

Judaculla Rock, NC- Solstice Horizon Marker

I'm a Rock Art Researcher specializing in Solstice & Equinox Markers. I have published a book entitled *ANASAZI of SW UTAH, The Dance of Light & Shadow*, which is available thru Manatanka Indian Council.

On a recent visit to Ashville, NC to visit my Son, Grandson, & Daughter-in-Law, I took a trip to the SW corner of the state. It took a little over 1 hr to drive from Ashville to just outside the town of Sylva, NC in order to visit the Judaculla Petroglyph Rock in Jackson County which is open to the public year round during daylight hours.

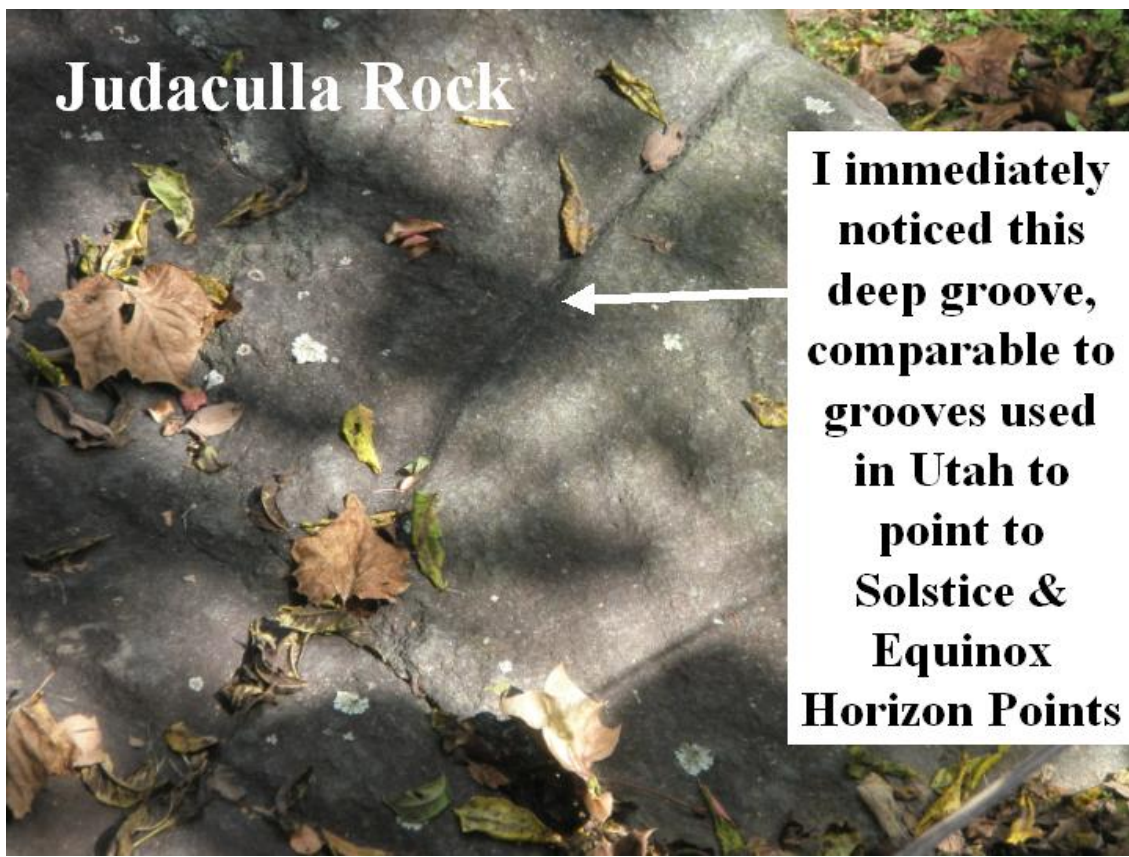


Plate 1

Unfortunately the lighting as well as leaves on the large soapstone boulder did not lend to a very detailed photograph. For better photos of the entire 16 foot x 11 foot boulder visit.... http://www.cs.unca.edu/nfsnc/rock_art/judaculla.html

In addition to the groove and other figures the rock has a lot of Cupules, (circular indents in the rock, **Plate 2**) which are among the oldest forms of Rock Art which have been found around the world (some of them dating back as much as 50,000 years).



Plate 2

The rock art at this site is purported to have been made in the Late Archaic Period or Early Woodland Period between 2,000-5,000 years ago per the several web sites I visited.

Much to my surprise I noticed that the large deep groove was very similar to many Solstice & Equinox Horizon Pointers I had recorded back in Utah.(**Plate 3**)

I checked the direction it was pointing with my compass & got a reading of 304 degrees. This should have been close to the Summer Solstice Sunset point.

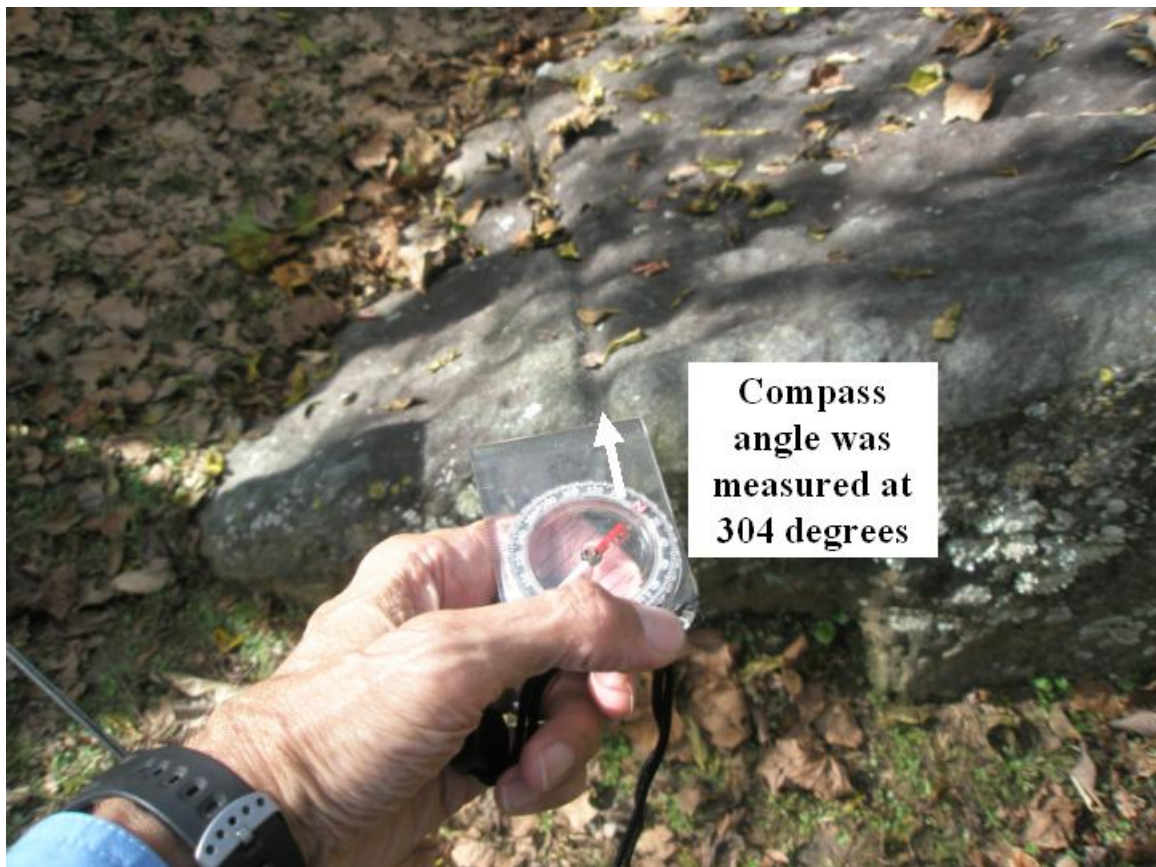


Plate 3

The exact horizon view is obstructed by recently planted reeds or bamboo plants. Therefore, I climbed up a slight hill to the road and photographed the view at 304 degrees.(Plate 4)



Plate 4

The compass pointed to a natural viewing point on the horizon. This indicates that the rock was selected because it was positioned to view the Summer Solstice Sunset and was therefore the logical place to peck in a Summer Solstice Horizon Sunset pointer.

After returning home to Utah I checked the declination (correction factor for Magnetic North vs. true North) for Sylva, NC.

I also checked the US Naval Observatory web site to find the azimuth (degrees clockwise around a circle starting at due North) for the setting Sun on the Summer Solstice for the Sylva, NC area. This turned out to be 298.3 degrees and the declination correction factor for Sylva, NC turned out to be minus 5.3 degrees. Therefore 304 minus 5.3 degrees was an almost perfect match of 298.7 degrees.

I then did a Google Earth Summer Solstice Sunset simulation on the computer and found it to match quite nicely. (Plate 5)

Google Earth Sun is a great tool for simulating Sunrise & Sunset on the Solstices & Equinoxes for any GPS location.

Summer Solstice Sunset Horizon Point

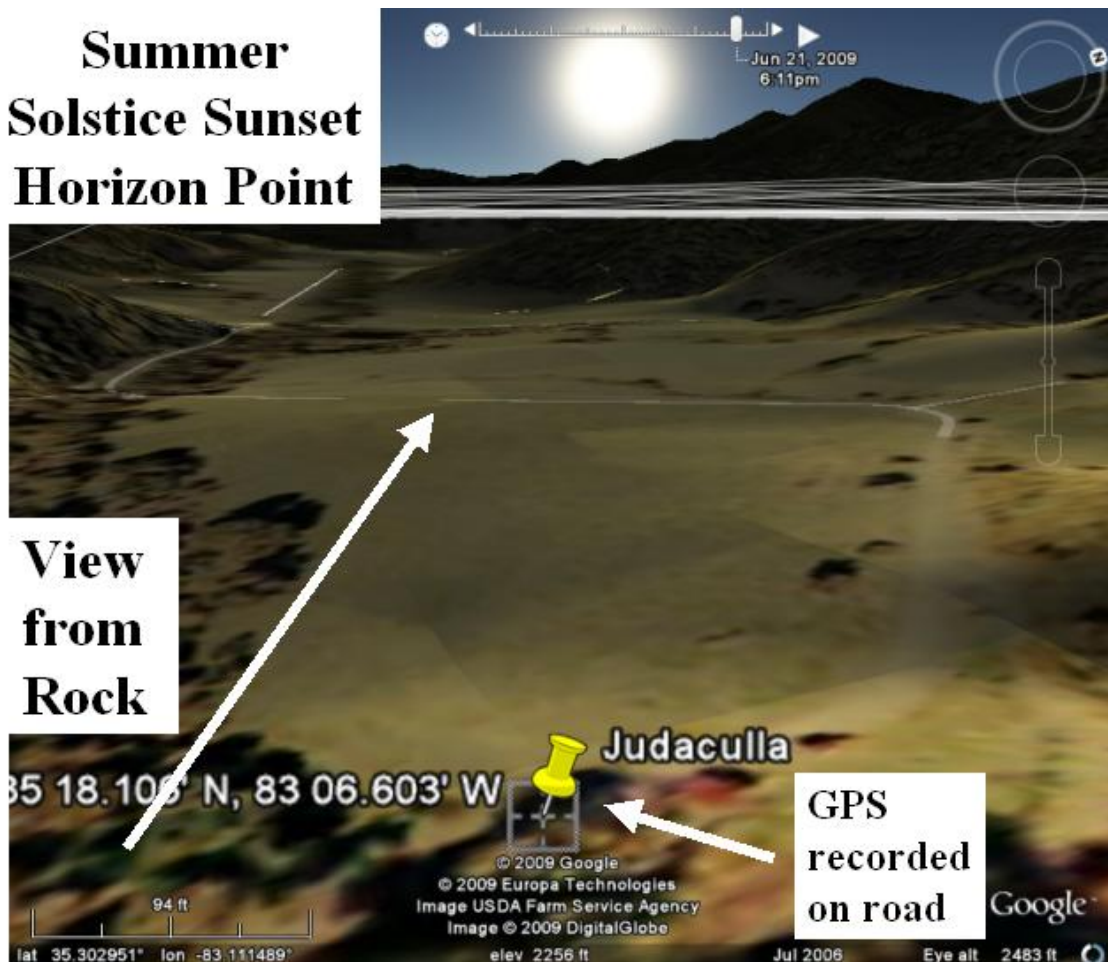


Plate 5

I feel quite certain that this rock was used as a Summer Solstice Sunset observation point and possibly as a Winter Solstice Sunrise observation point as well if viewed in the opposite direction. (Plates 6&7)

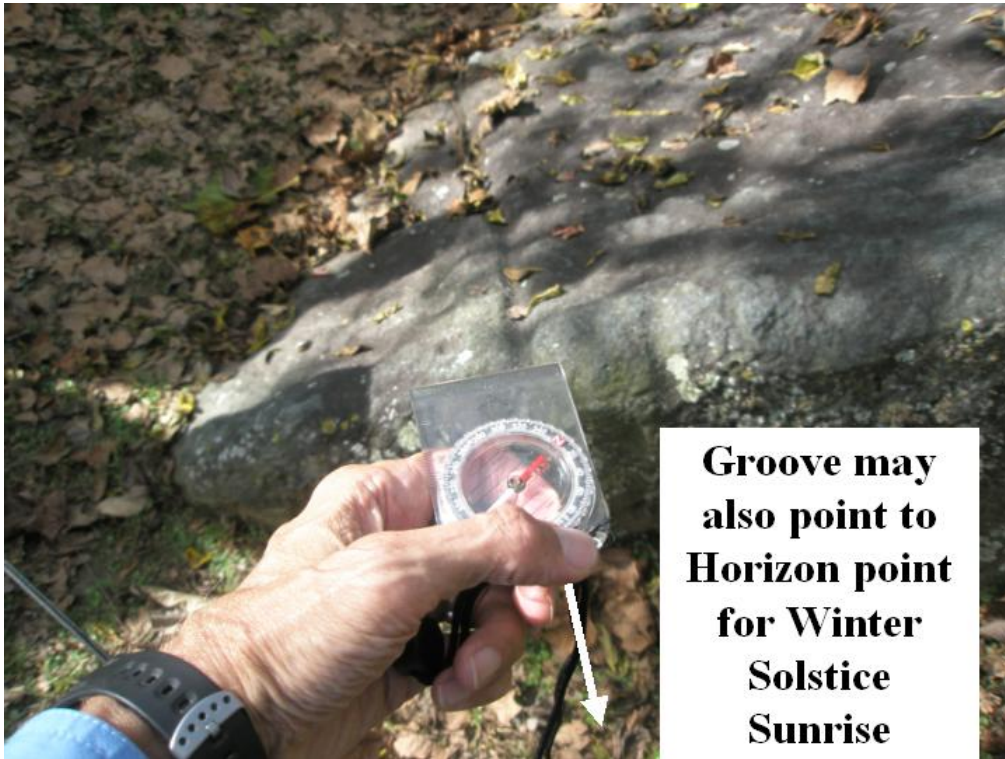


Plate 6

The Sun rises in a notch on the horizon per this Google Earth simulation.



Plate 7

Both of these solstice pointers need to be observed directly for visual confirmation, but it is highly likely that this is the first Solstice Marker to be confirmed in North Carolina (www.cs.unca.edu web site says that prior to my observations that none had previously been confirmed). *“It has been suggested that some sites appear to be related to comets or solstice observations. But again, there is no site in North Carolina thought to serve this purpose.”*