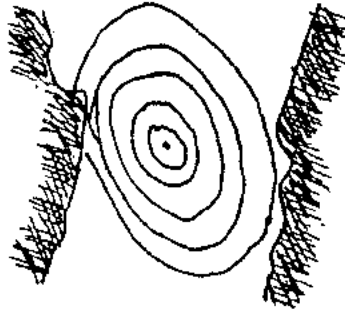


ANCIENT SUN CALENDAR IN SOUTHEAST UTAH

BY

REED LANCE

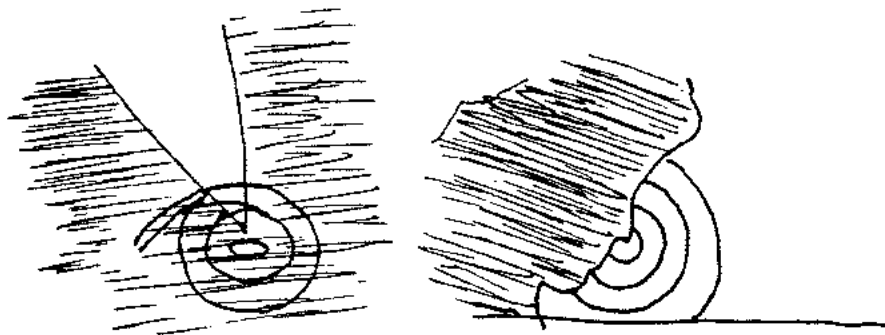
Until my discovery of this sun calendar it had performed hundreds of years unseen; spectacular performances lost in the winds of time. The following descriptions are of each of its four performances, and of its additional crescent symbol. The signals have completely different and innovative performances, one for each of the pivotal times of the season. The complete operation is within the crevice and on the east corner of a split sixty-foot rock. All performances are just before midday which is a reliable time of day, more so than horizon observations because sighting edgeways through the atmosphere increases the risk of clouds blocking the sunlight. This site has performed reasonably on partly cloudy days.



Winter Solstice

The winter solstice symbol is on the east wall, opposite the most prominent symbol in the crevice. A shadow moves up to touch the left side of a large circle of concentric rings. Then as the first shadow moves to the right side, a second shadow moves up to touch the left side, bracketing the circle with shadows at exactly 12 noon. The first shadow takes exactly thirty minutes to cross the circle and bracket it.

Description: The inscription is five rings of concentric circles, with a dot center approximately fifteen and one-half inches in diameter. It is etched into the rock relatively deeply. A stepped line is attached at the lower left (nine inches long and three and one-half inches wide) of the circles. The first shadow touches the left side at 11:30 AM, the center at 11:45 AM, and the right side at 12:00 Noon. From ground level to the bottom of the symbol is 54 inches.



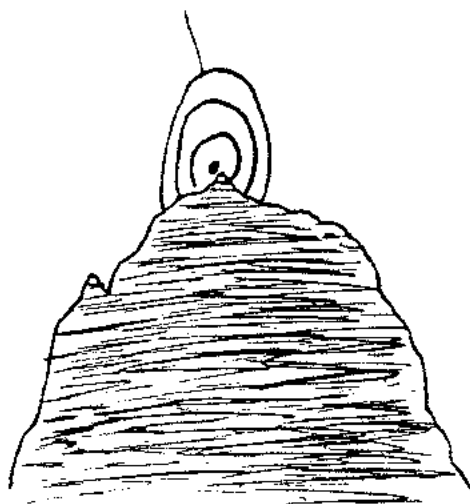
Equinox

For the first Equinox signal, a point of light drifts down across the center of an eye symbol at 10:40 AM standard time. The point of light touches a point progressively sideways each day, toward the south in the spring, and toward the north in the fall. The point touches the symbol center five days before the Vernal Equinox and five days after on the Autumnal Equinox.

For the second signal, a shadow forms a silhouette of a man's head as it crosses the center of a series of concentric circles. These two phenomena touch the center of their own symbols at exactly the same time. Two signals for the two equinoxes.

Description: The "eye" center circle is 6 inches in diameter, and the length of the "eye" is 14 inches with a second natural "eye" outline 18 inches long with a width of 6 inches. The center symbol and its circle appears to be a newer etching than the outside "eye" outline which might be a natural phenomenon used to advantage. From ground level to the bottom of the symbol is 47 inches.

The circles used for forming the silhouette are 14 inches diameter, with a total of four rings. The "eye" center circle is 18 inches above ground level. The carved edge forming the silhouette is about 15 inches to the left of the circles.

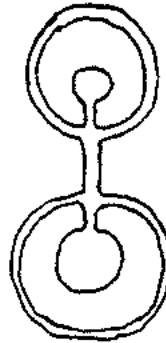


Summer Solstice

On the Summer Solstice, a wide, domed shadow with a point at the top forms over a large symbol, then the point lowers down the centerline. The shadow takes 20 minutes to pass from the top point to the lower horizontal line as it

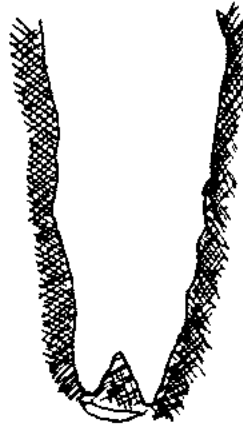
moves down.

Description: The vertical Summer Solstice symbol is 43 inches long with a ten and a half inch diameter circle. The circle has three rings around the center dot. The circle is four inches from the top of the line and 14 inches above the horizontal line. The horizontal line is 23 inches long. The bottom of the symbol is 21 inches above ground level.



Sun Migration Symbol

The top circle is four and a half inches diameter, the bottom circle is five inches in diameter, with a deep groove between the two centers. A reasonable explanation of the symbol might be that it represents the migrations of the sun between its solstices as represented by the circles used on the other signals.



Crescent and Dot Inscription

A point of light descends on the symbol at mid-day, then opens a triangular shaped mouth that swallows the symbol. Then it reforms a point as it continues. The crescent is four inches long with an extreme spread to the point of two and three quarters inches. The date of the light point contact is May 28.

Comments

This site has the capability to register each day from the equinox through the summer to the fall equinox, but it only has marks for several occasions. Since these few occasions are very dramatic and different, I would presume it is a shrine marking important ceremonial occasions. In my opinion it was done in a brilliant and innovative way. Used for ceremonial purposes the displays

could be impressive and convincing.

Because of the gradual slowing down to a stop and subsequent reversal of the sun direction, the day of solstice was a matter of judgement, not precision. The two solstice signals are on display for several weeks and the exact date is difficult to determine. The light point at the equinox gives exact days, and if you use the center of the eye symbol The Indians were off five or six days. If you use a corner for the spring equinox it is right on. This is very good considering the difficulty of determining the equinox, which cannot be done by just counting the days in the year, even if you do know the actual date of the solstice. The crescent mark is probably a good date for an early planting of corn and could be a very useful tool. This site leaves me awed and an attempt to put it into context leaves me overwhelmed.