26. It is 6 miles south of the Peachy Site. There are also signs of former petroforms along a fence line which have been covered with field-cleared boulders. Access to the site may require a walk along fields for about 300 meters, depending upon conditions. There

is no climbing. This site is not open to the public and cannot be visited independently. J. Steinbring will act as guide to this site.

The Brummond Mound Site

An extensive conservation effort has been ongoing by the Rock River Archaeological Society at this site. Numerous mounds, reported by celebrated Wisconsin archaeologists in the early to middle 20th Century, have been cleared in recent years. There are potential petroform connections on this site. It requires modest climbing. Parking is close. Site guide will be Joe O'Hearn, President of the Rock River Archaeological Society. This site is not open to the public.

The Nietschke Mound And Trail Site

This site has recently become a county park. It contains a large number of mounds and a trail. There appears to be at least one historic Native burial, decorated with placed boulders. Extensive clearing and trail preparation has been done over the past two years by the Rock River Archaeological Society. The site lies west of the Horicon Marsh Wildlife area near Hwy 26. Guide to the site will be Joe O'Hearn, President of the Rock River Archaeological Society.

References to use in preparation for the field trips:

Boszhardt, Robert F.

1995 Rock Art Research In Western Wisconsin, Reports of Investigations No. 201, Mississippi Valley Archaeology Center, University of Wisconsin La Crosse.

Steinbring, Jack and Franklin Farvour

1987 "The Hensler Petroglyph Site, Dodge County, Wisconsin," *The Wisconsin Archeologist*, Vol. 68, No. 4, pp. 396-411, Lake Mills

Wellmann, K. F.

1979 A Survey Of North American Indian Rock Art, Akademische Druck-u. Verlagsanstalt, Graz, Austria

CULTURALLY MODIFIED TREES IN THE NORTHEAST WOODLANDS

by

Edward J. Lenik, R.P.A.

In my book, *PICTURE ROCKS: AMERICAN INDIAN ROCK ART IN THE NORTHEAST WOODLANDS*, I reflected upon the question of why there were not more petroglyphs and pictographs in this region as compared to the rock art of the American west. I suggested that some of the answers lay in the history and geography of the region. European settlement, which came early to this area and was much more intense, may have destroyed much of the rock art that was here. Secondly, rock in the northeast is predominantly hard granites and dense igneous basalts, making carving here a physical challenge. The vast, virgin forest, on the other hand, offered other materials on which symbols and pictures could be placed (Lenik 2002:243).

In the course of my documentary research, I have found several examples of Indians carving bark and tree trunks in the seventeenth, eighteenth and nineteenth centuries. These examples of culturally modified trees suggest that the Indians had a long tradition of using wood as an artistic medium.

In 1809, Edward Augustus Kendall reported that Indians had carved four sides of the trunk of a pine tree located in Weathersfield, Vermont. On this tree, Kendall saw two figures, one of a woman and the other of a child. He could not identify the images on the other two sides because they had deteriorated. Kendall stated that these figures were carved by Indians and represented the birth of a child whose mother was taken captive by Indians who had raided the English settlement at Deerfield, Massachusetts in 1704 (Hall 1858:591; Delabarre 1928:267). Benjamin Hall, fifty years later, rejected Kendall's account of this tree carving, noting the "the oldest inhabitants of Weathersfield have never known of its existence." Hall's rejection was weak and inadequate. As Kendall himself noted, the carvings on two sides of the tree were already unidentifiable in 1809, and certainly the images would have continued to fade overtime.

In 1813, Jeremy Belknap in his *HISTORY OF New Hampshire* reported finding two pine trees that had been marked by Indians. One of these trees was located on the "shore" of the Winnepesaukee River (Lake?) and contained the image of a canoe with two occupants. Belknap interpreted this to be a directional

marker. The second tree was in Moultonborough, New Hampshire at a canoe-carrying place between two ponds. The carving depicted "the history of some expedition" including the number of persons killed and taken prisoner (Delabarre 1928:267).

Garrick Mallery (1893:330,331,338,339) cited a number of examples of carvings and paintings on trees and birch bark in the northeast woodlands. Mallery reported that geographic features, animals, human figures, wigwams, directional markers and other symbols were illustrated on birch bark to convey messages to other Indians pertaining to travel and hunting information. Such bark messages were employed by the Penobscot and Passamaquoddy Indians of Maine.

Archaeologists David Cook and Arthur Spiess (1981 21(1):30) in their study of canoe routes in Maine provide another example of Indians marking trees to facilitate travel routes. According to these authors, Colonel John Montresor, writing in 1761, made the following observation while traveling between Chadiere, Quebec and the Penobscot River: "The Abenakis, jealous of the knowledge of their country, took care to leave but few vestiges of their route. Even here we found but few knotches(sic) on the trees commonly called blazes, the savages' constant guide in the woods."

Garrick Mallery (1893:330,341) also reported that Algonkian Indians of the St. Lawrence River in 1810 drew with charcoal a notice of departure, direction and purpose. This illustrated message depicted two Indians paddling a canoe in which there was a woman, child, baggage and "a bird on the wing." Mi'kmaq Indians, he wrote, placed a pictographic message on a tree that indicated ten Passamaquoddy Indians were observed in canoes on a lake heading towards its outlet. Mallery also reported that in 1605, explorer Samuel de Champlain described how Indians drew with charcoal, illustrating geographic features along the coast of New England.

Examples of culturally modified trees are also found in Iroquois country in New York. Henry R. Schoolcraft, writing in 1857, stated the following: "In 1696, when Frontenac marched an army into Iroquois country, he discovered a large tree, on one side of which was a pictographic drawing of his army, with symbolic figures, indicating defiance, and representing the numbers expected to oppose him" (Schoolcraft 1857:605).

A final example of tree art has come to my attention from the Public Archives in Halifax, Nova

Scotia. In a 1921 photo, presented here, the names of William Chearnley, Indian Agent for Nova Scotia in the 1850s, his brother John, and James Cope, a Mi'kmaq guide are carved on a tree in Freemason's point, Newfoundland. The carving is a record of their hunting trips in Newfoundland between 1853 and 1859.

Like petroglyphs, culturally modified trees serve a basic purpose of communication. I find the variety of purposes of communication in these examples instructive. In this handful of examples we have seen trail blazes, directional markers, accounts of expeditions and a threat to an advancing army.

References cited

- Cook, David and Arthur Spiess
1981 "Archaeology of the Piscataquis Ah-wangan: Preliminary Results." Maine Archaeological Society Bulletin 21(1):29-38.
- Delabarre, Edmund B.
1928 Dighton Rock: A Study of the Written Rocks of New England. New York: Walter Neale, publisher.
- Hall, Benjamin
1858 History of Eastern Vermont. New York: D. Appleton & Co.
- Kendall, Edward A.
1809 Travels through the Northern Parts of the United States in the Years 1807-1809. New York: I. Riley.
- Lenik, Edward J.
2002 Picture Rocks: American Indian Rock Art in the Northeast Woodlands. Hanover, NH and London: University Press of New England.
- Mallery, Garrick
1893 Picture Writing of the American Indians. Reprinted 1972. New York: Dover Printing.
- Schoolcraft, Henry R.
1857 History of the Indian Tribes of the United States: Their Present Condition and Prospects, and a Sketch of their Ancient Status. Vol. 6. Philadelphia: J.B. Lippincott & Co.



1921 photo of tree carving, Freemason's Point, Newfoundland. Courtesy of Public Archives of Nova Scotia, Halifax, P98.34/N-14,445.

The Symbolism of the Sun, Moon, and Planetary Halo, Corona, Pillar, and Ray in Global Rock Art

By Kevin L. Callahan

*"And the Lord went before them...
by night in a pillar of fire, to give them light."
(Exodus 13:21)*

Two of the most common pictographic motifs in international rock art studies are concentric circles and the dot or cupmark with a circle, or a series of rings, surrounding it. Occasionally, a dot, a dot and circle, or a dot and circles, may also have a straight line or groove radiating downward or outwards from the center.

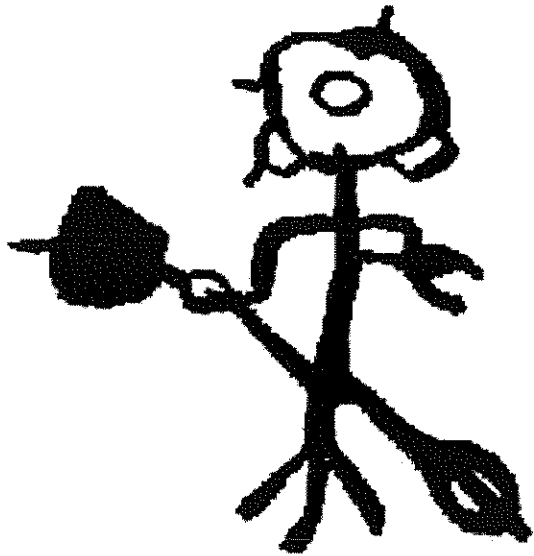


Fig.1. Internally circled "sun headed" figure with downturned arms and three "legs" holding an atlatl with a large banner stone (the hook is apparent on the rock surface but not in the drawing) with a fletched dart. Possible ear spools. From Station 7, Jeffers Petroglyphs, MN.

To give a few examples of the concentric circle motif in the western hemisphere, at the Jeffers site there is a "sun headed" figure (Fig.1) holding an atlatl with two concentric circles to represent his head. Joan and Romas Vastokas have noted how common haloed or rayed "sun headed figures" are in North America and at the Peterborough Petroglyphs in Ontario, Canada (Vastokas and Vastokas 1973:55-65). In the Vastokas' extensive discussion of this rock art motif, which includes the sun figure in cross-cultural perspective, they established that within Ojibwe culture, the sun headed figure, with its concentric circles and

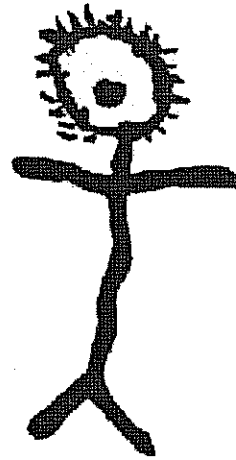


Fig.2. A stick figure petroglyph from the Jeffers Petroglyphs, MN with a dot and circle head and rays.

occasional rays, had culturally particular meanings and associations with "*Kitche Manitou*, the Great Spirit itself, in its manifestation as the sun, or else as a depiction of the most powerful of shamans, the prophets or *Jessakids*, who have received their power from the sun. Copway wrote in 1851 that 'the Sun is the wigwam of the Great Spirit, and it is as the abode of this being that the Indians view this luminary'" (Copway 1851:159; Vastokas and Vastokas 1973:55). Citing Hoffman's work with the Ojibwe Midewiwin (Grand

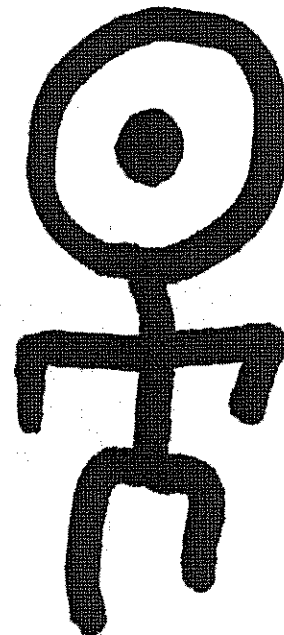


Fig.3. This dot and ring "sun headed" figure with downturned arms is from a pictograph on a boulder in Mexico and can be seen on T-shirts as the logo used by the German band *Einsturzende Neubauten*.

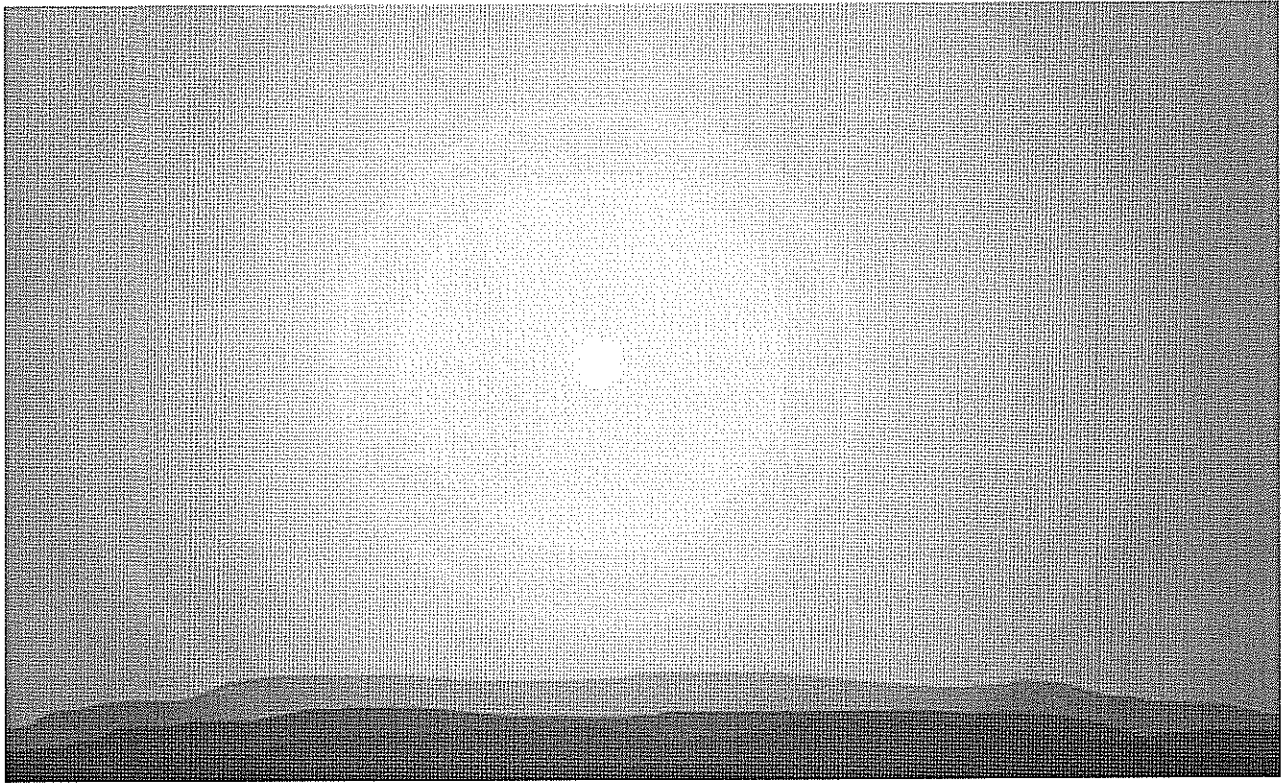


Fig.4. Concentric rings around the sun appear at regular intervals and in differing numbers depending on atmospheric conditions. *HaloSim* computer software can recreate the rarer displays of rings and pillars.

Medicine Society) of northern Minnesota, the Vastokas noted that “On [birch] bark scrolls, moreover, the heads of Mide spirits, or those images identified as guardian spirits of the Midewiwin, are often rendered with two concentric circles and are none other than Kitche Manito; Hoffman’s identification of one of these heads makes this clear” (Hoffman 1891:193; Vastokas and Vastokas 1973:58). According to Garrick Mallery, the Ojibwe pictograph for “sun,” as shown in Schoolcraft (1851-1857), is four concentric circles (Mallery 1972:695). Mallery also published an illustration from Copway with three dot and circle motifs underneath a larger (domed) semicircle. This was an Ojibwe representation of “spirits above.” With the semicircle turned downwards (like a bowl) they were “spirits under water” (Mallery 1972:480).

Mallery further cited Ernst for a description of a rock art site in Venezuela which had a thunderbird with three concentric circles next to it (see p.2 of this newsletter). These concentric circles were described as “a picture of the sun. This may be symbolic, and would then remind one of the representation of the wind and rain gods on the ruins of Central America” (Mallery 1972:487).

The research hypothesis I have been investigating is that there may be natural phenomena or “unifor-

mitarian processes,” other than the apparent curving motion of the sun overhead, which may explain the cultural convergence of solar meaning for the dot and circle motif in a variety of cultures widely separated by space and time. This discussion is not intended to suggest that all concentric circles in global rock art have one meaning or that there is a monocausal explanation for this rock art motif. We know, for example, from Lakota ethnographic sources that some circles referred to a wide variety of other things, such as drums, the sacred hoop, the tipi, the year, and so forth, and that a circle can have many meanings simultaneously (Callahan 2001:66,69-70,75-76; Walker 1917:160). However, there is good evidence to suggest that a dot and circle, or a series of concentric circles, is sometimes a direct pictographic representation of something people who spend a lot of time living under the open sky are very familiar with, namely, sun and moon halos and coronas.

We know from ethnographic sources that native people watched the sun for rings. For example, Luther Standing Bear, a Lakota (or Teton Dakota), wrote several pages about the meaning of the sun. He indicated that:

“Every day for the Lakota began with a salute

to the sun. . . . [T]he evening sun was watched for a forecast of the weather, and if a ring appeared around the sun a storm was looked for soon. Time of day was kept by the sun—hunter, traveler, and home-keeper—all watching its movements. . . . In the arts of design and drawing the sun was often used, being a favorite subject with the men. Occasionally the women used it as a symbol in their beadwork, but more often it was painted on the tipis and war shields of the men. Women often chose a sun name for their children, such as Wi he napa, meaning Rising Sun, or Wi sapa, meaning Black Sun” (Standing Bear 1978:47-48).

Concentric circles did appear on Native American clothing, as well as rock art. At a traveling exhibition of Native American war shirts from the Smithsonian Institution, (exhibited at the Minneapolis Institute of Arts in Spring 2004), one of the most striking beaded war shirts in their collection was owned by the Lakota Chief Sinte Gleska (Spotted Tail) and used only concentric circles of two and three circles for its decorative motif.

The sun and moon halo and corona arise from completely different meteorological causes. The generally larger halo is only caused by Cirrostratus ice crystals and the generally smaller corona is caused by moisture in the air—like a rainbow. Both halos and coronas appear to those on the ground as rings around the sun or moon. They can also form around other bright objects in the sky, such as Venus. Similarly, a line coming straight down from a central dot or dot and circle may directly represent a sun, moon, or planetary pillar, which, like the halo and corona, is also used as an indicator of rain.

Watching the sun and moon for rings is a commonly recommended method of weather prediction in the military. For example, the United States Air Force Search and Rescue Survival Training Manual advises that:

“The Moon, Sun and stars are all weather indicators. A ring around the Moon or Sun means rain. The ring is created when tiny ice particles in fine cirrus clouds scatter the light of the Moon and Sun in different directions. . . .

Weather forecasting enables survivors to make plans based on probable changes in the weather. Forecasts help survivors decide what clothes to wear and what type of shelter to build” (U.S.A.F. 2002:77,79).

The [British Special Air Service] SAS Survival Handbook further explains that:

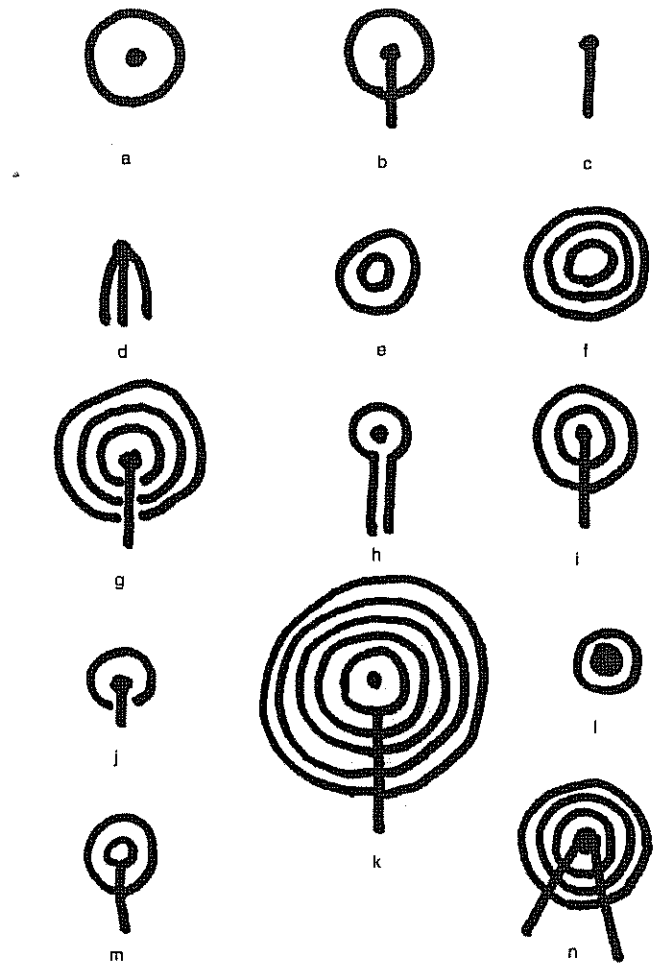


Fig.5. Common motifs. Top left to bottom right: (a) dot and circle motif (“cup and ring”); (b) dot and circle with radius line (“cup and ring and radial groove”); (c) dot and line (“cup and groove”); (d) hieroglyph for “light;” (e) two concentric circles without a central cup; (f) three concentric circles; (g) dot and line with incomplete rings; (h) cup and incomplete circle with a radial line; (i) cup and rings with radial line or groove; (j) cup and incomplete ring with a radial groove; (k) cup and multiple rings with a radial groove connected to the first circle; (l) large cup and small diameter circle; (m) concentric circles with radial line connected to the first circle; (n) cup and rings with two radial lines.

“Cirrostratus clouds are clouds made up of ice particles and look like white veins. These are the only clouds which produce a halo around the sun or moon. If it gets bigger it means fine weather, smaller a sign of rain. . . . To be caught in bad weather could be fatal to survival. There is a time to go out or move on and a time to shelter. With an awareness of certain signs, short-term weather predictions can be made to help decide which to do. Before setting out on any activity take note of the weather and any changes that are likely. . . . A corona, a coloured circle visible around the sun or moon can be used to forecast the weather accurately. An enlarging ring is a sign of good weath-

er—the enlarging circle shows that moisture in the atmosphere is evaporating and day or night will be clear. A shrinking corona around the sun or moon is a sign of rain” (*Wiseman 1996:185-6*).

Thus, one possible reason for showing several circles may simply be to show that over time the size of a halo or corona will get bigger or smaller. If it gets bigger, then fine weather is coming, and if it gets smaller, a warm front and rain is coming. This would be especially useful information for people in a desert, fishermen on the ocean—and people afraid of violent weather such as hailstorms—another common weather-related pictographic subject.

One of the most common and easily identifiable symbols on war shields in museums across the Great Plains is the hailstone. Beyond the religious symbolism related to the sky world, in a sudden severe hailstorm a shield held over the head probably provided needed head protection.

In North America certain shamans specialized in controlling and predicting the weather by making rock art. E. Breck Parkman (1995), for example, has noted a link between the phenomenon of making cupules on some boulders and the weather controlling shamans.

In the eastern hemisphere, the Egyptians had a myth that humans were the result of the tears of the sun. One of the earliest Egyptian “sacred carvings” or hieroglyphs (or in Egyptian “the god’s words”) was the dot and circle, which represented Ra, or Re, the sun god (Gahlin 2001: 125).

“In the 1820’s, Jean Francois Champollion broke into the silent world of pharonic writing proper when he identified the name of Rameses on a temple inscription by recognizing that the sun-symbol stood for the word *re* the Coptic word for sun. . . . The complexity was due to the fact that a hieroglyph could play one of several distinctive roles. It could stand, like [the dot and circle], for an idea—in this case the sun—and also for a syllable—in this case *re*. It could also stand for an individual consonant in what amounted to a pharonic alphabet. . . . In addition, it could stand as a determinative, a symbol making it clear whether the preceding hieroglyphs represented a god, a man, a mammal, a building, a river—or a whole range of other generic types” (Stewart 1971:108).

If the pictograph was intended to show the actual physical sun, rather than the sun god, the dot and circle also had a straight line coming down from the dot. According to Champollion the hieroglyph for

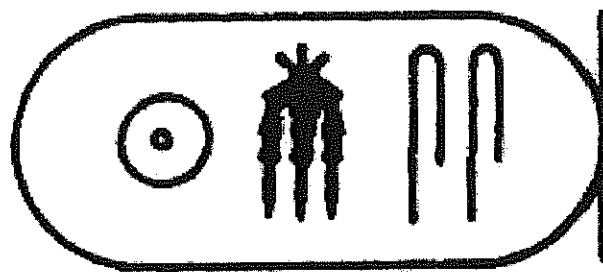


Fig.6. The design of the original cartouche Champollion recognized in deciphering the hieroglyphs.

“light” was a circle with three lines pointing downward (Mallery 1972:695). All three of these were probably direct pictographic representations of three common natural phenomena: the sun halo or corona, the sun pillar, and the rays of a setting or rising sun.

“As with Sumerian cuneiform writing, in the earliest form of [Egyptian] hieroglyphics a picture stood for an idea. For instance, a picture of a man stood for a man; a picture of a bird stood for the idea of a bird. In time, the system changed so that pictures stood for sounds as well as ideas” (Beck, et. al. 2003:38).

Egyptologist, Lucia Gahlin has noted that “the ancient Egyptians made observations of the natural world and then incorporated them into the iconography of their religious beliefs” (Gahlin 2001:56). The Old Kingdom Egyptians (c. 2686-c.2181 BC) used the dot and circle hieroglyph to mean “the sun god” early in their history. The sun cult at Heliopolis (the City of the Sun) was at the forefront of Egyptian religion during the period and it was a heyday for solar symbolism in architecture with the development of the pyramid, standing stones, and obelisks. According to Gahlin:

“Each of the pyramids would have sported a gilded pyramidion (a mini pyramid) at its pinnacle, which would have glinted strikingly in the sunlight. This feature, together with the sloping sides of the entire structure resembling the rays of the sun as they are seen to jut through the clouds, would have made the pyramid an appropriate icon of solar religion. . . . The prototype for the true pyramid may well have been the focal point of the cult at Heliopolis. This was a squat standing stone, pointed at its apex, known as a *benben* . . .

This monument, the original and most sacred of the *benbens* was erected at Heliopolis at least as early as the First Dynasty. It may well have symbolized the primordial mound that appeared out of the



Fig.7. Standing stone with cup and rings and radial grooves from the neighborhood of Moonbutts, parish of Cargill, Perthshire, Scotland (Simpson 1867:Plate 5).

watery chaos of the Nun, [primordial waters] whence the sun rose for the first time and creation began. It was certainly believed to have been the first point hit by the rays of the rising sun. . . . Throughout history, the ancient Egyptians also incorporated a more tapering, needle-like version of the *benben* into the design of their tombs and temple complexes. Today we call these sacred stones *obelisks*. . . . They too would originally have had gilded tips, which were referred to as *benbenet*, and would have reflected the sun's rays majestically" [emphasis added] (Gahlin 2001:176-7).

In southern Scotland, northern Spain, and Switzerland there are numerous nearly identical cup and ring motifs, some with radial grooves, from the late Neolithic and early Bronze Age (c. 2000 BC). Sir James Simpson (1867), in perhaps the first book en-

tirely devoted to rock art, suggested in a footnote that the cup and rings of Scotland were probably carved during a period when Basque speakers were in Britain, but he argued strenuously and at length against two of his contemporaries who were proponents of the view that the rock art was related to "Phoenician" solar symbolism or the "religion of Baal" (109-113, 143-144).

Simpson noted that several important place names in Scotland are based on the Basque words for rock and water (Asta and Ura) and Tacitus' Roman era reference to the "Horesti" in Scotland at the time of Agricola, may be composed of the Basque words Ura or Or and Asta or Esta, which would signify "a land of rivers and rocks or hills" (144). This is the reverse of the Basque word Asturias with the same meaning. He also noted that people had "anciently whaled in the Firth of Forth with harpoons of deer-horn when its upper waters were either much higher or its shores much lower than at present" (144). In Scotland the Basque word for water (Ura) was especially used in naming streams, rivers, and lakes and was used "either singly, or as prefixes and affixes to other names" (144). According to Simpson: "That Iberians, speaking the Basque or Euskarian languages, partially inhabited the southern and western parts of Great Britain in the time of Tacitus, and long previously, is generally admitted to be of high probability" (143).

The Basque language is a very old non-Indo-European language. The word "Basque" means "sun." Some linguists have asserted that the Basque language retains words for tools from the Neolithic and incorporates some Hamitic, and therefore possibly ancient Egyptian, words from North Africa. In a chapter on the "Cult of the Dead" in a travel book entitled *The Basque Country* (1921) Katherine Fedden described the Basque *Yarleku* stones and what appears to be an account of a cupule or "round dimple" in the stone at the entrance to a Basque house.

"These stones in the floors of the porches, or often set in the paving of the church itself, are called *Yarleku* and upon them the women of the family kneel on black praying rugs saying prayers for the dead. In the tabular stone, the grave, and the *Yarleku*, students see the menhir, the tumulus, and the dolmen (altar) of our prehistoric ancestors. It is certain that even today votive offerings of bread and wax are made at a funeral—food and light for the departed on his long journey—bread to the poor, wax candles for the mass. Everywhere in this country you feel yourself touching hands with remote and shadowy figures, half guessed

at through the mists of time. That strange round dimple in the stone on the floor of the porch is a symbol which is found in the dolmens of Brittany, on the Pyramids of Egypt, in India, in China, a symbol which has outlasted empires" (Fedden 1921:44).

Basque ancestors were buried beneath the stone floors inside Catholic churches and in the eighth to the seventeenth century a kind of Basque headstone became popular with a solar disc on a pyramid (Fedden 1921:41-44; c.f. Gallop 1970:215-219). Prior to that, pyramids appeared on some earlier headstones.

A recent DNA study of the Irish, Welsh, and Scots concluded that of any population in Europe, they are most closely linked to the Basques.

"Lacking ancient DNA from a pre-farming British population, Dr. [David] Goldstein and Dr. [J.F.] Wilson chose to compare the common genetic signature of the Welsh, Irish and Scots with the next best thing, the DNA of the Basques who live in northern Spain. The Basques, because they speak an unusual, non-European language and are genetically distinct from other Europeans, have long been assumed to be descended from the continent's first modern human inhabitants."

"Dr. Goldstein said he and his colleagues found the same genetic signature in Basque men, suggesting that the Scots, Irish, Welsh and Basques all derive from the same, possibly very homogeneous, population that inhabited Europe in Paleolithic times. This finding implies that the Celtic language must have arrived in Britain largely by cultural diffusion, displacing the original, presumably Basque-type language spoken by the first settlers."

"These arguments are based on the male, or Y, chromosome and apply only to men" (Wade 2001).

The Basques were well known during historic times for their seafaring, fishing, and whaling abilities and archaeologist Gordon Childe observed as early as the 1930's that an annual fish migration occurred between northern Spain and southwestern Scotland. Basque whalers' first stop on their way to Iceland was Scotland.

Archaeological evidence from northern Scotland indicates that Neolithic people fished miles out in the open ocean. "The presence of cod bones at the Knap of Howar [in Orkney] indicates that fishermen sailed several miles out to sea in order to secure the most appetizing catches" (Ross 1991:37).

There is another recent kind of preliminary archaeological evidence that people probably traveled

around in Europe during the Neolithic. Oxygen and strontium isotope analysis of the teeth of the "Amesbury archer" (near Stonehenge), by Paul Budd and Carolyn Chenery at the NERC Isotope Geosciences Laboratory in Nottingham, indicates that the Archer grew up in continental Europe at the longitude of Switzerland and Scandinavia and traveled to Britain during his lifetime (Budd 2003).

The prehistoric European traveler should have been quite familiar with the phenomena of halos, coronas, and pillars. In Europe, halos are seen more often than rainbows. One possible reason for carving more than one circle is that sometimes there actually is more than one ring. According to the *Atmospheric Optics* website:

"Halo displays range from the familiar circle around the sun or moon to rare and prized events when the whole sky is webbed by intricate arcs. Tiny ice crystals in the atmosphere create halos by refracting and reflecting light....Halos are produced all the year round from tropics to the poles by ice crystals in cirrus clouds 5 to 10 km (3 - 6 miles) high in the always cold upper troposphere. Sometimes in very cold weather they are also formed by crystals close to ground level, called diamond dust. The crystals behave like jewels, refracting and reflecting sunlight between their faces, sending shafts of light in particular directions. ..."

"Halos appear in our skies far more often than do rainbows. They can be seen on average twice a week in Europe and parts of the United States. The 22° radius circular halo is usually the most frequent followed closely by sundogs (parhelia) and then the upper tangent arc. . . . Passing through the sundogs and extending beyond them is the parhelic circle. It sometimes encircles the whole sky at the same altitude as the sun. Upper and lower tangent arcs touch the 22° halo directly above and below the sun. A circumzenithal arc is high above all...."

"Sundogs (parhelia, mock suns) are the second most frequent of the halos. Look for them, especially when the sun is low, at each side and about 22° away. This is the same distance or more than the common circular halo....Look for sun pillars near to sunrise or sunset....A lower pillar is formed when downcoming rays are reflected upwards from the near horizontal faces of plate crystals. . . . [The secondary] 46 degree radius halo. . . stretches wide across the sky. It is rare and even more rarely complete. Its colours spread nearly three times wider than those of the 22° halo and together with its larger radius this makes it at least six

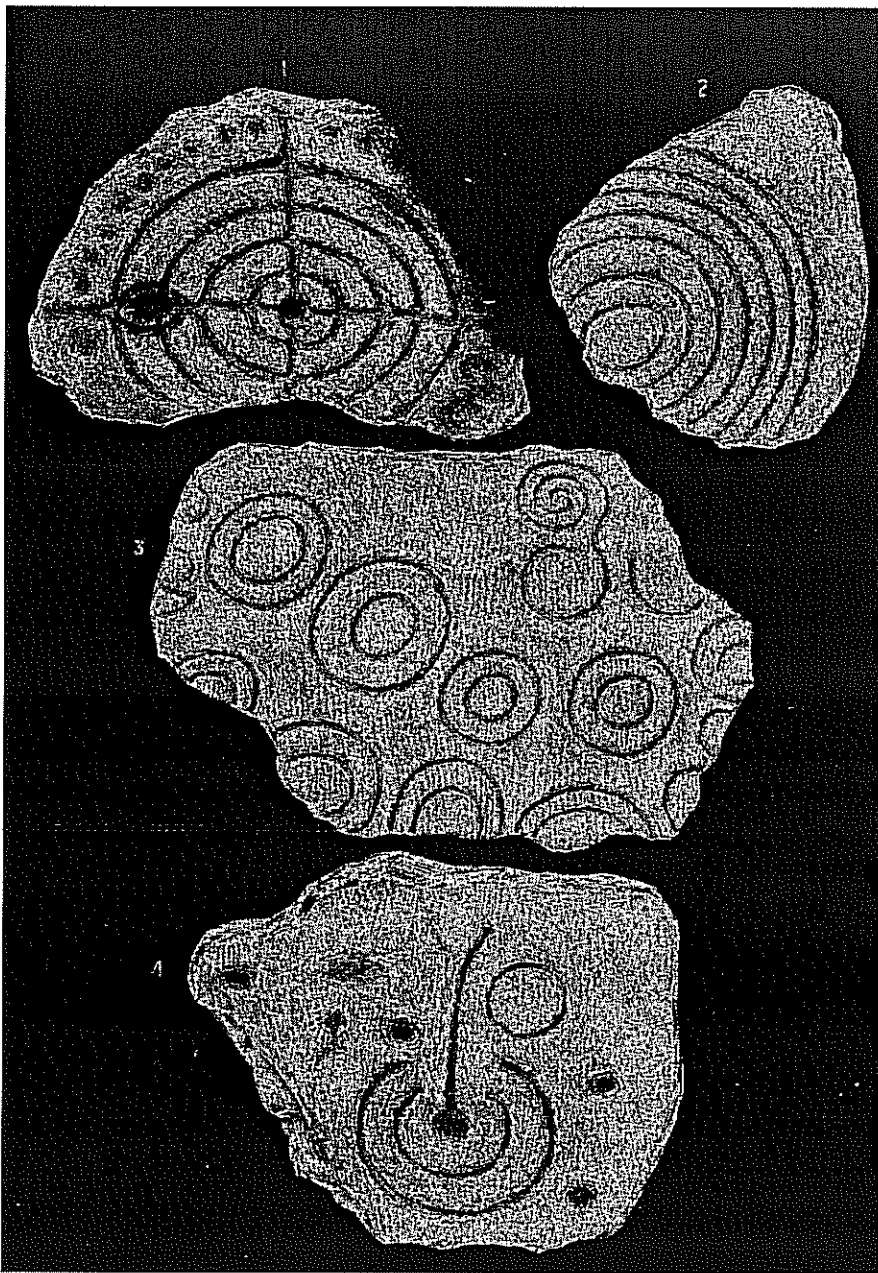


Fig. 8. Concentric circle motifs described as “Isolated stones from Jedburgh, &c.” (Simpson 1867: Plate 16).

times fainter....Look further out from the sun, beyond the sundogs. There is often a white band at sun's altitude, so white that it is sometimes easy to mistake it for cloud. This is the parhelic circle. When complete it goes all around the sky. Complete circles are rarities but sections extending outward from sundogs are quite common. It is formed by millions of ice crystals with vertical faces each mirroring the sun around the sky. . . . Coronae are produced by the diffraction of light by cloud droplets. They have an intensely bright central aureole fringed with yellows and reds. Surrounding that is a ring, violet-blue on the inside passing through blues, greens and yellows to red. Sometimes there

are more rings, sometimes none at all depending on how evenly sized are the cloud droplets. . . . A corona around the sun is not uncommon when the sun is veiled by thin clouds. To see it, hide the sun with a tree or building or view the sky reflected in water - never look at or near an unshielded sun. The coronae is much smaller than the 22° halo which can also ring the sun. The halo is formed by geometrical refraction through comparatively large hexagonal ice crystals” (Atmospheric Optics: 2004).

The *Atmospheric Optics* website also indicates that other bright objects in the sky such as Venus or the moon can produce striking pillars and halos.

The sun pillar may have been incorporated into the solar symbolism and meaning of both the standing stone and the more refined, but directly related, obelisk. An Egyptian or European wishing to see the fainter multiple sun rings might have used an obelisk or standing stone to block the sun and this may have been one of its purposes. The gold tip of Egyptian obelisks were designed to dramatically catch the earliest rays of the sun as it rose, as the ground level was still in shadow.

Since in Egyptian mythology humans originated from the “tears of the sun” (with its suggestion of rain, salty tears, and ocean water), the appearance of a sun or moon pillar as a weather indicator of approaching showers or thunderstorms in either a desert or ocean environment, would be of practical importance, but it

may also have occasioned the recalling of religious stories, historical events, and symbolic meanings associated with past phenomena. In describing the Exodus of Moses and the Jews from Egypt, the Old Testament indicates that “the Lord went before them by day in a pillar of a cloud, to lead them the way; and by night in a pillar of fire, to give them light; to go by day and night” (Exodus 13:21).

Benbens, standing stones, and obelisks may perhaps have commemorated or symbolized events associated with the light of other rare or striking pillars seen at night. They would also have been useful

as a sun shield to regularly look for haloes during the day and at night. Egyptian priests assigned to a solar observatory to regularly watch and predict weather changes by looking for haloes might have used a tall pillar as a sun shield to protect their eyes.

Regular atmospheric observers, Aden and Marjorie Meinel, have expediently used a tall saguaro cactus as a sun shield when photographing rare events such as a Bishop's ring visible near their home in Tucson, Arizona (Meinel and Meinel 1983:Plate 8-1). A Bishop's Ring is caused by diffraction of light from volcanic ash in the atmosphere and is named after the Reverend S. E. Bishop of Hawaii who first described it in one of the earliest articles in *Science* following the global atmospheric impact of the Karakatoa explosion of 1883 which occurred in Indonesia (Bishop 1884; Meinel 1983:79).

Garrick Mallery, indicated that in Asia, the Chinese pictograph for the sun was also the dot and circle (Mallery 1972:675). The dot and circle has even entered western astronomical symbolism as meaning the sun, through the symbolism used by the classical Greek world. The circle alone means "moon."

Conclusion

Some concentric circle, dot and circle, and dot and line rock art motifs appear to be direct pictographic representations of commonly observed natural phenomena associated with the sun, moon, and perhaps other bright objects in the sky, such as Venus. These natural phenomena, the halo, corona, and pillar are useful in weather prediction, are uniformitarian processes observable on a worldwide basis, and, as such, they would have been present in the prehistoric past.

References

Atmospheric Optics

- 2004 Atmospheric Optics website, <http://www.sundog.clara.co.uk/atoptics/phenom.htm>.
- Beck, R. B., Linda Black, Larry S. Krieger, Phillip C. Naylor, Dahlia Ibo Shabaka
- 2003 World History: Patterns of Interaction. McDougal Littell, Evanston, Ill.
- Bishop, S. E.
1884. *Science* 3:216.
- Budd, P.
2003 May 27 Britarch posting.
- Copway, G.
1851 The Traditional History and Characteristic Sketches of the Ojibway Nation, Boston.
- Gahlin, L.
2001 Egypt: Gods, Myths and Religion.
- Lorenz Books, New York.
- Gallop, R.
1970 A Book of the Basques. University of Nevada Press, Reno, Nevada.
- Hoffman, W. J.
1891 The Mide'wiwin or "Grand Medicine Society" of the Ojibwa. Bureau of Ethnology, Seventh Annual Report, 1885-'86.
- Mallery, G.
1972 Picture Writing of the American Indians, Vols 1 & 2. Dover Editions reprint [1893], Washington D. C.
- Meinel, A. M. a. M.
1983 Sunsets, twilights, and evening skies. Cambridge University Press, Cambridge, U.K.
- Parkman, E. B.
1995 California Dreamin': Cupule Petroglyph Occurrences in the American West. In Rock Art Studies in the Americas, edited by J. Steinbring. Oxbow Books, Oxford.
- Ross, S.
1991 Ancient Scotland. Barnes and Noble Books, New York.
- Standing-Bear, L.
1978 Land of the Spotted Eagle. University of Nebraska, Lincoln and London.
- Stewart, D.
1971 The Pyramids and Sphinx. Newsweek Book Division, New York.
- U. S. A. F. 2002 United States Air Force Search and Rescue Survival Training. AF Regulation 64-4. Metro Books, New York.
- Vastokas, J. M. V. a. R. K.
1973 Sacred Art of the Algonkians, A Study of the Peterborough Petroglyphs. Mansard Press, Peterborough, Ontario.
- Wade, N.
2001 Gene Study Shows Ties Long Veiled in Europe. In New York Times, New York.
- Walker, J. R.
1917 The Sun Dance and Other Ceremonies of the Oglala Division of the Teton Dakota. Anthropological Papers of the American Museum of Natural History 16(2):50-221.
- Wiseman, J.
1996 The SAS Survival Handbook. Harper Collins Publishers, London.

Petroglyphs at the Spring Valley Road Cave in the Driftless Area of Southwestern Wisconsin

By: Mandy Georgeff

Mississippi Valley Archaeology Center at the
University of Wisconsin – La Crosse.

Introduction

My senior thesis at University of Wisconsin – La Crosse covered three aspects of Native American rock art found within the Driftless Area. The first aspect covered was the history of rock art research in the Driftless Area. Topics such as general rock art studies, specific Driftless Area rock art sites, and a synthesis of regional rock art were covered.

The second aspect was a description of Spring Valley Road Cave, a small crevice cave located in Crawford County, Wisconsin. Five petroglyphs were discovered within the cave and were formally recorded for the first time. The recording of this cave involved mapping, photography, and condition assessment reports. In addition, the site was recorded in the Wisconsin Archaeological Site Inventory as 47Cr709.

The third aspect of this research was the creation of a comparative motif grid consisting of petroglyphs and pictographs from the Driftless Area. The grid was modeled after a recent synthesis of Missouri rock art (Diaz-Granados and Duncan 2000). The Driftless Area grid was initiated by reviewing published and unpublished reports of rock art site investigations in this region. The grid provides documented examples of six of the most common motif categories and twelve sub-categories from 22 sites found within four sub-regions. The four sub-regions were the Mississippi River Valley, La Crosse/Black River Valleys, Kickapoo River Valley, and the central Wisconsin Valley. This grid clarifies the variation of selected motifs. When all the motifs were set up into the grid, stylistic patterns were apparent. Finally, the locations of sites containing each motif category were plotted on a series of regional maps, in an attempt to identify spatial patterning.

Spring Valley Road Cave

Spring Valley Road Cave contains four or five petroglyphs in a small crevice of a remote valley of the Driftless Area. The Driftless Area of southwestern Wisconsin, southeastern Minnesota, and northeastern Iowa consists of rugged landscape (Martin 1965). The Driftless Area harbors thousands of limestone and sandstone bedrock exposures, including numerous rockshelters and caves. Over a century of rock art research has iden-

tified nearly 200 rock art sites in this region, more than any adjacent area (Boszhardt 2003).

Both petroglyphs and pictographs, have been documented in the Driftless Area (Lowe 1987; Stiles, 1987; Salzer 1987, 1997). (As used here, petroglyphs are carved or pecked into the rock. Pictographs are rock art motifs painted onto rock with a variety of pigments, including charcoal or red ocher.)

The second task involved in my research was recording the petroglyphs at the Spring Valley Road Cave. I adapted a Rock Art Condition Assessment Form that had been previously used to record glyphs at other caves in the region. The Spring Valley Road Cave was mapped using a compass and metric tape. The map includes height, width, and length of the cave. The locations of the petroglyphs were also plotted on the map. I photographed each glyph with a HP 315 PhotoSmart digital camera. Each photograph included a centimeter scale.

The Spring Valley Road Cave contains three petroglyph panels, which were numbered sequentially beginning at the entrance. Panel 1 consists of a Turkey Track right at the entrance. Panel 2 includes two glyphs, which are located along the west wall, nearly 1.5 meters from the entrance (Fig.1) . These were designated 2A (a bird) and 2B (an abstract vulva with several slash marks) (Fig.s 2 and 3) . Panel 3, is located furthest back in the cave, approximately 2 meters from the entrance. This panel also consists of two petroglyphs, which were designated 3A (another vulva with a central slash) and 3B (a double arc). The age of the glyphs is currently unknown.

The digital photographs were uploaded to a computer using HP Photo Imaging Software for the 315 Digital Camera software. Photographs were saved to a zip disk in order to edit and use on a rock art motif grid. An Archaeological Site Inventory form was filled out to formally report the Spring Valley Road Cave site and received a site number for the cave, which is 47Cr709. The panel 2A bird is similar to the furthest bird to the right at the Hanson's Petroglyph (47Ve48 [Buck and Wilson 1960]). The diamond "vulva form" (panel 3A) is comparable to series at Fish's Cave (Stanley 1993) and at DNR site #5 (Lowe 1987) and a single example at Bell Coulee Rockshelter (Loubser 1995). Panel 2B also contains a diamond shape vulva but is oriented horizontally and is associated with a series of crossed grooves. The double arch (panel 3B) is, thus far, unique for the region.

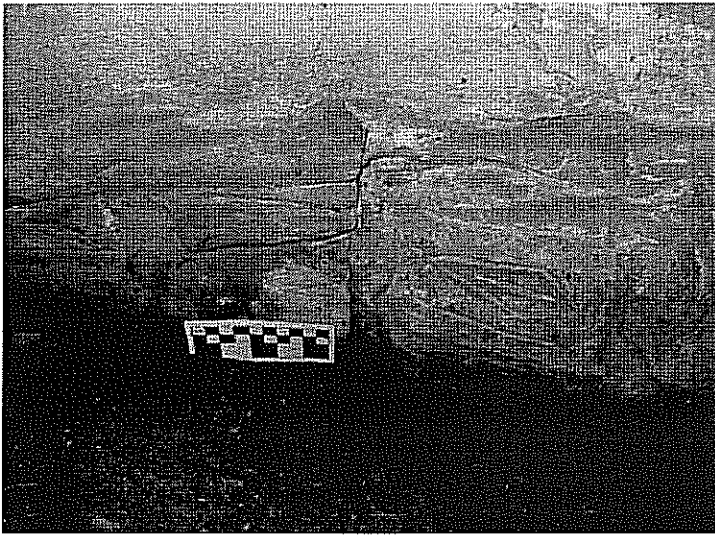


Figure 1. Panel 2, Glyphs 2A (left) and 2B (right).

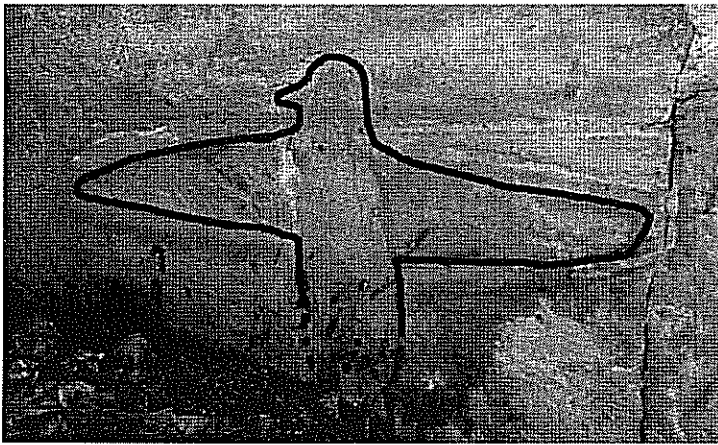


Figure 2. Panel 2, Glyph 2A digitally enhanced by outlining (Glyph of a bird.)

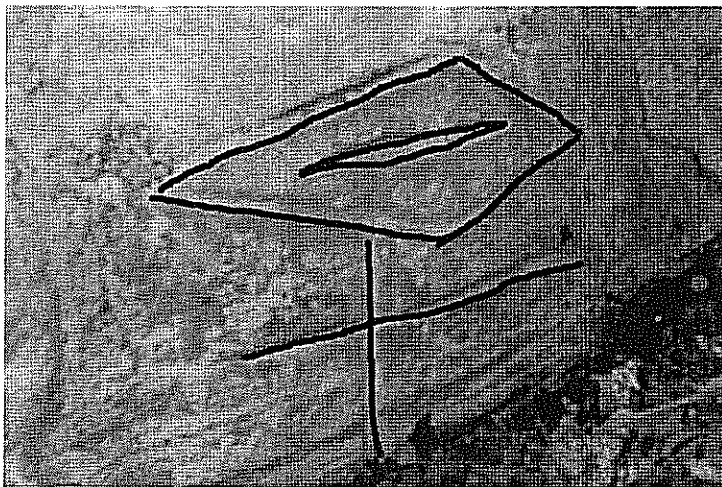


Figure 3. Panel 2 Glyph 2B digitally enhanced by outlining (Glyph of an abstract vulva with slash marks.)

References

- Boszhardt, Robert F.
2003 Deep Cave Rock Art in the Upper Mississippi Valley. Prairie Smoke Press, St. Paul.
- Buck, Dewey A., and William H. Wilson.
1960 The Hansons Petroglyphs, Vernon County, Wisconsin. *The Wisconsin Archeologist* 41: 98-101.
- Diaz-Granados, Carol and James R. Duncan
2000 The Petroglyphs and Pictographs of Missouri. The University of Alabama Press, Tuscaloosa.
- Loubser, Johannes H. N.
1995 The Tale of Two Shelters: Recordation and Conservation Status Of Bell Coulee Cave and Fleming #1, La Crosse County, Wisconsin.
- Appendix A in Rock Art Research in Western Wisconsin 1994-1995, compiled by Robert F. Boszhardt. Reports of Investigation No. 201, Mississippi Valley Archaeology Center, University of Wisconsin – La Crosse.
- Lowe, David
1987 Rock Art Survey of the Blue Mounds Creek and Mill Creek Drainages in Iowa and Dane Counties, Wisconsin. *The Wisconsin Archeologist* vol. 68 pp. 341-375.
- Martin, Lawrence.
1965 The Physical Geography of Wisconsin. The University of Wisconsin Press, Madison.
- Salzer, Robert J.
1987 Introduction to Wisconsin Rock Art. In *Wisconsin Rock Art*, edited by Robert A. Birmingham and William Green, pp. 277-286. *The Wisconsin Archeologist* Vol. 68 (4).
- 1997 Wisconsin Rock Art. In *Wisconsin Archeology*, edited by Robert A. Birmingham, Carol I. Mason, and James B. Stoltman, pp. 44-77. *The Wisconsin Archeologist* Vol. 78 (1 / 2).
- Stanley, Lori.
1993 Rock Art. In *Archaeological Investigations of the Bear Creek Locality, Allamakee County, Iowa*, Chapter 7. HCRC #155, Highland Cultural Research Center, Highlandville, Iowa.
- Stiles-Hanson, Cynthia
1987 Petroglyphs and Pictographs of the Coulee Region. *The Wisconsin Archeologist*, n.s., 68(4): 287-340.

ARARA BOOK ORDER FORM
(American Rock Art Research Association)

TITLE:

ROCK ART OF THE EASTERN WOODLANDS

1996 Charles H. Faulkner, Editor

Includes the following papers presented at the Eastern States Rock Art Conference in Natural Bridge State Park, Kentucky, April 1993.

(136 pages, 50 drawings and maps, 45 black and white photos)

CONTENTS:

Charles H. Faulkner – Foreward

James L. Swauger – Petroglyphs, Pictographs, and the Last Thirty-Five Years

Mark Hedden – 3,500 Years of Shamanism in Maine Rock Art

Edward J. Lenik – Sacred Places and Power Spots: Native American Rock Art at
Middleborough, Massachusetts

David C. Lowe – Ancient Images of Wisconsin

Mark J. Wagner – Written in Stone: An Overview of the Rock Art of Illinois

Carol Diaz-Granados -- Missouri's Petroglyphs and Pictographs: Overview of a Statewide
Survey and Analysis

Fred E. Coy, Jr. – Petroglyphs and Pictographs in Kentucky

Charles D. Hockensmith – Circle and Line Petroglyphs: Historic Carvings Mistaken for
Prehistoric Petroglyphs

Charles H. Faulkner – Rock Art of Tennessee: Ceremonial Art in This World and the
Underworld

B. Bart Henson – Rock Art Distribution in North Alabama as a Function of Motif Style

Richard M. Mooney – Petroglyphs and Archaeoastronomy in Tennessee

Wm. Jack Hranicky – Virginia's Prehistoric Observatories



BOOK ORDER

Quantity

Cost

Rock Art of the Eastern Woodlands \$16.00

Shipping/Handling for one book 3.20

Each additional book \$1.00 x _____

SUB-TOTAL: _____

TOTAL: _____

Please make checks payable to ARARA (All orders must be pre-paid)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone number: () _____

MAIL ORDERS TO:

ARARA

c/o Deer Valley Rock Art Center

P. O. Box 41998

Phoenix, AZ 85080

(For further inquiries, call: 623-582-8007)

For Official Use Only:

Check #: _____

Amount of check: _____

Paid in Full: _____ Yes