



BORREGO SPRINGS DARK SKY COALITION 2015 ANNUAL REPORT to the International Dark-Sky Association

During 2015, the Borrego Springs Dark Sky Coalition has initiated a system of regular contacts with local residents, expanded our program for Dark Sky Friendly Business, and improved and publicized our webpage.

BOOTH AT FARMERS MARKET - Many townspeople shop at the Farmers Market. We have found it to be a good place to publicize our work. On a monthly basis, we set up a booth and talk to residents and visitors about the Dark Sky policy. Our two flyers, a *Homeowners Brochure* and a *Borrego Lighting Standards* pamphlet, are handed out. These contacts have been well received and worthwhile.



DARK SKY FRIENDLY BUSINESS PROGRAM - Letters were mailed to 25 local businesses, which resulted in seven requests for more information. One board member, who is an astronomer, made four site visits to explain the program and request permission to make a lighting evaluation. A written report was then taken to the owner with specific suggestions for improving light fixtures. Several businesses made significant changes as a result. Another board member, also an astronomer, made two contacts, which resulted in valuable lighting changes.

Our second annual presentation of certificates took place in April 2015 at a Chamber of Commerce function. Six local businesses / organizations were honored. We plan to continue this worthwhile effort during the 2015-16 winter season.

WEBSITE - Our website, www.borregodarkskies.org, is kept fresh by one board member who is



a graphic designer. We are seeing an increasing number of visits to this valuable source of information. Our site is linked to the San Diego IDA Chapter's new webpage. The site includes

publications developed by the coalition, the San Diego County lighting ordinance, publicity which Borrego's dark sky and the IDA certification have received, a calendar of current events in the sky, and listings of sky-related educational activities for residents and visitors. Find our new Facebook page at www.facebook.com/BorregoSpringsDarkSkyCoalition.

PUBLICITY FOR DARK SKIES – The Coalition was featured in the 2015-16 local telephone directory with a two-page spread. The IDA Dark Sky Community Designation is frequently mentioned in tourist publicity by the Chamber of Commerce and local businesses. Stardance was the theme of the annual Borrego Days Parade, with the Borrego Dark Sky Coalition



A page from our regional telephone directory highlighting Borrego's dark skies and our Dark Sky Coalition.

represented. Local businesses having received the Dark Sky Friendly Business certificate often use the Coalition logo in their advertising.

BORREGO VALLEY STEWARDSHIP COUNCIL - The Coalition was solicited for input on the draft Governance wording. Our suggestions were included in the final document.

THE BORREGO SPRINGS DARK SKY COALITION - The Borrego Springs Dark Sky Coalition meets at least six times a year. Skype greatly helps with attendance during the summer when five members live elsewhere. Our nine members are community leaders active in numerous civic organizations and planning groups. One is a professional graphic artist who has been essential to the visual appeal of our materials. Several members participate with the San Diego IDA and attend their chapter meetings by phone or in person.

EDUCATION, PUBLIC PROGRAMS – Of the nine current Coalition members, three hold degrees in astronomy and each regularly holds star gazing sessions and educational programs in Borrego Springs for the public. In addition, one Coalition member works at Anza-Borrego Desert State Park and is the lead in preparing the state park to apply for IDA Dark Sky Park status, and another member works for the Anza-Borrego Desert Natural History Association. Each of these members organizes star gazing and educational programs at their respective locations. One of our group presents at both the Julian Starfest and the annual Nightfall event in Borrego Springs. In addition, we supplement the science curriculum at the local schools. Coalition member Sam Webb is also an archaeological volunteer with the state park and is currently updating two prehistoric Native American celestial sites located in the Borrego Valley that could date back hundreds of years. See attached report.

STRATEGY FOR 2016 - We expect to continue to make assessments of the lighting in town and approach the owners with suggestions for improvement. We will work with the community to publicize and educate about dark skies, continuing to take advantage of opportunities to participate in community events. We plan to publicize the website and update its useful material. We will reprint a popular car decal promoting Borrego Springs Dark Sky Community.



*Submitted by Betsy Knaak, Chair, P.O. Box 310, Borrego Springs, California 92004-0310 * borregodarkskies.org*

On behalf of the Borrego Springs Dark Sky Coalition Members: Maris Brancheau, Dorothy Hogan, Dennis Mammana, John Mosley, Jim Rickard, Grace Rickard, Sally Theriault, Sam Webb.

Ocotillo against the desert sky in Borrego Springs, California

Stargazing has been going on in the Dark Sky community of Borrego Springs for over 1,000 years . . .



Kumeyaay Intaglio depicting the Big Dipper

in the 1970s and include celestial-related features.

One site is an intaglio depicting the Big Dipper, with an associated “W” (Cassiopeia?). The “W” feature is no longer visible, but the Big Dipper, was depicted as an ax by the Kumeyaay Indians. Impacts to this site are visible, and the state park is undertaking a plan to relocate a nearby dirt road to help protect it.

The other feature is an alignment of rocks, which depicts the dark sky above and was used for ceremonial purposes. This site is still in pristine condition. Photos of these to prehistoric sites are included.

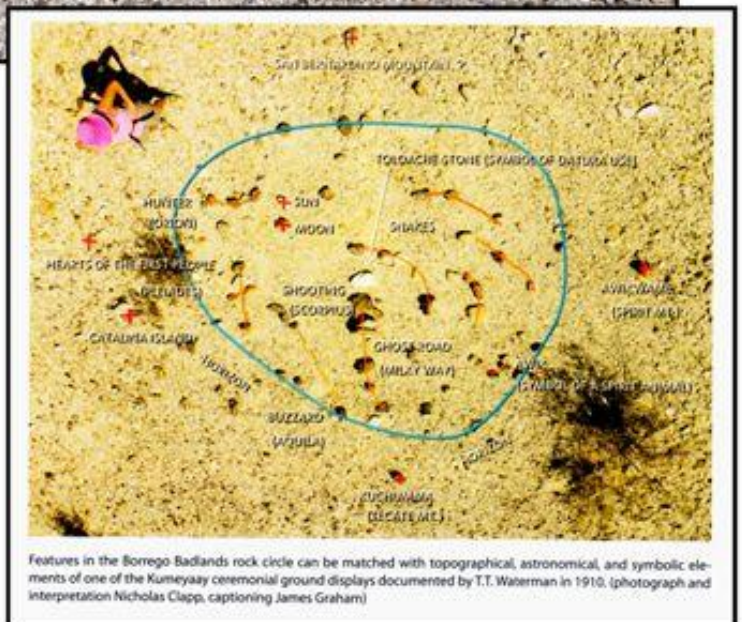
Borrego Springs became an official Dark Sky Community in 2009, but stargazing in the area goes back well over a 1,000 years.

Sam Webb, a Borrego Springs Dark Sky Coalition member, is also an archaeology volunteer with the Anza-Borrego Desert State Park. Sam is currently updating two prehistoric Native American celestial sites located in Borrego Valley that could date back hundreds of years.

Both of these sites were first recorded



Above is a photo of a **celestial rock alignment** in Borrego Valley, which ethnographers state were utilized by the local Native Americans for ceremonial purposes.



Features in the Borrego Badlands rock circle can be matched with topographical, astronomical, and symbolic elements of one of the Kumeyaay ceremonial ground displays documented by T.T. Waterman in 1910. (photograph and interpretation Nicholas Clapp, captioning James Graham)

