



## ***Dark Skies, Inc., Westcliffe & Silver Cliff, Colorado International Dark Sky Community Annual Report October, 2016 – September, 2017***

Our certification efforts continue to attract area, state, and international attention with requests for information to include in publications and other media. More individuals have come forward to join our group and commit to our projects. The Smokey Jack Observatory on the western edge of Westcliffe has proven to be a major public outreach tool with more than five dozen public and privately reserved star parties hosted. The two towns worked together to erect a two-sided “Welcome” sign that features our dark skies. We received national media coverage from multiple sources to widely promote the light pollution message. We have initiated a “Speaker Series” of public presentations by local experts. Finally, the Sky Quality Monitoring Program results show that our extremely dark readings are being maintained — within the margin of error for readings taken during the towns’ power outage last February!

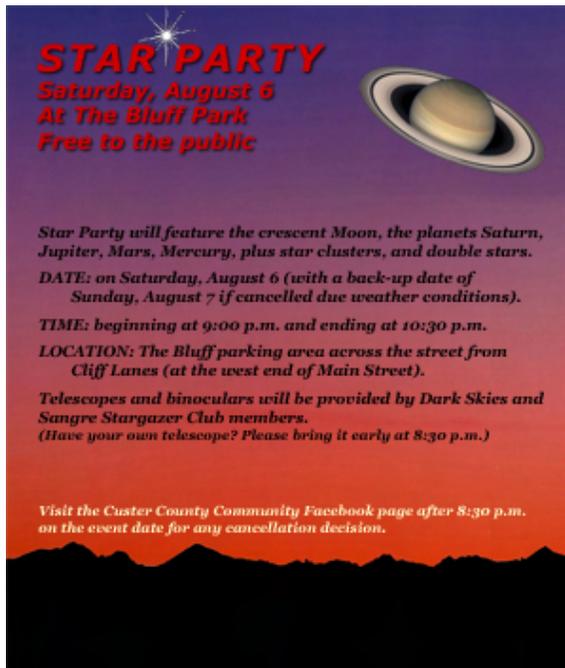
### ***Summary of Activities***

- Annual advertisement campaign in the local weekly newspaper, total: 24.
- Annual dark sky themed art contest at elementary school, ninth year.
- Continuous weekly astronomy column, *Celestial Exploring*, in the local weekly newspaper, total: 52.
- Newspaper articles involving the Dark Skies organization, total: 8.
- Newspaper and magazine *Letters to the Editor*, total: 6.
- Tourist publications: articles and calendars in print and Internet, total: 4.
- On-site presentations to other groups and the public: 3.
- Public star parties hosted by Dark Skies: 6.
- Observatory available to the public by reservation: 63 groups hosted.
- *HNK TV World*, Japan’s public TV channel media coverage.
- Local civic groups erect dual-town limits sign with the tag line of: “a dark sky community.”
- The first of the new “Speaker Series” occurred for the solar eclipse.
- Sky Quality Monitoring quarterly readings remained at excellent levels.
- Email distribution list developed to keep interested parties informed.
- Dark Skies included as an event for *Wet Mountain Western Pilgrimage*.

# Descriptions and Documentation in Chronological Order

## Annually: advertisement campaign in *The Wet Mountain Tribune*

Our ad contract includes 15 small 4" x 4" black & white ads that feature dark sky education facts or event announcements, 3 half-page full color ads featuring the art from the annual elementary school contest, 5 medium 5" x 4" full color ads announcing star parties, and 1 small black & white ad in the annual *Builder's Guide* special edition for a total of 24. Sample advertisements:



**STAR PARTY**  
 Saturday, August 6  
 At The Bluff Park  
 Free to the public

Star Party will feature the crescent Moon, the planets Saturn, Jupiter, Mars, Mercury, plus star clusters, and double stars.

DATE: on Saturday, August 6 (with a back-up date of Sunday, August 7 if cancelled due weather conditions).

TIME: beginning at 9:00 p.m. and ending at 10:30 p.m.

LOCATION: The Bluff parking area across the street from Cliff Lanes (at the west end of Main Street).

Telescopes and binoculars will be provided by Dark Skies and Sangre Stargazer Club members.  
 (Have your own telescope? Please bring it early at 8:30 p.m.)

Visit the Custer County Community Facebook page after 8:30 p.m. on the event date for any cancellation decision.



**Moon & Planet Viewing Party**  
 Featuring the Crescent Moon, Saturn, Mercury & Venus

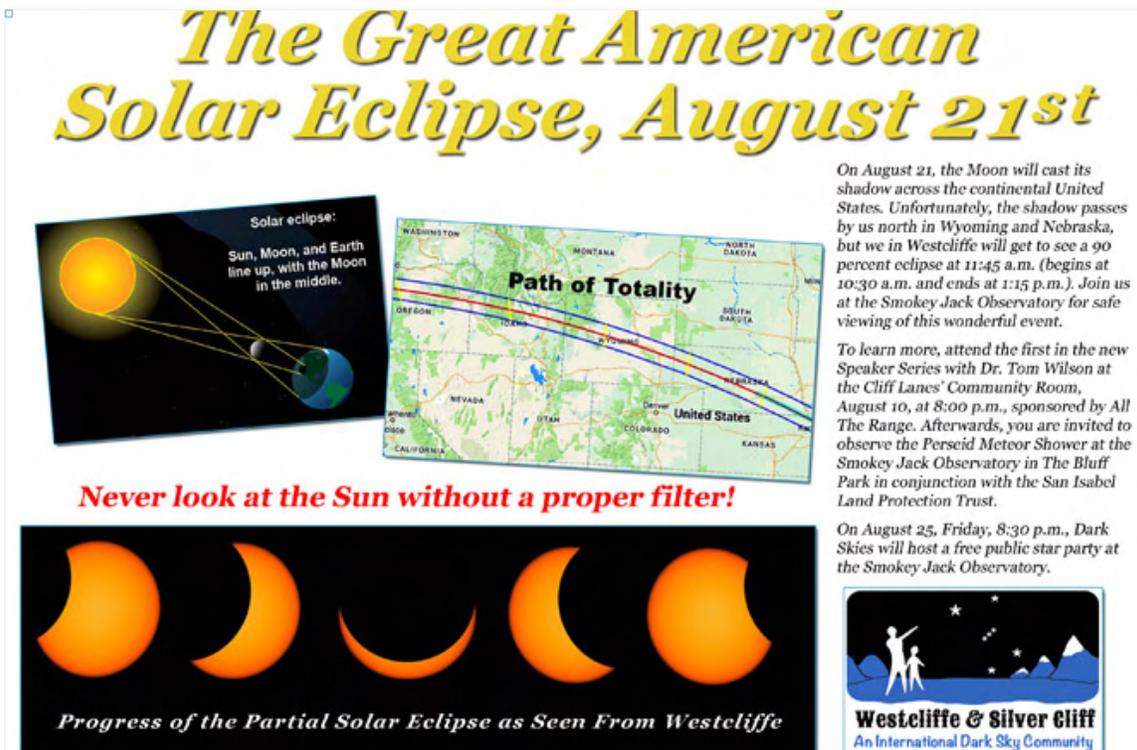
DATE: on Thursday, June 13 (with a back-up date of Friday, June 14 if cancelled due weather conditions).

TIME: beginning at 9:00 p.m. and ending at 10:30 p.m.

LOCATION: The Bluffs event site across the street from Cliff Lanes at the west end of Main Street.

Telescopes will be provided by Dark Skies and Sangre Stargazer Club members.  
 (Have your own telescope? Please bring it early at 8:30 p.m.)

Visit the Dark Skies website after 8:30 p.m. on the event date for the cancellation decision: <<http://www.aetmndarkskies.org/>>.



## The Great American Solar Eclipse, August 21st

Solar eclipse: Sun, Moon, and Earth line up, with the Moon in the middle.

Path of Totality

On August 21, the Moon will cast its shadow across the continental United States. Unfortunately, the shadow passes by us north in Wyoming and Nebraska, but we in Westcliffe will get to see a 90 percent eclipse at 11:45 a.m. (begins at 10:30 a.m. and ends at 1:15 p.m.). Join us at the Smokey Jack Observatory for safe viewing of this wonderful event.

To learn more, attend the first in the new Speaker Series with Dr. Tom Wilson at the Cliff Lanes' Community Room, August 10, at 8:00 p.m., sponsored by All The Range. Afterwards, you are invited to observe the Perseid Meteor Shower at the Smokey Jack Observatory in The Bluff Park in conjunction with the San Isabel Land Protection Trust.

On August 25, Friday, 8:30 p.m., Dark Skies will host a free public star party at the Smokey Jack Observatory.

**Never look at the Sun without a proper filter!**

Progress of the Partial Solar Eclipse as Seen From Westcliffe

Westcliffe & Silver Cluff  
 An International Dark Sky Community

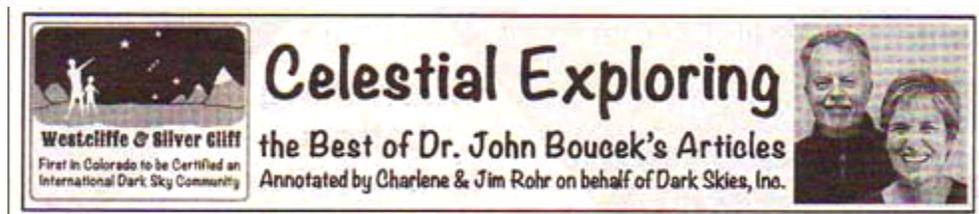
**Annually: school art contest (winner's art used in half-page ads)**

A dark skies themed art contest at the local elementary school has been conducted since 2009. The art is then used in three half-page color ads during the year in *The Wet Mountain Tribune* and other publications, as needed. 2016 winners are Audrey Heckmann, first place, and Ethan Dulohery, second place.



**Continuously:**

The weekly astronomy column, *Celestial Exploring*, by Dark Skies' members Jim and Charlene Rohr in *The Wet Mountain Tribune* is a feature column.



And we have changed over from expensive postal mail to an email system to maintain more timely and responsive contact with our supporters. Currently we have 168 enrolled. Only 3 have unsubscribed in the one year the system has been in operation. The list is also used for one annual fundraising campaign.

**September, 2016 and May, 2017:  
Star parties articles in *The Wet Mountain Tribune*.**

2 Wet Mountain **Tribune** THURSDAY, SEPTEMBER 29, 2016

## Dark Skies tells of two star parties

Come enjoy the night sky! Dark Skies of the Wet Mountain Valley is holding two star parties the first week of October.

On the evening of Wednesday, October 5, the public is invited to view Saturn with a four-day crescent Moon. As dusk gives way to full darkness, other fainter objects such as galaxies, star clusters, and nebulas will be viewed. Come to the new Smokey Jack Observatory at The Bluff at the west end of Main Street in Westcliffe starting at 7 p.m.

Everyone on Earth is invited! Saturday, October 8, is International Observe the Moon Night, an annual worldwide public event that encourages observation, appreciation, and understanding of our Moon and its connection to NASA planetary science and exploration. Dark Skies volunteers will have telescopes setup on The Bluff as well as opening the Smokey Jack Observatory starting at 7 p.m.

In recent years, the dark night skies over the towns have come to be recognized by locals as a natural resource worth preserving. The towns of Westcliffe and Silver Cliff have come together to protect a shared natural resource – their dark night skies. In the first effort of its kind, the towns worked side by side to ensure preservation of dark nights for the benefit of future residents. As a result of their efforts, the towns have earned Colorado's first International Dark Sky Community certification from the International Dark-Sky Association.

About Dark Skies: In 1998, a group of citizens concerned about the protection of this natural resource formed Dark Skies Incorporated, a 501(c)(3) nonprofit organization. In the years since it was founded, Dark Skies has drawn attention to the threat of light pollution, offering solutions and engaging local government, businesses and residents in protecting the area's night skies. The results equally benefit those who appreciate astronomy and those interested in promoting regional eco- and astro-tourism.

THURSDAY, MAY 25, 2017 Wet Mountain **Tribune**

## Dark Skies to host star party Sunday

The planets Jupiter and Saturn along with a crescent moon will be the primary focus of a star party this Sunday hosted by the local Dark Skies organization.

The public star party will be held this Sunday, May 28, beginning at 9 p.m. at the Smokey Jack Observatory (SJO) located on the southwest corner of The Bluff Park, at the west end of Main Street in Westcliffe.

This event is free to the public and all are invited.

The planets Jupiter and Saturn will be the main featured objects along with a three-day old crescent Moon. As dusk gives way to full darkness, other fainter objects such as galaxies, star clusters, and nebulas will be viewed.

Besides the telescope in the observatory, Dark Skies members and local amateur astronomers will have their personal telescopes set-up around the SJO to provide viewing access with minimal waiting time. Viewing will continue as long as visitors are present.

Remember that evening temperatures drop rapidly, so dress warmly in layers for a pleasant experience. If you bring a flashlight, please put red transparent plastic over the lens or, if not available, please keep the light pointed at the ground.

Dark Skies of the Wet Mountain Valley, Inc. was organized in 1998, when a group of citizens concerned about the protection of this resource formed Dark Skies of the Wet Mountain Valley, a 501(c)3 nonprofit organization.

In the years since it was founded, Dark Skies has drawn attention to the threat of light pollution, offered solutions and engaged residents in protecting the area's night skies. The results equally benefit those who appreciate astronomy and those interested in promoting regional eco- and astro-tourism.

For more information, contact star party coordinator Clint Smith via email at: [clintsmith5555@live.com](mailto:clintsmith5555@live.com)

First of six scheduled for the summer 2017 season at the Smokey Jack Observatory.

**November, 2016: Graphic insert for Dark Skies in the Wet Mountain Valley Community Foundation's (WMVCF) *Guide to Local Non-Profits*, a special edition publication to *The Wet Mountain Tribune*.**

The WMVCF is an important means of financial support to many non-profit organizations in Custer County as they organize an annual inclusive fund drive, the *Spirit Campaign*. The allure of matching funds from the WMVCF encourages more of the public to donate and at a higher level than if each non-profit was dependent on running their own separate fund drives. The *Guide to Local Non-Profits* comes out several weeks prior to the announcement for the opening of the *Spirit Campaign*.



**COMMUNITY FOUNDATION**

**Wet Mountain Valley**

**Guide to Local NonProfits  
-&-  
Annual Report**

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**Dark Skies, Inc.**

Dark Skies, Inc. has been dedicated to preserving the dark-sky heritage of the Wet Mountain Valley through education and fundraising efforts to shield glaring light fixtures since 1998. Dark Skies has drawn attention to the threat of light pollution, offering solutions and engaging local government, businesses and residents in protecting the area's night skies.

In the first effort of its kind, Dark Skies worked side by side with the towns of Westcliffe and Silver Cliff to ensure preservation of dark nights for the benefit of future residents. As a result, the towns have earned Colorado's first International Dark Sky Community designation from the International Dark-Sky Association. Our community and its nightscape have been featured in the NY Times, on CNN and NBC Nightly News. Donations are used to purchase light shields, replace non-shielded fixtures, purchase information materials for distribution, and expenses in actual construction of dark-sky friendly lighting. Besides protecting dark skies, good lighting actually improves visibility and saves energy dollars. For example, we helped Round Mountain Water install dark-sky friendly lights at their treatment plant. They are now saving 70% on their electric bill at that facility. The Town of Silver Cliff is realizing \$400 per month savings in electric costs after the change in lighting. We helped get glaring lights replaced with shielded fixtures on the streets of Westcliffe, at the Custer County Courthouse, and at the Custer County Shops on the north side of Westcliffe. Please visit our website at [www.wetmtdarksies.org](http://www.wetmtdarksies.org) to see our schedule of events.

Contact: Jim Bradburn  
President, Dark Skies, Inc.  
[jim@ranchobendito.com](mailto:jim@ranchobendito.com)

**December, 2016: *HNK TV World*, Japan's public TV channel visit.**



The 3-man [NHK World](#) crew recorded the observatory roof opening before recording interviews with Dark Skies members operating the telescope and computer system.



An interview was conducted of Dark Skies member, Ed Stewart, about his construction of a 12.5" Dobsonian telescope and his decision to retire in Custer County. The planned 3-minute segment will air in March, 2017, as part of a documentary on Mars exploration in the weekly astronomy program [Cosmic Front NEXT](#).

## Japanese TV crew here for "Skies" segment

A film crew from NHK World TV, Japan's version of PBS, arrived in town Saturday, Dec. 3, just in time for the Christmas parade in Westcliffe.

The crew filmed the parade as a part of a video segment featuring the Wet Mountain Valley's unique starry night skies and the support from the local community for preserving them.

On Sunday evening, the Dark Skies organization hosted a specially called star party at the Smokey Jack Observatory in Westcliffe for the three-member crew, headed by producer Hideyuki Masumoto.

Before the star party, they filmed Dark Skies' members operating the observatory's computerized telescope and conducted an interview with local amateur astronomer Ed Stewart about his and his wife's decision to retire here and the construction of his telescope.

On Monday, they interviewed Westcliffe's mayor, Christy Patterson, before concluding their visit.

The three-minute video segment will be part of a larger story on Mars exploration to air sometime in March, 2017.

The recorded audio will be dubbed over into Japanese. The producer will send a copy of the broadcast story on a DVD to Dark Skies president Jim Bradburn, which will then be posted on the organization's website, <http://www.wetmtdarkskies.org>.



A three-member production crew from NHK World TV in Japan spent several days here, filming a segment about our Dark Skies organization. Here, they shoot footage at the Smokey Jack Observatory on The Bluff in Westcliffe.

—Photo courtesy Ed Stewart

LETTERS  
DECEMBER

YOUR OPINIONS, STORIES AND FEEDBACK



### Ford's Heavy Hitter

Regarding October's "Light-Heavy-weight Champ" by Chris Hemer, the 2017 Ford Super Duty trucks look really attractive to me, too. I love the new features and capabilities. But be careful, the new trucks are considerably larger. Before buying one, measure your garage carefully.

Paul Weis, Loveland, Colorado

"Light-Heavyweight Champ" was an informative article, but I take exception to the comment, "Not that it matters to RVers," in reference to the 2017 Super Duty's front-axle rating. My experience is that the front axle of a long truck — already near its limit with a diesel engine, heavy-duty transmission, front-wheel differential, four-door cab, people, furry companions and items in the cargo box (tools, compressor, vehicle lasted only a year. We replaced them and started to pay close attention to the load on the front axle. It's been smooth cruising ever since.

Dave Clark, Mono, Ontario

I read Chris Hemer's article on the new Super Duty with great interest. He was a bit disparaging about the V-10 engine, which isn't available in the 2017 trucks but comes on Class A motorhome chassis. In my experience, there are reasons to favor V-10s.

In 2006 I went from a Class A to a 14,000-pound fifth-wheel towed by a six-speed manual F-250 with the V-10 engine. According to that year's Trailer Life tow guide, it pulled only 400 pounds less than the diesel, and it sold for about \$2,000 less. I bought my V-10 based on torque and horsepower curves that showed the diesel and gas V-8 climbed steeply to their peak torques and fell off quickly. The V-10 peaked around 2,200 rpm, dipped slightly, and from there was almost flat for more than 1,000 rpm, which allowed the engine to climb even higher on the

## Colorado's Deep, Dark Secret



After reading "Stargazing Across America" in September's Around the Bend, I wanted to chime in about Westcliffe, my hometown, a Dark Sky Community in Colorado. We invite everyone to visit our wee town at the foot of the Sangre de Cristo Mountains and enjoy the fabulous nighttime skies. Westcliffe even has a Good Sam Park, Grape Creek. Becky Poisson, Westcliffe, Colorado

*The International Dark-Sky Association designated Westcliffe, Colorado, and neighboring Silver Cliff an official Dark Sky Community in 2015. For information about seeing the nightly light show above the two ranch towns — with populations of less than 600 and elevations approaching 8,000 feet — visit the Wet Mountain Valley Dark Skies website, [www.wetmtdarkskies.org](http://www.wetmtdarkskies.org). — Editors*

revolution. Maintenance costs for the V-10 are about on par with a passenger car, except for the additional oil. Then there are the benefits of no DEF and no engine brake.

In 2011, Ford removed the V-10 from the regular Super Duty lineup. In 2012, I went back to a Class A motorhome with the V-10 and have yet to have a diesel RV — either a motorhome or a truck and trailer — match me climbing grades.

Carter M. Brough, Whitney, Texas

### Substance Over Style

Thank you for "Take a Load Off," Chris Dougherty's October article about trailer weights and loading. These and other factors leading to tire and bearing failure need to be repeated more often. I can understand the need to keep costs down to remain competitive, but we are towing dangerously, and the industry is hurting itself. Manufacturers should put more money into safety and reliability, rather than fancy paint and vinyl art that shrinks before the trailer is old.

### I Can't Drive 65

Bob Livingston's September article, "Maxxis ST Tires," points out an important shortfall of most trailer tires, namely max speed, in this case, 65 mph. Many highways now have 70- and 80-mph speed limits. Would you restrict your speed crossing a 350-mile state to 65 mph when almost everyone is running 75?

My Keystone Montana 29RL came with LT tires made by Cooper that I replaced due to age. Cooper recommended an LT replacement, which I bought. Since then, I have put more than 21,000 miles on the tires with no problems. I routinely weigh my trailer and truck, check the air pressure and try to limit making tight, twisting turns on pavement.

Bill Rasner  
Stephenson, Michigan

**TALK TO US!** Write to: Trailer Life, 2750 Park View Court, Suite 240, Oxnard, California 93036 or email [info@trailerlife.com](mailto:info@trailerlife.com). Please include your full name and location.

PHOTO BY CHRISTOPH STUPKA

**January, 2017: The Wet Mountain Tribune article announcing the results of the Spirit Campaign results.**

Since 2009 when the Spirit Campaign first became available, Dark Skies averaged about \$6,500, including WMVCF matching funds, usually at a rate of 20%-25% of donations. After being designated a Dark Sky Community in 2015, our portion of the 2016 campaign rose to \$10,507. These results indicate the high level of support as compared to the other non-profit organizations as we came in eleventh out of 68.

<http://www.wmvcf.org/Spirit-Campaign.aspx>

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**Spirit Campaign Results**

**Foundation to distribute \$354,000 to nonprofits**

The 13th annual Community Spirit Campaign raised nearly \$354,000 for local nonprofit organizations.

As of Tuesday of this week, the campaign, sponsored by the Wet Mountain Valley Community Foundation, has \$353,900.62 which will be distributed to 68 local nonprofits.

The funds raised in this 2016 campaign are about ten percent greater than at this same time last year, when \$321,766.82 was in-hand.

Those numbers could increase slightly, as contributions typically continue to come in through early February or beyond.

The annual campaign runs each year from mid-November through Dec. 31, and donations made by individuals are then matched. So far for this 2016 campaign, individual contributions to specific nonprofits totaled more than \$303,000, with matching funds of nearly \$51,000 added to that total.

The match is about 25 cents on the dollar and is applied to, or pro-rated, to donations of \$1,000 or less.

Charity Name	Donated Amount	Match	Total
All Aboard Westcliffe	\$4,740.00	\$943.71	\$5,683.71
American Legion Post 170 Boys State	\$925.00	\$144.56	\$1,069.56
Animal Advocates	\$940.00	\$100.67	\$1,040.67
Bean Kettle Scholarship Fund	\$250.00	\$50.50	\$300.50
CERT	\$150.00	\$35.77	\$185.77
Cliffs Commercial District (CART)	\$1,940.00	\$139.75	\$2,079.75
Cross D Bar Recreation Foundation	\$3,250.00	\$777.20	\$4,027.20
Custer County 20/20 Ibsa Club America	\$9,810.00	\$1,787.86	\$11,577.86
Custer County 4H Foundation	\$1,250.00	\$98.35	\$1,348.35
Custer County Ambulance Corps	\$8,409.50	\$1,472.21	\$9,881.71
Custer County Cares About Cancer	\$1,000.00	\$228.84	\$1,308.84
Custer County Community Sharing Center	\$12,707.50	\$2,045.18	\$14,752.68
Custer County Conservation District	\$245.00	\$60.83	\$305.83
Custer County E911	\$100.00	\$25.25	\$125.25
Custer County Economic Development	\$3,250.00	\$375.92	\$3,625.92
Custer County Genealogical and Historical	\$705.00	\$134.54	\$839.54
Custer County Medical Foundation	\$535.00	\$84.59	\$619.59
Custer County Schools	\$4,000.00	\$252.52	\$4,252.52
Custer County Search & Rescue	\$19,460.00	\$3,670.42	\$23,130.42
Custer County Senior Center	\$1,040.00	\$205.22	\$1,245.22
Custer County Sheriff's Department	\$4,255.00	\$956.55	\$5,211.55
<b>Dark Skies, Inc.</b>	<b>\$9,175.00</b>	<b>\$1,331.56</b>	<b>\$10,506.56</b>
Dancke Memorial Park	\$3,493.00	\$608.22	\$4,101.22
Eagle Summit Ranch	\$1,735.00	\$343.10	\$2,078.10
Education Legacy Fund	\$5,625.00	\$232.10	\$5,857.10
Excellence in Education	\$11,385.00	\$1,200.59	\$12,585.59
FFA	\$1,600.00	\$310.04	\$1,910.04
Friends of the Beckwith Ranch	\$1,110.00	\$224.00	\$1,334.00
Friends of the West Custer County Library	\$9,752.50	\$1,702.65	\$11,455.15
Frontiers Pathways	\$495.00	\$81.51	\$576.51
High Altitude Garden Club	\$1,075.00	\$133.36	\$1,208.36
High Country Recycling	\$1,538.00	\$282.27	\$1,820.27
High Mountain Hay Fever Festival Associ.	\$2,760.00	\$434.57	\$3,194.57
Historic Willows School Society	\$1,415.00	\$287.59	\$1,682.59
HMHF Children's Fund	\$300.00	\$52.52	\$352.52

**March 31, 2017: Special Event at Custer County Library**

Indoor Stargazing Event! Come enjoy the beautiful night sky from the warm comfort of the indoors. Dark Skies of the Wet Mountain Valley and the West Custer County Library present an evening of indoor stargazing to conclude the Adult Winter Reading program. This free presentation will take place at the Custer County Library on Main Street in Westcliffe on Friday, March 31 at 7:00 p.m. and is open to the public. Come see celestial images taken at the local Smokey Jack Observatory. Members of Dark Skies will be on hand to provide commentary and field questions for this unique presentation.

The dark night skies over the Valley are recognized by locals as a valuable natural resource. The towns of Westcliffe and Silver Cliff have worked side by side to ensure the preservation of the night skies for the benefit of future residents. As a result of these collaborative efforts, the towns have earned Colorado's first International Dark Sky Community certification.

March, 2017: Letter published in March issue of *Sky & Telescope* magazine about the media coverage of Dark Skies.

**SKY & TELESCOPE**  
THE ESSENTIAL GUIDE TO ASTRONOMY

FROM OUR READERS

## Light Pollution Success Story

More than a year ago (*S&T*: Oct. 2015, p. 6), I described how my local organization, Dark Skies, Inc., had worked since 2000 to minimize light pollution in our two adjoining small towns of Westcliffe and Silver Cliff in Colorado's Wet Mountain Valley and to have them certified as an IDA International Dark Sky Community. We had no idea that a media storm was about to engulf us – in a good way!

First, a *New York Times* reporter wanted to do a story on our fight against light pollution. He came with a photographer for several days and conducted video interviews of local citizens. We also put on a special star party for them. Apparently, the various news agencies watch each other, because in short order we were contacted by CNN's documentary unit (*Great Big Story*), *USA Today*, and NBCUniversal's "Sunday Today" show. Now NHK World, one of Japan's national TV services, wants to do a video feature too.

To support these requests, our members have provided lodging recommendations, driven the crews around, taken them to dinner, arranged interviews with local governmental officials and citizens, and called out the public to attend impromptu star parties using Facebook. The reaction by the local citizens has been incredible and a very satisfying vote of approval. And a common reaction of the reporters and media crews is, "I'd love to live here!"

**Ed Stewart**  
Westcliffe, Colorado



6 MARCH 2017 • SKY & TELESCOPE

**May, 2017: The Wet Mountain Tribune front page article titled: "EcoDev Summit: Good, Bad and Ugly"**

A paragraph begins: "In addition, the EcoDev team and the county needs to develop branding and marketing opportunities to attract more visitors to the area. Potential opportunities include the great successes of the Dark Skies organization, the ranching heritage here,..."

**May, 2017: The Wet Mountain Tribune article in the "Summer in the Valley 2017" supplement that is placed in businesses throughout Custer County for free distribution.**

WET MOUNTAIN TRIBUNE - SUMMER IN THE VALLEY 2017 3

## Dark Skies: Int'l. group recognizes Wet Mountain Valley for amazing sky viewsapes

Visitors to Westcliffe and Silver Cliff come to the Valley to look at our mountains, our wildlife, our attractions. Now they are coming from across the country to look up at the night sky as well.

With guidance and support from the Dark Skies of the Wet Mountain Valley organization, the towns of Westcliffe and Silver Cliff have worked side-by-side to ensure preservation of dark nights for the benefit of future residents and visitors. As a result, the towns have been designated as Colorado's first and only International Dark Sky Community by International Dark-Sky Association (IDA). This is only the ninth such designation in the world and the seventh in the U.S. The towns are also the highest altitude communities admitted to the international listing.

Dark Skies of the Wet Mountain Valley, a 501(c)3 nonprofit organization, was founded back in 1998 by Smokey Jack, long time Valley resident who died in 2004. Under Smokey's able leadership, replacing one light at a time, Dark Skies solicited enough donations to change all 45 streetlights in the Town of Westcliffe to dark sky friendly fixtures in 2001. Through her work and that of dedicated Dark Skies volunteers, the dark night skies over the towns have come to be recognized by locals as a natural resource worth preserving.

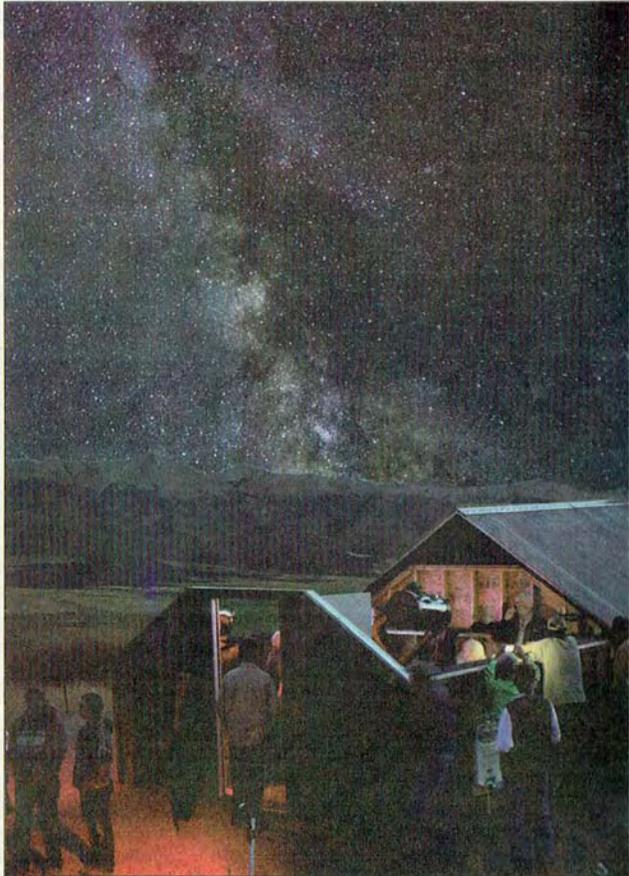
Smokey Jack is now memorialized at the Smokey Jack Observatory (SJO), which is located on The Bluff on the western edge of Westcliffe. The Observatory is 12' by 12' with a retractable roof, and houses a 14-inch Schmidt-Cassegrain telescope with computer guided pointing and tracking. It is located on the southwest corner of The Bluff, just below the grassy level of the park used for festivals.

The observatory will hold a series of public events this summer. In addition, the observatory is available for private events. Dark Skies has trained volunteer "Star Guides" to operate the observatory for those interested in a night of stargazing. To make a reservation, visit the organization's website at [wetmtdarkskies.org](http://wetmtdarkskies.org) and click on the "observatory" link.

Here are some of the events scheduled for this summer:

**May 28, Sunday, 9 p.m. MDT (Memorial Day Weekend)**  
Jupiter and Saturn rise in the SE by 9:00 p.m. Plus there will be a 3-day crescent Moon. As dusk gives way to full darkness, other fainter objects such as galaxies, star clusters, and nebulas will be viewed.

- Continued on page 4



Skywatchers view the Milky Way from the Dark Skies' observatory in downtown Westcliffe.

**June, 2017: Letters in the Wet Mountain Tribune concerning our public star parties.**

THURSDAY, JUNE 1, 2017

Wet Mountain **Tribune**

**L e t t e r s**

**Dark Skies: Oohs, Aahs and Wows!**

Dear Jim,

WHO NEEDS FIREWORKS when we have Dark Skies? To think what I missed all winter! What a shame. Thank you to the many outstanding volunteers for putting on a fantastic, star studded show, or maybe planet studded is more appropriate.

You would have thought it was the Fourth of July from all the "Oohs, Aahs, & Wows," as young and old looked through the telescopes. Can't wait for the screen to be installed. Just amazing!

Thanks so much,  
Cathy Griffin

**Sky Party Was A Grand Success**

Hello Jim,

I wanted you and the rest of our community to know what a wonderful night we had this past Sunday evening the 28th. Close to 100 people came out under clear skies to the Smokey Jack Observatory at The Bluff for a Dark Skies Sky Party.

Locals and several from out of town enjoyed the moon, Jupiter with its moons, star clusters, galaxies and nebulae. Many brought their own telescopes which was a big help with such a large crowd.

The best for me was all the kids who came to check out the sky. Many, both kids and adults, had never looked through a telescope and the "WOW" expressed when seeing their first space object brought a broad smile to my face. It was truly a special evening under our starry dark skies.

My heartfelt thank you to all the Dark Skies volunteers who organized the Sky Party and operated the telescopes, and to all the volunteers and local businesses who funded and built the observatory for all of us to enjoy. Isn't it grand that we live in a community that recognizes our gorgeous overhead natural resource and works so hard to preserve it and see it?

By the way, our next Star Party is Friday, June 30th at 9 p.m. Come on out!

Jim Bradburn  
President of  
Wet Mountain Valley Dark Skies

June, 2017: Dark Skies was featured in the *Summer Getaways* special edition insert to *The Denver Post*.



Page describing Westcliffe/Silver Cliff on the following page:



Westcliffe, above, is one of only 10 towns in the U.S. officially designated as Dark Sky communities. Michael Pach/Three Peaks Photography, Special to The Denver Post

... and animals depend on Earth's cycle of light and dark to help dictate their behaviors, including everything from reproduction to sleep to protection from predators.

Aside from disrupting critters, artificial lighting is altering the spectacle that is our night sky, too.

Whether you're a stargazer or just want a peaceful reprieve from the city lights, here are close-by getaways that are recognized by the International Dark Sky Association.

#### Westcliffe and Silver Cliff

**The place:** In all, the association has deemed 15 communities worthy of the Dark Sky Community designation. Of those, 10 are in the United States, and of those, one is in Colorado. Technically, Westcliffe and Silver Cliff are two cities that neighbor each other and pooled their resources to get the designation. Combined, "the Cliffs" have a population of about 1,155 as of the last census. Nestled between the WET MOUNTAIN and SANGRE DE CRISTO mountain ranges, they're already shielded from the Front Range's skyglow. But the cities took additional steps to limit outdoor lighting in order to preserve their night sky. Visitors tend to be amazed at just how well they can see the Milky Way when they come here.

**Where to stay:** Set up camp at DEWEESE RESERVOIR. From Westcliffe, go 5 miles northwest on Colorado 69 to Copper Gulch Road, then about 2 miles north to the reservoir.

**How to stargaze:** Reserve a "star party" at the SMOKEY JACK OBSERVATORY. Volunteer guides host these parties at their humble observatory, which is 12 feet by 12 feet, has a retractable roof and houses a 14-inch Schmidt-Cassegrain telescope with computer-guided pointing and tracking. Reserve at [sites.google.com/site/smokeyjackobs/](http://sites.google.com/site/smokeyjackobs/).

**What to do while you're waiting for it to get dark:** Stop at BISHOP CASTLE (12705 Colorado 65, between Rye and Beulah, 719-564-4366, [bishopcastle.org](http://bishopcastle.org)), arguably one of Colorado's coolest roadside attractions. Both an engineering marvel and folk-art masterpiece, Jim Bishop used more than 47,000 tons of rocks, concrete, wood and metal to build this castle all by himself.

If you're looking to flesh out your itinerary, you can take some nearby daytrips, like sandboarding in the GREAT SAND DUNES NATIONAL PARK AND PRESERVE ([nps.gov/grsa/index.htm](http://nps.gov/grsa/index.htm)).

**Bonus:** Colorado has two other Dark Skies designations, both parks. They are BLACK CANYON OF THE GUNNISON NATIONAL PARK and HOVENWEEP NATIONAL MONUMENT, which is split between Colorado and Utah.

## June, 2017: Dark Skies' board member gives talk at the Rotary Club.

THURSDAY, JUNE 8, 2017

Wet Mountain **Tribune**

# Deep Subject: Deep Space

## Rotarians enthralled by Dark Skies observations

Clint Smith, speaking as vice-president of Dark Skies and as amateur astronomer, took Rotarians and their guests into deep space during last Monday's luncheon gathering in Cliff Lanes community room. Smith pretty much enthralled the audience as he described the capabilities of the 14 inch Celestron telescope in the Smokey Jack Observatory on the southwest corner of Westcliffe's Bluff Park. Calling the instrument "the envy of many small obser-

"There is another Star Party coming up," he enthused, "June 15, in association with the Fremont County Library, for Saturn at Opposition." The last Star Party was attended by about 40 people, most local, but some coming from across and out of the state just for the occasion.

Smith pointed out how the Dark Skies Community designation here is beginning to draw more and more visitors. Efforts to move that distinction into an identified Dark



County attorney and amateur astronomer Clint Smith, at podium, speaks during Monday's luncheon meeting of the Wet Mountain Valley Rotary Club.

**July/August, 2017: *Colorado Life Magazine* includes our dark sky efforts in a sidebar comment.**

# ColoradoLife MAGAZINE

## Hidden in the Sangres

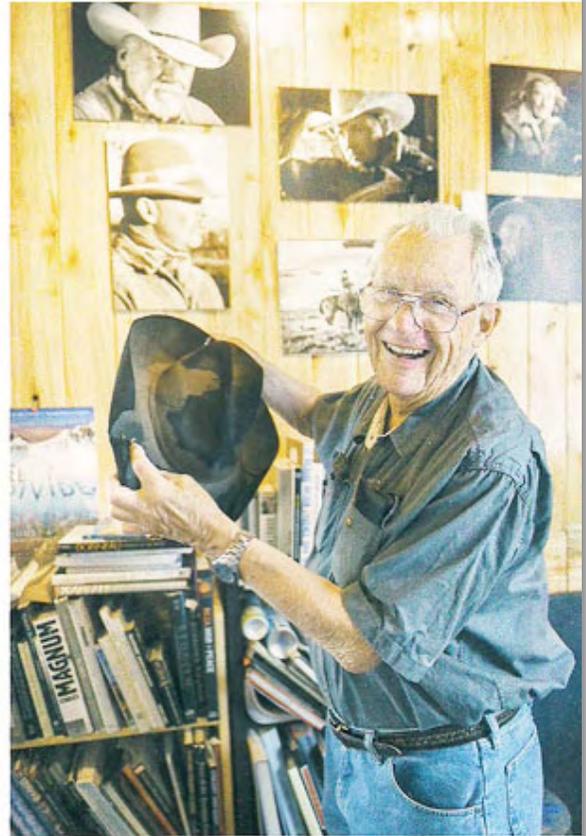
BY MATT MASICH July/August, 2017

### A real cowboy's cowboy hat

Photographer Bill Gillette, who has made a career of photographing ranchers in action, shows off one of his favorite cowboy hats at his Westcliffe gallery. Held together with stitches of twine and stained with sweat, the hat shows evidence of hard service atop the head of cowboy Trey Allen, who worked on a local ranch. When Gillette first saw Allen wearing it, he begged the cowboy to give it to him when he got a new one. Some time later, Gillette discovered the hat hanging on the doorknob of his gallery's entrance.

Custer County's population has doubled since 1990, though that means that 4,000 as opposed to 2,000 people live here now. Even though the land is still wide open compared to the crowded Front Range, some old-timers feel hemmed in. However, when the sun sets and the stars emerge, Westcliffe feels the same as it ever did.

WHILE ASPEN IS known as the "playground of the stars," owing to its popularity among celebrities, Westcliffe has a fair claim to the title as well, thanks to the shimmering blanket of stars that covers its night sky. This valley is one of the least light-polluted places in the state, allowing the Milky Way and uncountable stars to emerge in full splendor.



Katlyn Rusher rounds up Charolais and Hereford breeding bulls on her father's V Bar Ranch.



**July, 2017: A co-op of local civic organizations erected a two-sided sign marking the town limits' adjoining boundary line. Both towns were given the tagline of: "a dark sky community." The dedication ceremony was held on June 26 with about 50 local citizens attending.**



**August 21: Approximately 200 attend solar eclipse viewing at the SJO.**



This was in conjunction with the first in the new "Speaker Series" of public presentations by local experts on light pollution and astronomy topics.

**September: Dark Skies included in Western Heritage Days.**

For the first time this year, tours of the Smokey Jack Observatory to bring attention to our internationally known dark skies were included in the *Wet Mountain Western Pilgrimage*, a four-day event held in September where residents and visitors alike are invited to visit historic sites and other attractions to learn more about the spectacular Wet Mountain Valley.

Ending event each day: <http://www.wetmountainwesternpilgrimage.com/>

**2017 Sky Quality Monitoring (SQM) Program readings continue to be taken each quarter from ten locations within the two towns of Westcliffe and Silver Cliff.**

The extremely dark readings beginning February, 2014, demonstrate the successful efforts by Dark Skies in the 15 years from 2000 – 2015 prior to the certification effort and indicate that there has been no degradation of the conditions during our current annual review. In fact, the latest readings are within the margin of error during the towns’ power outage in February!

SKY QUALITY MONITORING													
TOWNS OF WESTCLIFFE AND SILVER CLIFF, COLORADO													
READINGS ARE IN MAG/ARCSEC <sup>2</sup> -- READINGS ABOVE 20.00 = "DARK SKIES"													
DATE	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6	SITE 7	SITE 8	SITE 9	SITE 10	AVG		COMBINED
											WESTCLIFFE	SILVER CLIFF	AVG
**2/26/2014	21.28	21.11	20.93	21.03	21.04	21.10	21.29	21.31	21.14	21.22	21.07	21.22	21.15
05/20/14	21.54	21.28	21.13	21.12	21.13	21.32	21.47	21.56	21.35	21.37	21.22	21.43	21.33
07/23/14	21.53	21.31	21.13	21.23	21.18	21.30	21.52	21.57	21.39	21.42	21.27	21.45	21.36
*11/17/2014	21.19	20.79	20.39	20.34	20.62	20.83	21.05	21.22	20.74	21.02	20.62	21.02	20.82
**2/20/2015	21.42	21.24	20.90	20.88	20.98	21.09	21.18	21.32	21.11	21.30	21.03	21.25	21.14
***6/14/2015	21.57	21.37	21.24	21.32	21.22	21.42	21.54	21.59	21.43	21.45	21.33	21.50	21.42
08/12/15	21.62	21.43	21.19	21.42	21.29	21.45	21.52	21.61	21.44	21.51	21.37	21.53	21.45
10/10/15	21.46	21.24	21.16	21.25	21.09	21.15	21.19	21.36	21.13	21.32	21.19	21.28	21.24
01/28/16	21.43	21.19	20.99	21.24	20.97	21.15	21.24	21.40	21.15	21.36	21.14	21.28	21.21
05/03/16	21.58	21.29	21.12	21.35	21.16	21.26	21.20	21.63	21.30	21.48	21.28	21.39	21.34
09/09/16	21.60	21.38	21.32	21.43	21.33	21.44	21.51	21.66	21.45	21.52	21.41	21.52	21.46
11/26/16	21.40	21.09	21.11	21.18	20.94	21.07	21.21	21.35	21.11	21.26	21.12	21.22	21.17
****02/15/2017	21.61	21.48	21.53	21.47	21.59	21.55	21.56	21.64	21.53	21.51	21.53	21.57	21.55
06/15/17	21.64	21.43	21.19	21.46	20.98	21.46	21.42	21.58	21.41	21.51	21.31	21.51	21.41
09/18/17	21.56	21.26	21.07	21.30	21.24	21.31	21.30	21.49	21.34	21.42	21.27	21.38	21.33
*GROUND SNOW COVERED													
**JUPITER PRETTY BRIGHT OVERHEAD													
***LOCATION FOR SITE 4 READING MOVED TO THE SMOKEY JACK OBSERVATORY													
****Readings taken during power outage in Westcliffe and Silver Cliff. Power was on in the rest													

\* This annual report was compiled and produced by Dark Skies member Ed Stewart, <[stargazer@skymtn.com](mailto:stargazer@skymtn.com)>