

THE BIG PARK/VILLAGE OF OAK CREEK'S

2017

*Annual International  
Dark-Sky Community Report*

Report submitted by Joanne Kendrick, Chair  
Big Park/Village of Oak Creek Dark-Sky Committee  
Big Park Regional Coordinating Council, Inc.



The Big Park/Village of Oak Creek Dark-Sky Committee is pleased to report its dark sky activities after being designated the 14th International Dark-Sky Community in the world in February 2016. Offering incomparable beauty and included in the Greater Sedona Area, the Big Park/Village of Oak Creek is an attractive place to visit or settle for many reasons. One of those reasons is the magnificent dark night skies that swath its skies. The community values this natural resource and wants to preserve it for us and for future generations. When public star parties are hosted, many visitors to our community exclaimed that they cannot see the Milky Way from where they live and they are awed at the beauty of our dark night sky.

## EDUCATION EVENTS:

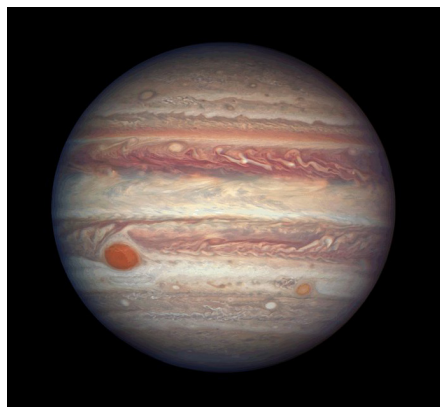


### **Bruce Brocket Trail Head Star Party, May 27, 2017**

J. D. Maddy, President of Astronomers of Verde Valley, and other astronomers hosted a star party at Bruce Brocket Trail Head. The attendees included some visitors from Phoenix.

### **Star Party at The Collective Sedona, May 22, 2017**

J.D. Maddy, President of Astronomers of Verde Valley, and his wife, Karen, hosted a star party at The Collective Sedona. The guest dined at J Wine Bistro, then attended the star party. The attendees were awed at the beauty of the magnificent dark skies and particularly enjoyed looking at Saturn.



### **Star Party at Red Rock State Park, April 29, 2017**

The Astronomers of Verde Valley presented the celestial happenings of the late April sky at Red Rock State Park on April 29.

J.D. Maddy, President of Astronomers of Verde Valley, gave an interesting presentation, followed by telescope viewing. A four-day-old Moon located in the constellation of Orion the Hunter did not interfere with the many clusters and galaxies in the skies overhead. The Ghost of Jupiter was due south with the planet Jupiter and its Galilean Moons not far away in the constellation of Virgo. Virgo was also host to galaxy clusters easily seen in the telescopes. Several little known constellations such as Lynx, the Cat; Hydra, the Water Snake; Corvus, the Crow; Crater, the Chalice; Canes Venatici, the Hunting Dogs, and many more were visible under the dark skies.

The Big Park/Village of Oak Creek Dark-Sky Committee participated in this event with an exhibit of dark-sky literature. Light refreshments were provided.



### **Star Party at Hilton Sedona Resort at Bell Rock, April 28, 2017**

J.D. Maddy, President of The Astronomers of Verde Valley, and Karen Maddy hosted a star gazing event at the Hilton Sedona Resort on Friday evening, April 28, at the request of Jay Kriske, Hilton's General Manager. The Big Park/Village of Oak Creek Dark-Sky Committee participated in this event.

Many of the attendees had never looked through a telescope and most people live in large cities with light pollution. Everyone commented on the darkness of the night sky and the beauty of the stars.

Early views of the Moon and several bright stars kept the viewers busy as the sky darkened. The partly cloudy sky started to clear up just after dark. The wind kept it cool but helped clear the sky. Jupiter was probably the favorite object of most. Four of Jupiter's moons were easily visible.

Dark-Sky brochures and other dark-sky material were available for attendees.

### **Red Rock Ranger Station Solar Viewing and Star Party, April 22, 2017**

J. D. Maddy, President of Astronomers of Verde Valley, Karen Maddy, and other astronomers hosted a fun day of solar viewing during the day and viewing the wonders of the heavens through telescopes in the evening.

**Bruce Brocket Trail Head Star Party, March 25, 2017**

J. D. Maddy, President of Astronomers of Verde Valley, Karen Maddy, and other astronomers hosted a star party at Bruce Brocket Trail Head. The attendees included some visitors from Phoenix.

**Red Rock State Park 25th Anniversary Celebration, November 5, 2016**

The Red Rock State Park's 25th anniversary was celebrated on Saturday, November 5 at the Red Rock State Park. The event was from 9 a.m. to 3 p.m.

Red Rock State Park is a 286-acre nature preserve and environmental education center. Twelve organizations participated in the activities of the day. The Big Park/Village of Oak Creek Dark-Sky Committee participated in this event with an exhibit of dark-sky literature and information on reducing light pollution and examples of dark-sky compliant fixtures.

**The 28th Annual Verde River Day, September 24, 2016**

The 28th annual Verde River Day was celebrated on Saturday, September 24, 2016, at Dead Horse Ranch State Park. Verde River Day promotes preservation and care of the environment by showcasing informative exhibits on the Verde's unique riparian habitat.

The Big Park/Village of Oak Creek Dark-Sky Committee participated in this event with an exhibit of dark-sky literature and information on outdoor lighting fixtures. Many people visited our exhibit table, including residents, visitors, and children. We discussed preserving our dark night sky by reducing light pollution and using fully shielded light fixtures. We distributed dark-sky brochures as well as the International Dark-Sky Association Brochures.

**Big Park Community School Star Party, September 12, 2016**

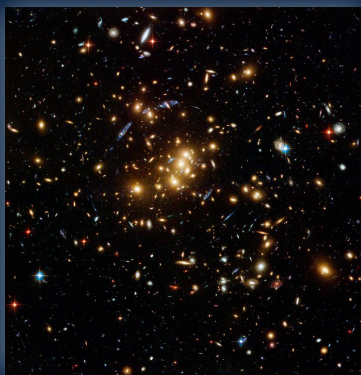
Dennis Young, President of Sirius Lookers Astronomy Club, hosted a fun and educational evening at Big Park Community School for 5th and 6th grade students. The Big Park/Village of Oak Creek Dark-Sky Committee partnered with Sirius Lookers for this event.

Diane Schmacher, teacher at Big Park Community School, really enjoys Dennis and his astronomers to come to the school for a night of Astronomy. The students are thrilled to view the heavens through a telescope and excited to learn about the stars, constellations, and planets.

The evening star party began at 6:45 p.m. with Dennis giving an introduction presentation to the students, followed with some question and answer time. Dennis and other Sirius Lookers astronomers were present with telescopes and binoculars to show the students the Crescent Moon, Mars, and star clusters.

Dennis also presented a solar viewing session for the students to show the activity of our Sun, which included sunspots and solar explosions and flares.

Dark-Sky Brochures were distributed to the students.



WITH OUR BEAUTIFUL PRESERVED DARK SKIES, MULTIPLE COMPANIES OFFER PRIVATE AND GROUP STAR PARTIES TO VISITORS WORLDWIDE.



In Big Park/Village of Oak Creek

There were no commercial projects that received a final inspection of Certificates of Occupancy during 2017.

The Big Park/Village of Oak Creek Dark-Sky Committee takes Sky Quality Measurements to ensure that the Big Park/Village of Oak Creek continues to protect its dark night skies and to reduce light pollution. The measurements were taken in three locations on March 27, 2017 and July 27, 2017. The readings were taken at the same locations as in previous years. Below are the measurements:

Sky Quality Reading in the Village of Oak Creek Preformed March 27, 2017 (new moon)									
Time	Location	Percent of Cloud Cover	1st Sky Quality Reading	2nd Sky Quality Reading	3rd Sky Quality Reading	4th Sky Quality Reading	5th Sky Quality Reading	6th Sky Quality Reading	Average Sky Quality Reading
21:37	888 E. Saddle Horn Rd	30%	21.17	21.11	21.15	21.24	21.27	21.27	21.20
21:47	Bell Rock/Red Butte (395 Bell Rock)	30%	21.52	21.44	21.38	21.43	21.39	21.38	21.42

Sky Quality Reading in the Village of Oak Creek Preformed July 21, 2017 (2 days before new moon)									
Time	Location	Percent of Cloud Cover	1st Sky Quality Reading	2nd Sky Quality Reading	3rd Sky Quality Reading	4th Sky Quality Reading	5th Sky Quality Reading	6th Sky Quality Reading	Average Sky Quality Reading
22:21	Jacks Canyon Road/ SunCliff Dr.	80%	19.97	19.96	20.06	20.08	19.97	20.03	20.01
22:06	888 E. Saddlehorn Rd	80%	20.28	20.00	19.84	19.95	19.84	19.87	19.96
22:14	Bell Rock/Red Butte (North of Golf Club)	80%	19.85	19.84	19.80	19.75	19.74	19.85	19.81