

HIGH RESOLUTION ROCK ART PHOTOGRAPHY AND EDITING



D A R G

Dominquez Archaeological Research Group

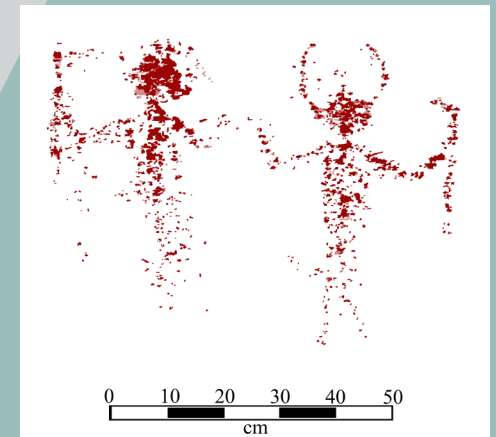
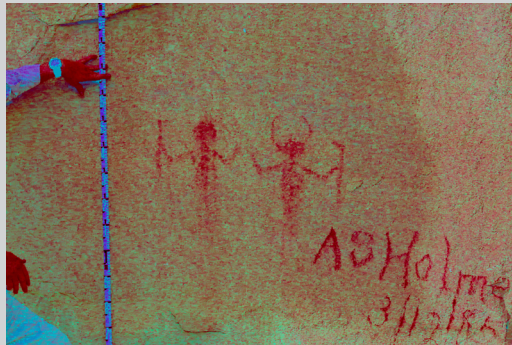
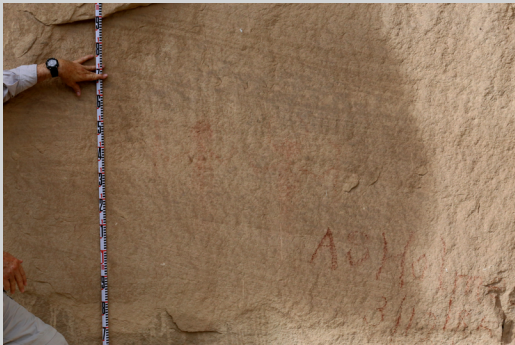


Masha Conner

KORIMA
DESIGNS

Rock Art Digital Archives for preservation

1. Digital photography allows for high quality photos to be taken and edited easily
2. Easier non deteriorating storage
3. Can be accessed Online anywhere
4. Easier distribution and access by public
5. Educational outreach
6. Non destructive of original
7. Images can be traced and edited to remove vandalism



Methods to create high resolution photos

Hardware

- 1) DSLR(digital single-lens) camera
 - Canon EOS 6D
 - 35mm lens
 - Take photos in RAW format(allows for more post processing)
- 2) Tripod and/or flash as needed
- 3) Grey Card - white balance check for post processing
- 4) Color passport - Can be used with Lightroom to ensure colors show true on screen

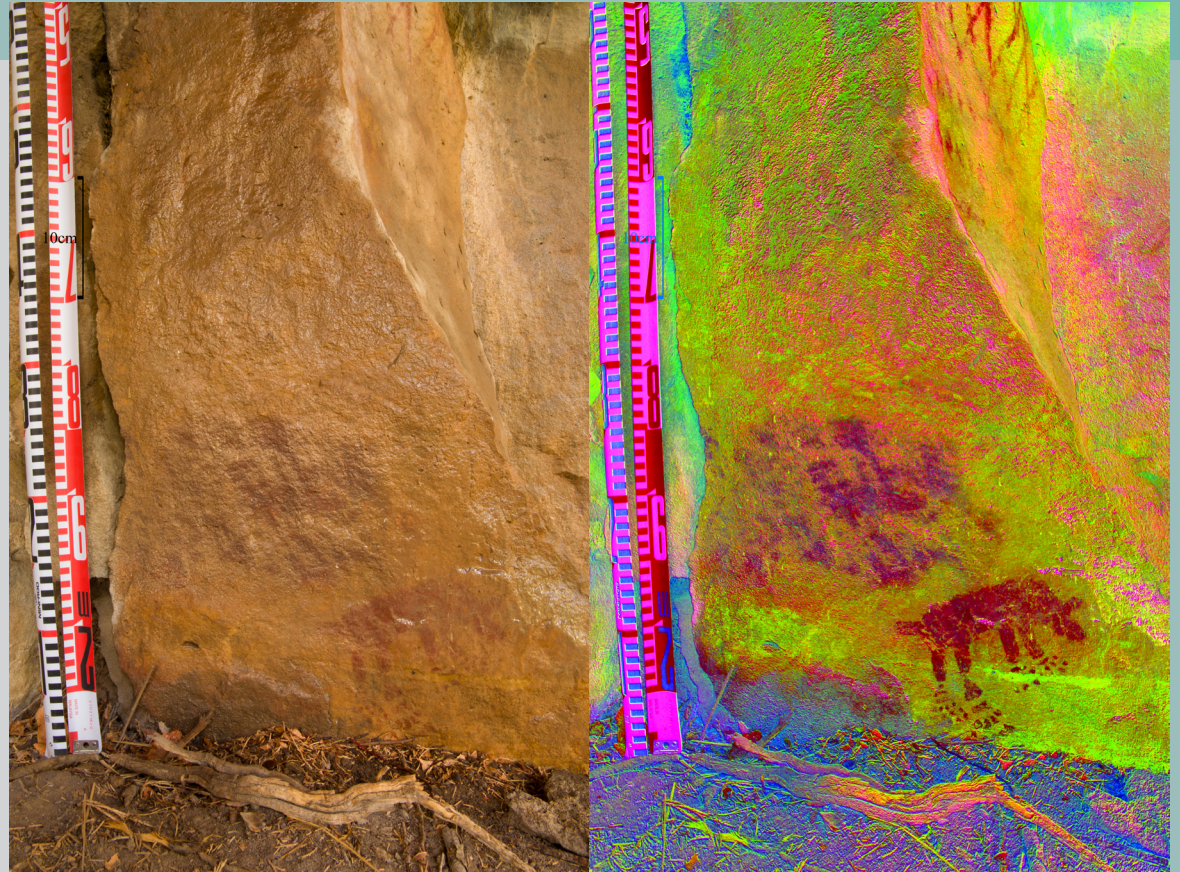


5EA1273



Software

1. Adobe Lightroom
2. Adobe Photoshop
3. Adobe Illustrator
4. DStretch



5EA1273

1) Panoramic Views

- Lightroom - automatic
- Photoshop - manual

Raw version



Cropped version



2) HDR (High dynamic range) photos

-Lightroom

Over exposed

OK exposure

Under exposed



HDR



5MN863

OK exposure



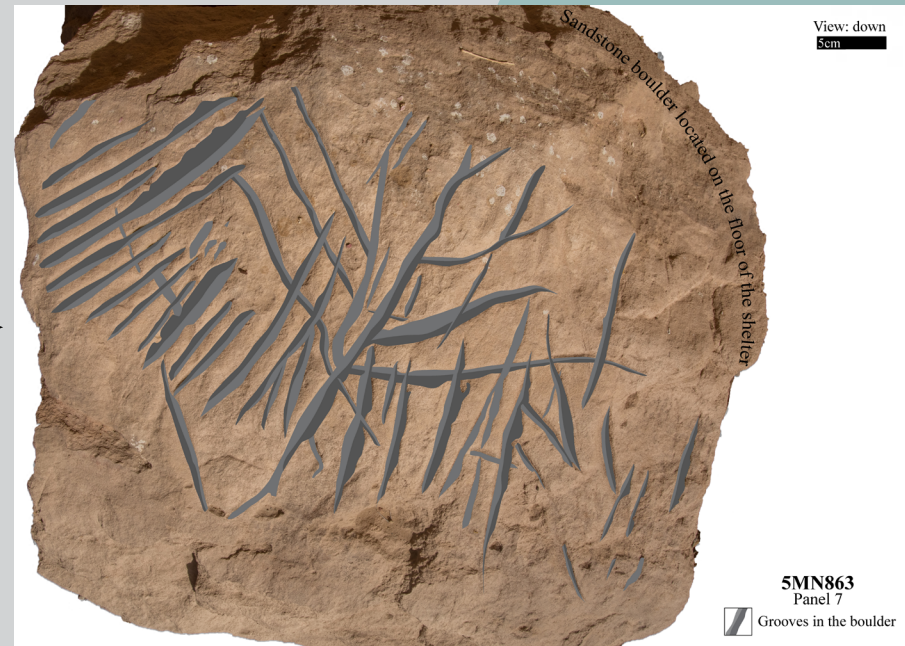
HDR photo

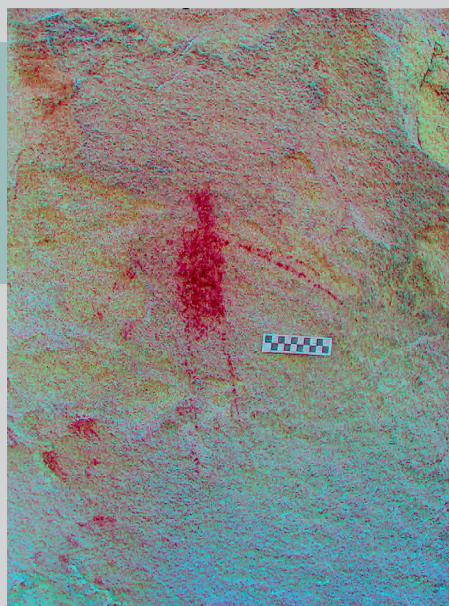


Difference between processed and raw photos

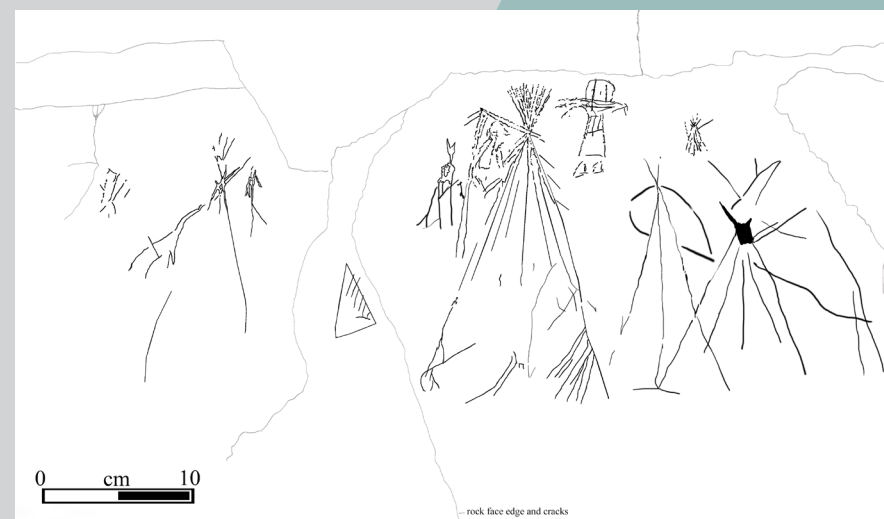
Rock Art Tracing

- 1) Using layers and HDR photos to create more precise trace
- 2) Adobe Illustrator
 - Allows to create trace of rock art without impacting original photo





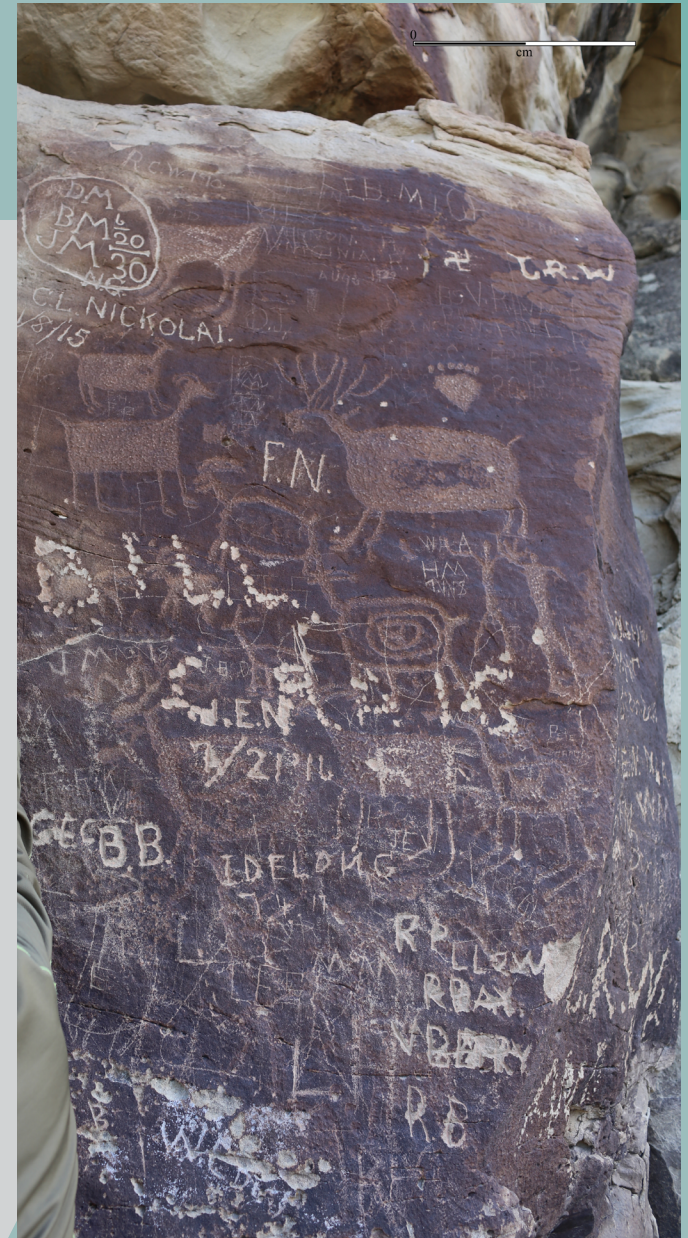
5ME4021



5RB5848

Photo Editing

- Adobe Photoshop can be used to remove/touch up graffiti or other problem areas from rock art photograph



5ME457

Combining multiple layers to achieve higher precision for editing

- Using DStretch to acquire multiple layers:

DStretch YBK

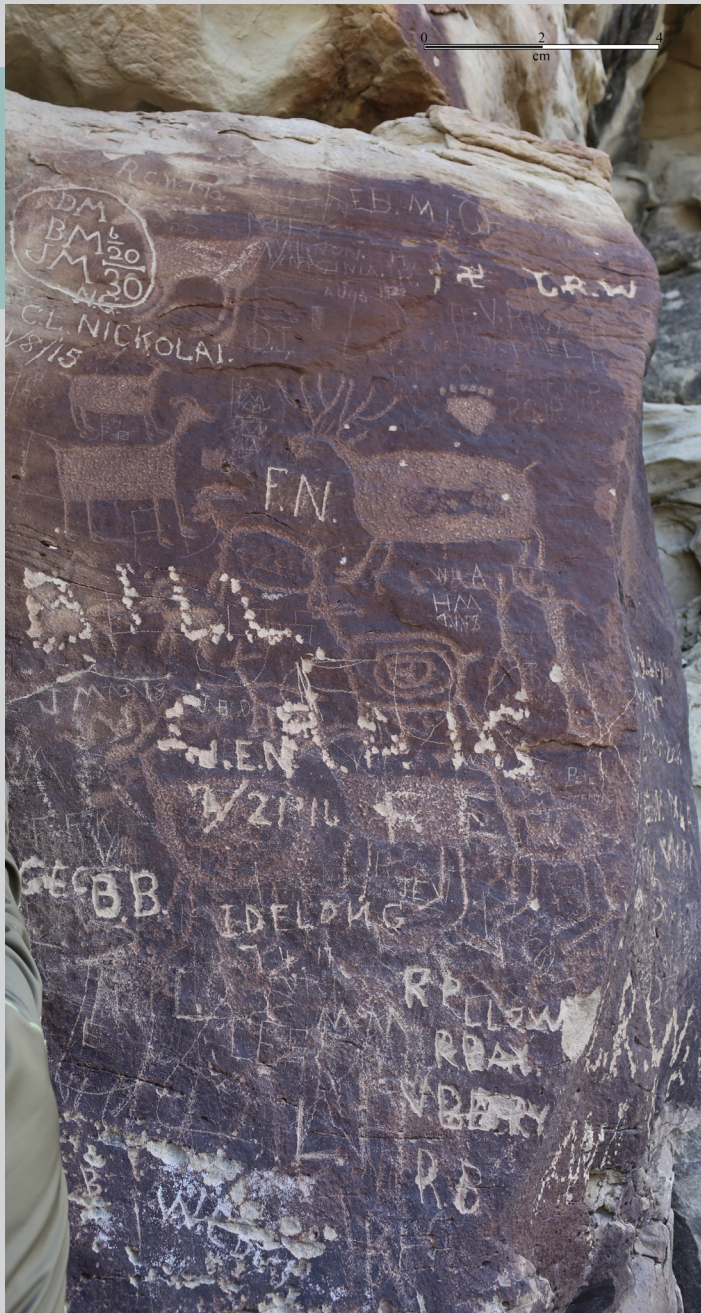


DStretch LDS

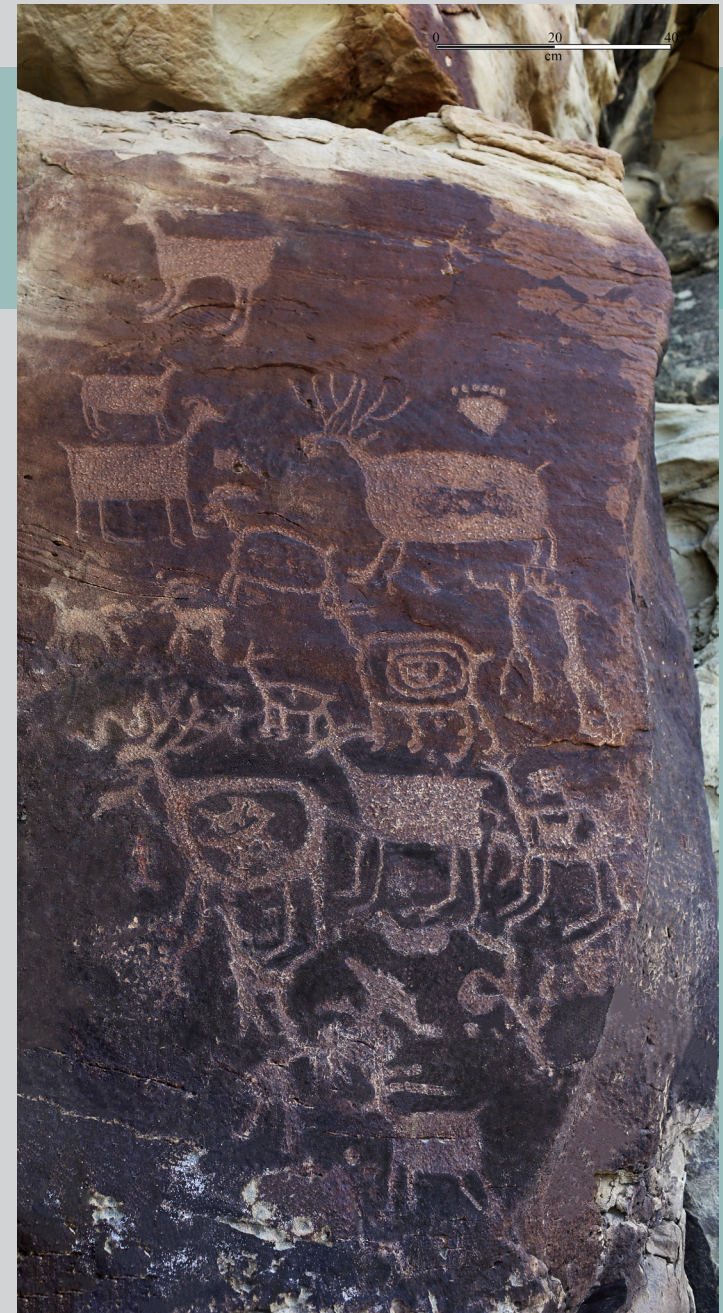


DStretch YYE



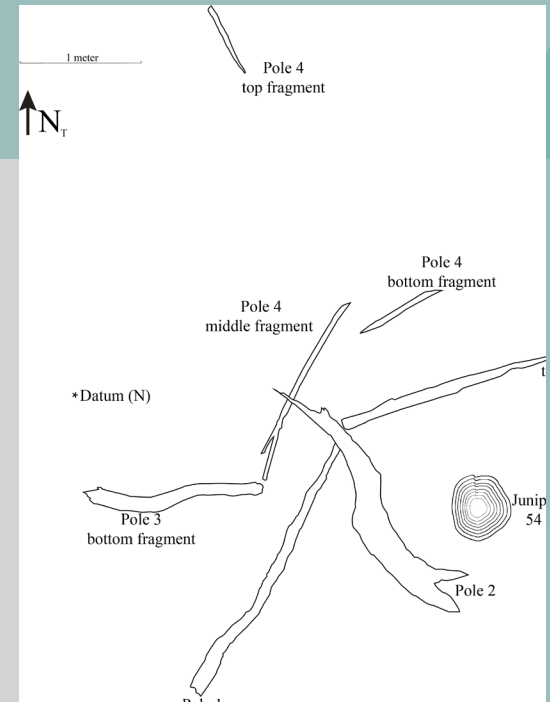


Original Photo



Edited Photo

3d modeling



1. Set up grid
2. Make to scale drawing
3. Fix scale drawing (if needed) in Photoshop or **Illustrator**
4. Import JPEG of drawing in 3d modeling program (ex: Blender, 3ds max, Maya)
5. Create cylindrical shapes to match wickiup poles
6. Make sure to trace the scale when creating the poles

7. Apply appropriate shaders and textures
8. Stand up the poles, based on pole ends location
9. Have poles meet at apex
10. Create surroundings as needed

