

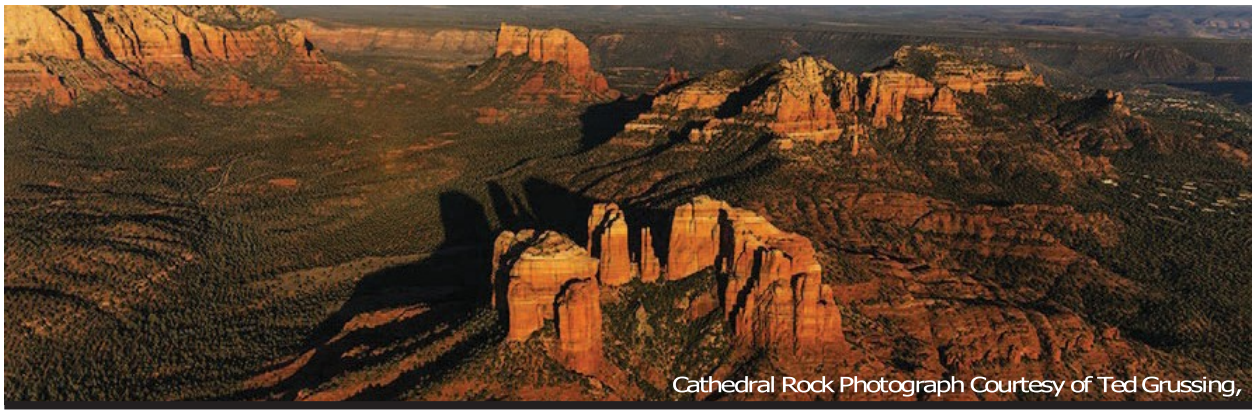


Sedona, Arizona

Keep Sedona Beautiful
Dark-Sky Committee

2017 Annual Report

To the International
Dark-Sky Association



The Keep Sedona Beautiful (KSB) Dark-Sky Committee is pleased to report progress in 2015 towards its goals of bringing more community awareness of light pollution and preserving our magnificent natural resource... our dark night sky. This was accomplished through the committee's dark-sky outreach program, which included educational events and support of Dark-Sky Community designations for Big Park/Village of Oak Creek and Red Rock State Park (RRSP)

EDUCATIONAL EVENTS

- February 11, 2015, Mike Cadwell, Astrophotographer, spoke at KSB's popular Speaker Series program on "Looking Off Into Space: The Dark Skies of Sedona".
- The Keep Sedona Beautiful Dark-Sky Committee joined Sedona Parks and Recreation at the Sedona Wetlands Preserve to celebrate Earth Day on April 22, 2015. The event vendors were Astronomers of Verde Valley, Arizona Water Company, Coconino National Forest, Jay's Bird Barn, Keep Sedona Beautiful, and Whole Foods. The morning activities included guided hikes lead by Jay's Bird Barn and solar telescope viewing provided by Astronomers of Verde Valley. KSB had dark-sky information available.
- April 26, 2015, was National Astronomy Day. The Sirius Lookers Astro Club, Sedona Public Library, and KSB Dark-Sky Committee sponsored the event. The National Astronomy Day event is now global, started over 30 years ago by Doug Berger of California to promote public awareness of science and the dark sky. The star party was at the Safeway Plaza in West Sedona and started with solar viewing of our closest star, the "Sun". The night sky viewing highlighted the Crescent Moon, the Seven Sisters Star Cluster,



Jupiter, and more. Large telescopes and binoculars were available for viewing the heavens as well as dark-sky information.

- June 6, 2015, KSB partnered with Red Rock State Park and Astronomers of Verde Valley for a fun night of dark-sky viewing at the Red Rock State Park. J.D. Maddy, President of Astronomers of Verde Valley, gave an introduction presentation, showed current sky events and what's "up" in the June sky. Telescopes were provided to view Jupiter, Venus, and Saturn as well as constellations.



- The Sedona National Night Out was sponsored by the Sedona Police Department and its Police Volunteer program at the Posse Grounds Park in Sedona on August 4, 2015. KSB Dark-Sky Committee participated in this event with an exhibit table of dark-sky literature, which was available for attendees. We had nice conversations with children, residents, and visitors about using fully shielded light fixtures, reducing light pollution, and preserving the dark sky.

SUPPORT OF INTERNATIONAL DARK-SKY COMMUNITY DESIGNATIONS

- During the summer of 2014, we started working with the Big Park Regional Coordinating Council about pursuing the International Dark-Sky Community designation for Big Park/Village of Oak Creek, a community adjacent to Sedona. Big Park/Village of Oak Creek obtaining the Dark-Sky Community designation would further enhance awareness by residents and visitors of light pollution and how light pollution can be reduced to preserve the dark night sky for ourselves and for future generations.
- In July 2015 we met with the Park Manager at Red Rock State Park to discuss RRSP pursuing the International Dark-Sky Park designation. The Park Manager agreed to pursue the Dark-Sky Park designation. We will assist them in the application process.

SKY QUALITY MEASUREMENTS

- Sky Quality Measurements were taken in four locations on February 18, 2015, June 15, 2015, and July 15, 2015. The readings were taken at the same locations each time. Below are the measurements:

SKY QUALITY READING IN SEDONA CITY LIMITS PERFORMED ON FEBRUARY 18, 2015, NEW MOON									
Time	Location	Percent of Cloud Cover	First Sky Quality Reading	Second Sky Quality Reading	Third Sky Quality Reading	Fourth Sky Quality Reading	Fifth Sky Quality Reading	Sixth Sky Quality Reading	Average Sky Quality Reading
22:15	Saddle Rock Cir and June Bug Cir; about 1.2 miles west from Y	10%	20.90	20.47	20.90	21.08	21.06	21.04	20.91
22:22	Whitetail Rd and Rodeo Ln; 2.1 miles W of Y off Rodeo Road/89A	10%	20.98	20.95	20.91	20.95	20.95	20.90	20.94
22:32	Keep Sedona Beautiful parking lot, 340 Brewer Road, facing away from KSB office	10%	21.06	21.01	20.96	21.03	20.97	20.96	21.00
22:45	Entrance to Back-O-Beyond	10%	21.41	21.29	21.28	21.28	21.27	21.40	21.32

SKY QUALITY READING IN SEDONA CITY LIMITS PERFORMED ON June 16, 2015, NEW MOON									
Time	Location	Percent of Cloud Cover	First Sky Quality Reading	Second Sky Quality Reading	Third Sky Quality Reading	Fourth Sky Quality Reading	Fifth Sky Quality Reading	Sixth Sky Quality Reading	Average Sky Quality Reading
21:30	Saddle Rock Cir and June Bug Cir; about 1.2 miles west from Y	0%	20.99	21.02	20.91	20.89	20.90	20.92	20.94
21:37	Whitetail Rd and Rodeo Ln; 2.1 miles W of Y off Rodeo Road/89A	0%	20.97	20.98	20.99	20.95	20.97	20.99	20.98
22:02	Keep Sedona Beautiful parking lot, 340 Brewer Road, facing away from KSB office	0%	21.05	21.02	20.97	20.92	21.02	20.99	21.00
22:12	Entrance to Back-O-Beyond	0%	21.60	21.58	21.53	21.56	21.54	21.56	21.56

SKY QUALITY READING IN SEDONA CITY LIMITS PERFORMED ON JULY 15, 2015, NEW MOON									
Time	Location	Percent of Cloud Cover	First Sky Quality Reading	Second Sky Quality Reading	Third Sky Quality Reading	Fourth Sky Quality Reading	Fifth Sky Quality Reading	Sixth Sky Quality Reading	Average Sky Quality Reading
22:25	Saddle Rock Cir and June Bug Cir; about 1.2 miles west from Y	0%	20.99	20.99	20.95	20.93	20.93	20.94	20.96
22:15	Whitetail Rd and Rodeo Ln; 2.1 miles W of Y off Rodeo Road/89A	0%	21.04	21.00	20.97	20.95	20.96	20.92	20.97
22:30	Keep Sedona Beautiful parking lot, 340 Brewer Road, facing away from KSB office	0%	21.07	21.04	21.07	21.02	21.04	21.09	21.06
22:42	Entrance to Back-O-Beyond	0%	21.40	21.41	21.37	21.35	21.34	21.34	21.37

RECOGNITION AND AWARDS

- At the September 23, 2014, Sedona City Council meeting, City Manager Tim Ernster presented a beautiful etched-glass plaque from the IDA to the City of Sedona and to KSB, recognizing the City of Sedona as the world's eighth International Dark-Sky Community.



- On March 9, 2015, the IDA Board of Directors presented KSB with an IDA Dark-Sky Defender Award. The IDA Board gave the award in recognition of the fine work that KSB is doing for the dark-sky movement. The IDA Board felt that KSB has made a great splash in Sedona and across the region.
- Monika Joshi in *Beyond the Guidebook* on April 9, 2015, listed three trip-worthy dark-sky havens in the United States. One of those places was Sedona, AZ., a place that has clear skies at least 300 days each year. Ms. Joshi is a researcher at *National Geographic Traveler* magazine.

NEW DARK-SKY BROCHURE

- The KSB Dark-Sky Committee developed a new Dark-Sky Brochure, which will be distributed at educational events as well as distributed to residents, businesses, and visitors.

WEBSITE

- Our website, www.KeepSedonaBeautiful.org, Dark-Sky Tab is kept updated about dark-sky events. The Dark-Sky Tab includes annual community dark-sky awareness events. It links to the IDA Video, "Losing the Dark".

PRESS ARTICLES

Report submitted by Joanne Kendrick, Chair
Keep Sedona Beautiful Dark-Sky Committee
360 Brewer Road, Sedona, AZ86336



Photo courtesy of Dennis Young

THE STARS over Cathedral Rock in 2001 is one example of the wonder of Sedona's night sky. This year, the Sirius Lookers are teaming with the Sedona Public Library and the Keep Sedona Beautiful Dark-Sky Committee to hold a star party in honor of National Astronomy Day.

Look to the sky for fun during star party on Astronomy Day

In honor of National Astronomy Day, the Sirius Lookers astronomy club, Sedona Public Library and the Keep Sedona Beautiful Dark-Sky Committee are sponsoring a Star Party on Sunday, April 26.

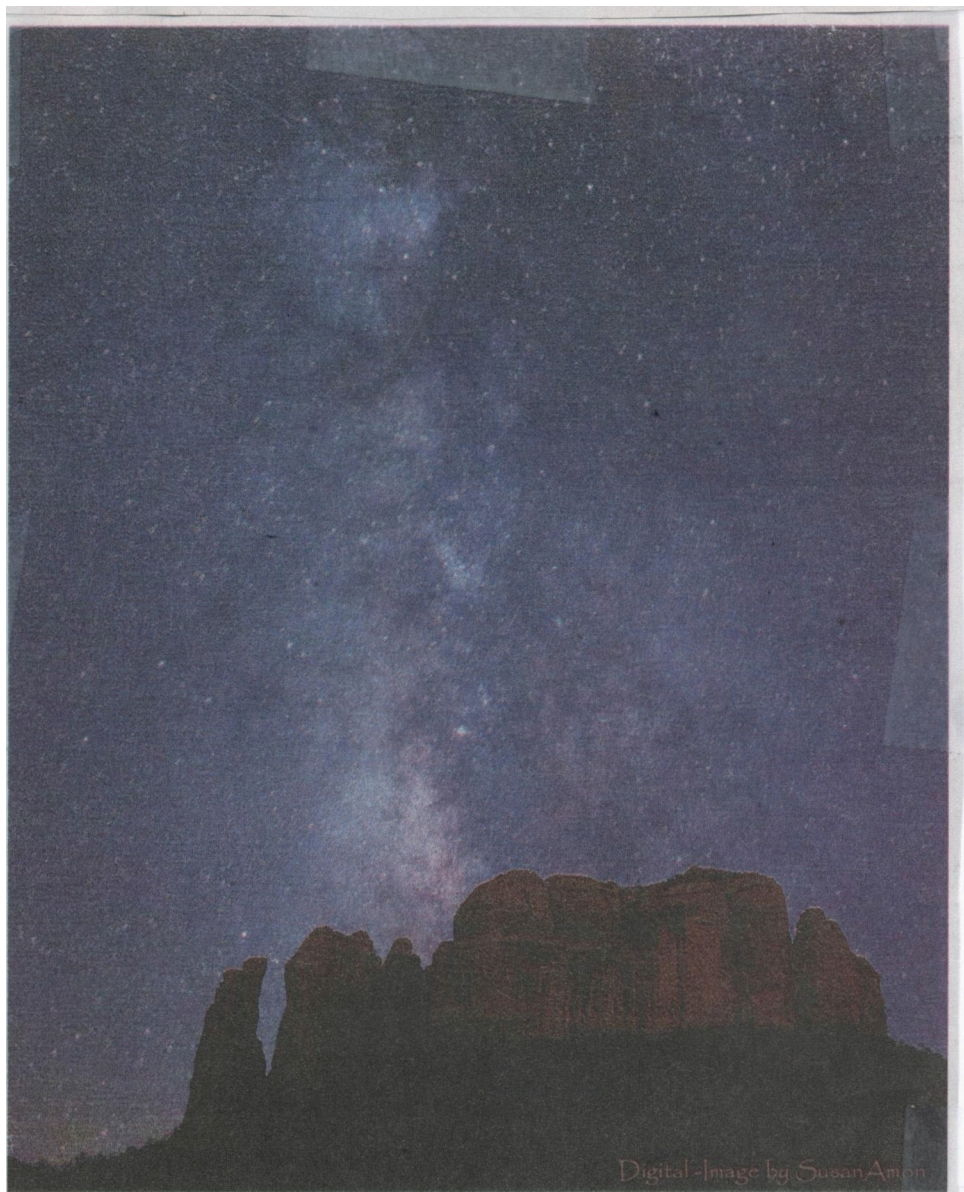
The free event will be held in the Safeway plaza parking Lot in West Sedona. Starting with a safe solar viewing of the closest star — the sun — from 3 to

5 p.m., attendees can see explosions coming off the sun with a H-alpha filtered scope and sunspots.

Nighttime viewing will be held from 7 to 9 p.m. Highlights will be the crescent moon, the Seven Sisters Star cluster, the planet Jupiter and more. Binoculars and giant scopes which are more powerful than the Lowell Observatory, will be on hand for enhanced viewing.

National Astronomy Day is now a global event, which was started more than 30 years ago by Doug Berger of California to promote science and dark skies awareness.

Bring the whole family out under the stars for this fun activity. Everyone is welcome to attend. More information is available at the Sirius Lookers website or by calling Dennis Young at 282-7501.



Keep Sedona Beautiful receives award

The Board of Directors of the International Dark-Sky Association (IDA) decided by unanimous vote to present Keep Sedona Beautiful with an IDA Dark Sky Defender Award "in recognition of the fine work that Keep Sedona Beautiful (KSB) is doing for the dark sky movement."

KSB has advocated for dark skies in the Greater Sedona area for more than 15 years. Most notably, KSB and Mainstreet Sedona had worked with the City of Sedona and Yavapai County to develop dark-sky compliant outdoor lighting ordinances, which were adopted by the City in 2001 and by the County in 2003

Since then, KSB has been involved in many issues concerning outdoor lighting, be it residential, commercial, or governmental. In 2013, KSB worked toward and applied for the IDA Dark-Sky Community designation for the City of Sedona, which was awarded in the fall of 2014.

Currently, KSB is collaborating with the City of Sedona to convince business owners that it would be to their advantage to replace existing old grandfathered lights that are not dark-sky compliant with new dark-sky compliant ones: half the replacement cost would be covered by a grant from the city and the new properly

shielded compliant fixtures using more modern fluorescent or amber LED bulbs are much more energy-efficient and save on electricity cost.

KSB is also focusing on convincing other Verde Valley communities to protect their dark sky and has begun working with Big Park Regional Coordinating Council and Red Rock State Park to become IDA-designated Dark-Skyplaces.

The Dark Sky Defender award by the IDA honors all those KSB members who over the many years have contributed their efforts to turn the greater Sedona area into a Dark-Sky Community

