

# Observation of Little Brush Creek Solar Site Number 1

---

## Tom Freestone

The Little Brush Creek Site appears as an active solar panel with complex solar interactions. Not only does it appear that there is great variety in the panel functions, but different functions are carried out independently yet simultaneously in a precise and coordinated manner. Interactions for seasons of the year, as indicated by solstice and equinox, along with migration and other functions, appear to be present. The site is located at Little Brush Creek, tributary to Big Brush Creek near the Red Fleet Dam and Reservoir in Section 36 Township 2 South Range 22 East Salt Lake Basin Meridian in Uintah County, Utah. Elevation at the site is 5760 feet. A perennial stream and flat land is located nearby. The site is an isolated panel located on an outcrop of Navajo sandstone. The panel has a true north-south axis with exposure to the west. The panel surface seems to have had some degree of preparation prior to the figures being placed upon it, as evidenced by pecking across the entire panel face. Area of the panel is approximately 3.6 meters long by 0.75 meters on the left side, tapering to 0.60 meters on the right side. The arrangement of the numerous figures is very orderly, permitting a large number of depictions to utilize all of the available space. The exact location of each symbol or figure appears to have a definite placement in relation to other figures or symbols (e.g. anthropomorphs, zoomorphs and solar shields).

The panel is made up exclusively of petroglyphs appearing to be made in the same period. The application method is by pecking and/or incising. Stick figure anthropomorphs do appear to be in contrast to the Classic Vernal Style figures (Schaafsma

1971) located in the area. A cultural stratum covered by colluvial material is located at the base of the panel ledge. The lamina has been found to contain charcoal, bone, and grayware ceramics, the latter containing an unsorted quartz sand temper. Most of the grayware from this area contains a crushed calcite temper, so I found this to be unusual.

For a period of several years, a casual observation of the panel had been made, primarily due to the presence of four sets of concentric circles or symbols and an asymmetrical solar shield divided into quadrants containing varying numbers of dots. Observation of the panel has been on different dates, generally at sunrise, sunset, and noon. No significant shadows or points of illumination were in evidence.

On October 6, 1988, fourteen days after Autumnal Equinox, a chance observation revealed a dramatic cone or triangle of light penetrating to the center of the set of concentric circles on the extreme right side of the panel. This lighted triangle resulted from one or more irregularities in the rock surface adjacent to the panel. Subsequent and ongoing observation revealed that two minute ridges of rocks acting as gnomons or indicators would also cast triangular shadows that continuously pointed to different dots and quadrants in the solar shield. It was noted that the shadow points in the solar shield always moved in relation to the light and/or shadows moving on one or more sets of concentric circles. It was further noted that the shadow points in the solar shield always receded from the asymmetrical corner of the solar shield and

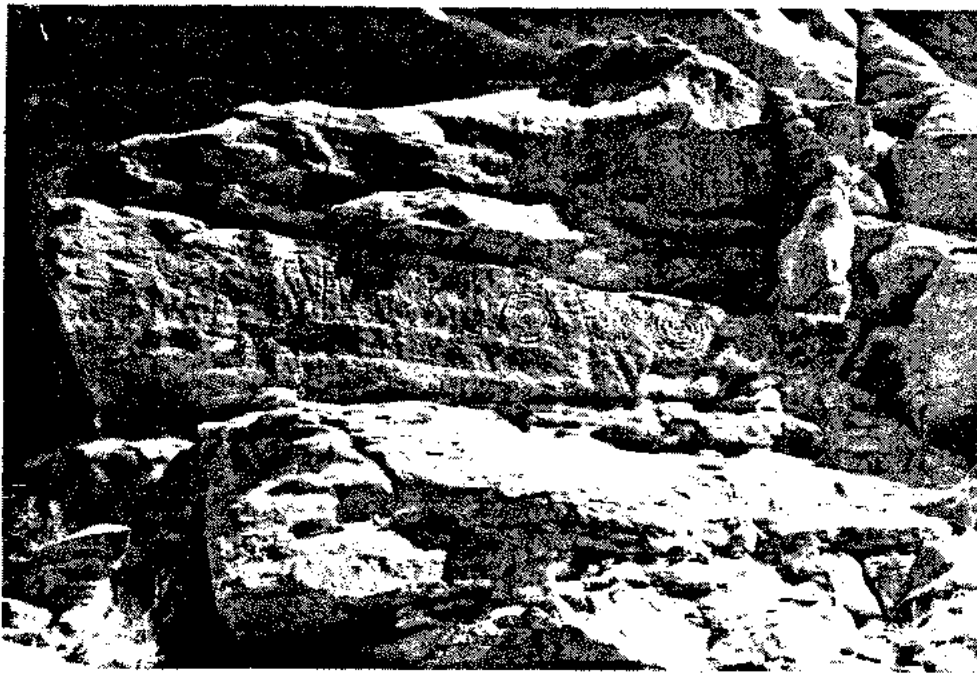
concluded their interaction with the various dots and quadrants in relation to the light and/or shadow moving on one or more sets of concentric circles. Conclusion of the panel's performance comes about precisely in unison with the different interactions.

It was determined that the overall performance of the panel is occasioned by the fact that prior to its performing it is completely in shadow, and following performance it is completely illuminated. The transition and performance is complete in just under 50 minutes, commencing each day at about 3:00 P.M. Daylight Standard Time. At some seasons of the year, the concentric circles on the left side of the panel remain in shadow, while in winter the circles on the right side of the panel remain in shadow until a full illumination of the panel takes place at the conclusion of the activity.

Other panel action, such as a "cupping" of some circles, appearance of a small face, and shadow pointers are present on a seasonal basis. Present day use of the panel is readily achievable following reasonable study and observations over a one-year period. To date, approximately 150 slides have been made at two-minute intervals. Several other possible interactions will continue to be observed with follow-up material to be supplied.

### REFERENCES CITED

- Schaafsma, Polly  
1971 *The Rock Art of Utah*. Peabody Museum Papers. Vol. 65 Harvard University, Cambridge, Massachusetts.



Picture taken after vernal equinox due to earlier cloud problems. Two shadow points are indicating particular dots and quadrants in the "sun shield". The cove of light is exiting the "solar symbol". Concentric circles and the small face are present.