

“Archaeoastronomy at Rochester Creek and Parowan Gap”

by

Nal Morris

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Nal Morris is an astro physicist who became interested in the archaeoastronomy as it relates to petroglyphs.

Nal began his talk with a generic description of how the sun moves along the horizon and how knowledge of this movement would help natives in their daily life – when to have ceremony when to plant, etc.

Nal then talked about his research at three locations – Rochester Creek, Comb Ridge and Parowan Gap.

Rochester Creek:

The Rochester Creek panel is shown in Figure 1. The images that interested Nal are the vertical line and the five images to the right of the line and above the spalled area.

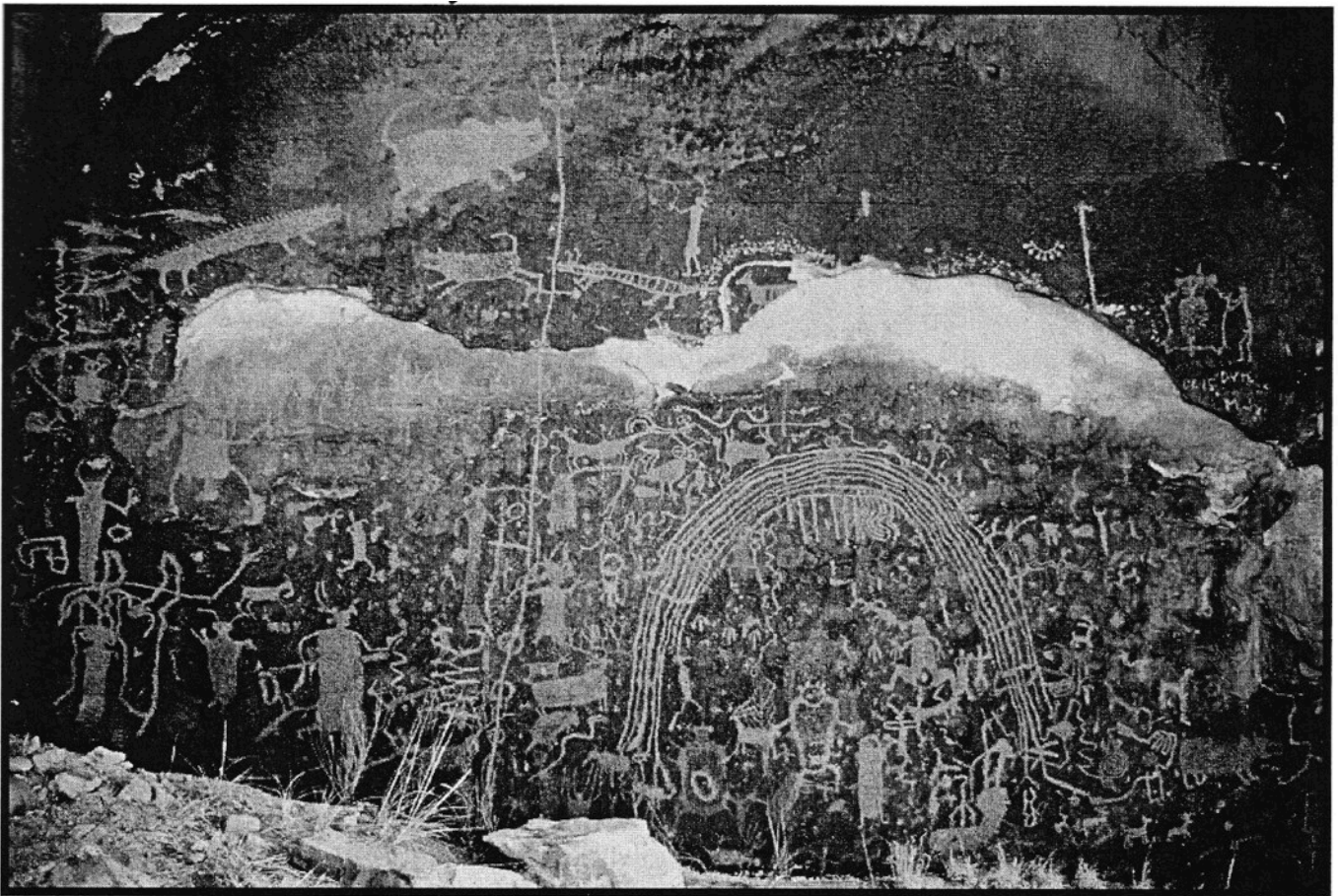


Figure 2-1 The Petroglyphic Panel at Muddy River and Rochester Creek

Figure 1 – Rochester Creek Panel

Nal described in detail how he and his team discovered that the vertical line is a shadow line the marks the summer solstice. He determined that he line was formed by a tall rock, which has since fallen. He then described how his team created and located a gnomon that could track the movement of the sun on the rock face.

They found that the shadow of the gnomon lined up perfectly with glyphs located at the top of the panel – Figure 2.

Figure 2-16 The Resultant and Fundamental Calendar Forms from the Rochester Study

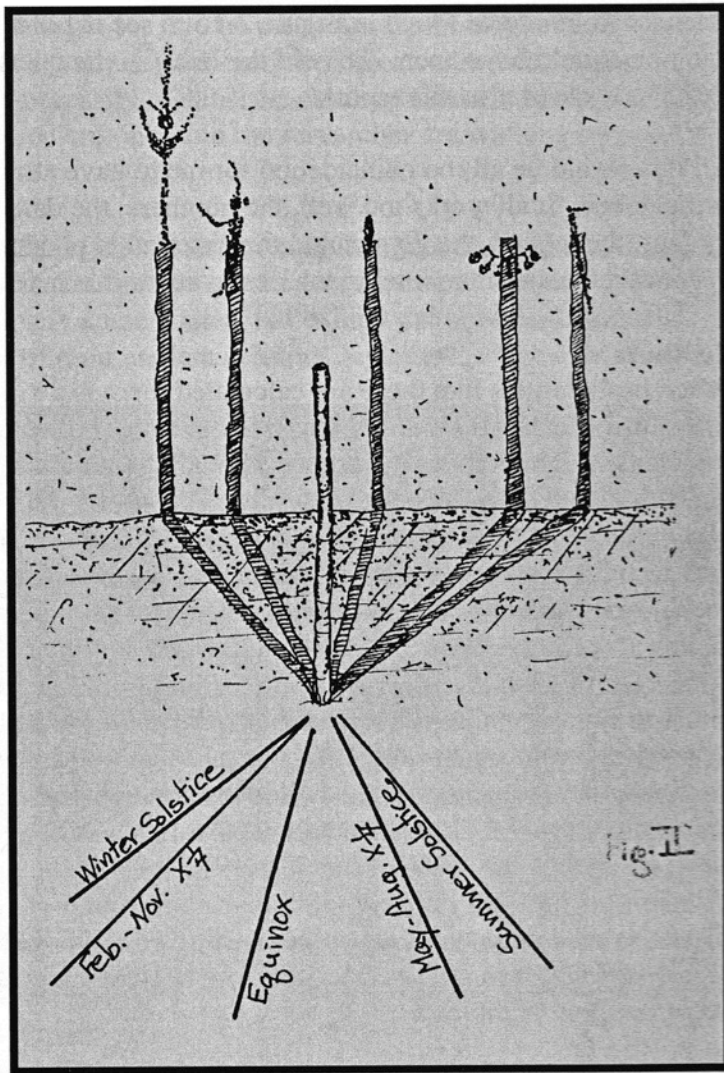


Figure 2 – The glyphs that describe the calendar at Rochester Creek.

The important point from this study was the “! ! ! !” spacing pattern of glyphs. This pattern generally indicates a calendar noting the solstices, equinoxes and the cross quarter dates. Examples of “Hand Glyphs” with this spacing are shown in Figure 3a and b.

The flaw in the Rochester Creek study was that there was no preexisting gnomon or any indication of a hole where a gnomon would have been located.



Figure 4-11a This figure from The White River Narrows Nevada, tells even more about hand glyphs. Here the hand is not at the wrist but the fingers are growing from the top of the head. This is a variation of Figures 12 where lines emanate from the eyes. The five fingers coming from the head indicate the five key sunrise or set positions of the Fremont Calendar to be observed with the eye. There is to the left a very precisely carved 13 tooth comb. This has been underlined to make it a unit count probably of the 13 full or new moons possible in a year. In concert the calendar function of this figure is strongly implied by figure and number. Now compare this figure with Figure 4-7. Notice how the five lines/fingers extend to a edge of the rock or, in this case, to a crack in the rock. In each case the center finger comes to the Crest of the comb. This would be equinox in the Fremont Octant

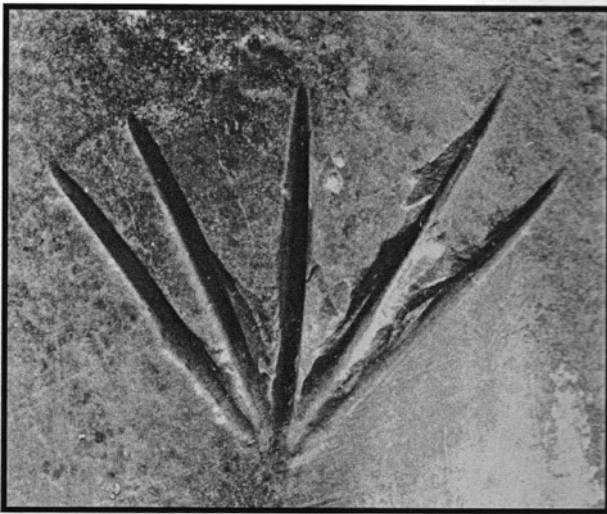


Figure 4-10 Freestone Ranch Solar Hand, Precise Angles

Figure 3a & b – Hand Glyphs

Nal also pointed out the significance of the August / May cross quarters. A woman impregnated on the August cross quarters would give birth when the sun returned to the same position, the May cross quarters. A number of glyphs confirm Nal's interpretation. Nal also pointed out that "Mothers Day" falls near the date of the May cross quarters.

Comb Ridge:

The Comb Ridge "Procession Panel" is shown in Figure 4. The spacing of the glyphs looked correct so Nal and his team set up a gnomon at a point to observe the resulting shadow. The shadow did align with the glyphs as expected.

More importantly, they found a rock with a hole carved into it at the location where Nal's team placed their gnomon.

This work confirmed their theory relative to the spacing of the glyphs being an indication of a solar alignment, but also confirmed their theory relative to the use of a gnomon by the natives.

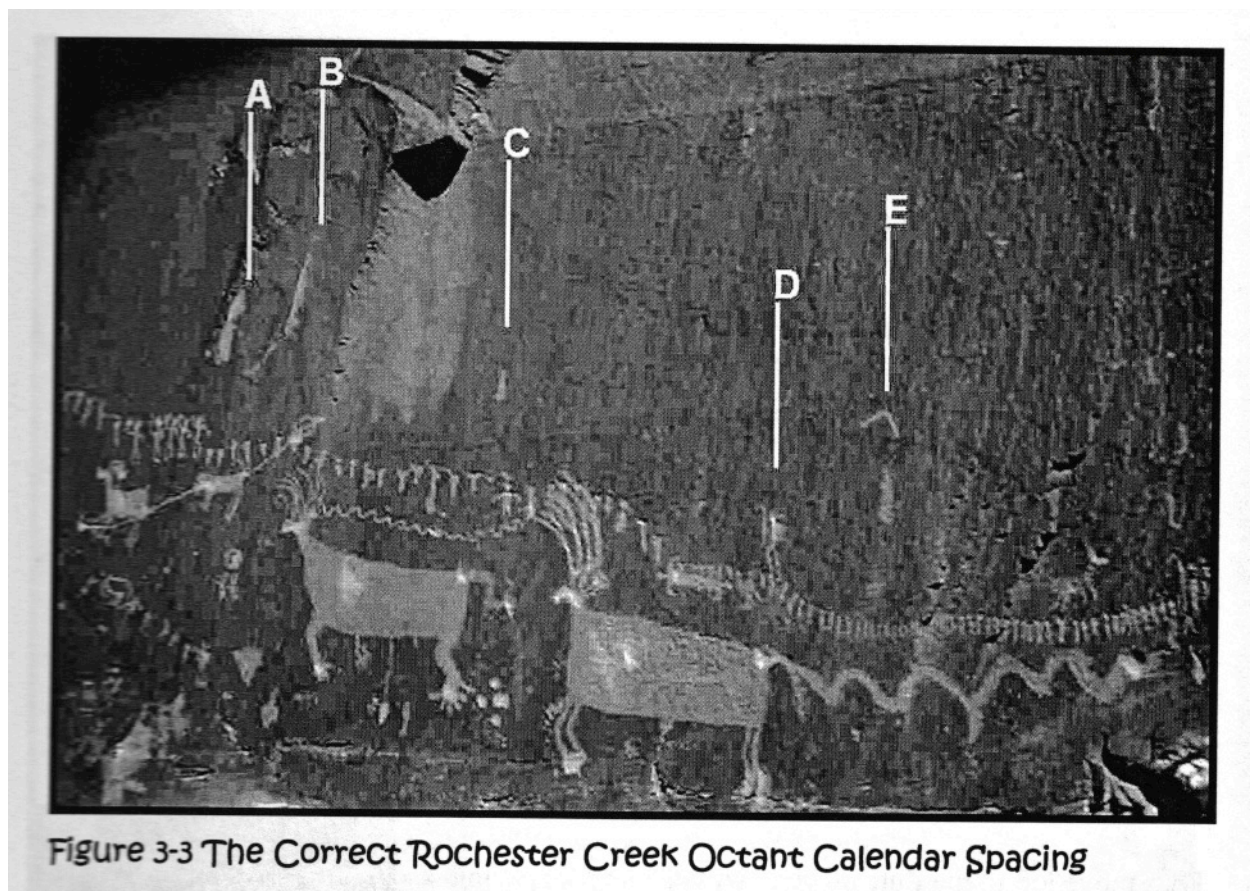


Figure 4 – The Comb Ridge Procession Panel with the key solar alignment glyphs marked.

Parowan Gap:

Nal discussed the Zipper Glyph (Figure 5) and the Pendulum and Cross Quarter Glyph (Figure 6) at Parowan Gap.

Of note are the 180 tic marks on the Zipper Glyph – a full cycle equals a full year.

The pendulum glyph (the larger glyph in Figure 6) indicates the relative position of the sunrise on the summer and winter solstices and the equinoxes.

The cross quarter glyph (under the pendulum glyph) indicates the relative position (spacing) for the solstice / cross quarter / equinox. The array of 47 dots below the glyph indicates a way of accurately accounting for the time.



Figure 3-2 The Zipper Glyph

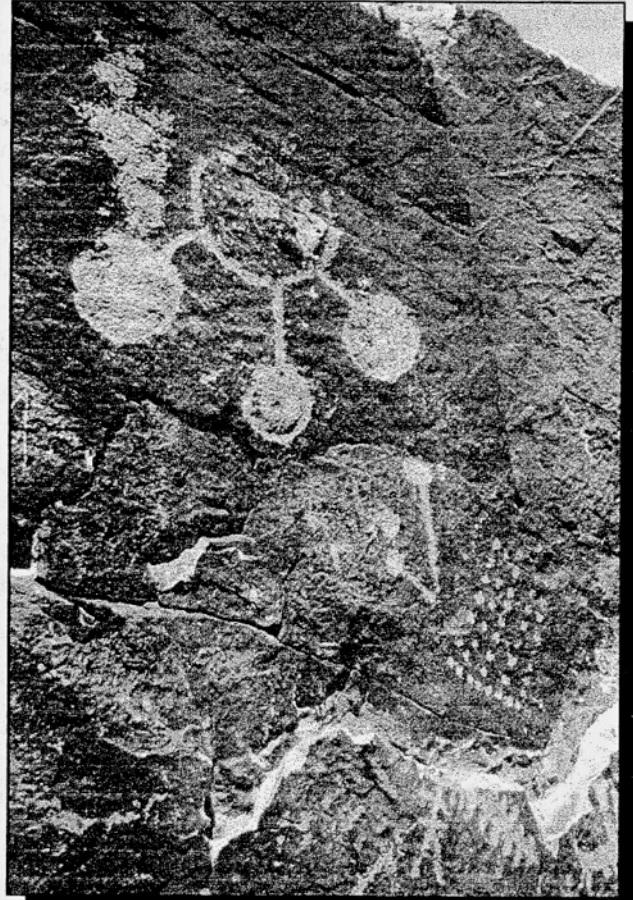


Figure 3-3 The Pendulum Glyph

Figure 5 – the Zipper Glyph

Figure 6 – the Pendulum and Cross Quarter Glyph

All the Figures in this summary are from Nal Morris' books.

“The Parowan Gap Archaeoastronomy Report – Volume 1 – Space, Time, Light and Number” by Nal Morris, Solarnetics Inc., 1998

““The Parowan Gap Archaeoastronomy Report – Volume 2 – The Path of Discovery” by Nal Morris, Solarnetics Inc., 1998

<http://www.solarnetics.com>

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John Mangels

