

CENTRAL IDAHO DARK SKY RESERVE
ANNUAL REPORT

**20
22**



SMOKY MOUNTAIN MILKY WAY – NILS RIBI

International Dark Sky Place Annual Report: October 2021 - December 2022



Date

Wednesday, January 4, 2023

General Information

International Dark Sky Place Name

Central Idaho Dark Sky Reserve

International Dark Sky Place Category

International Dark Sky Reserve

Designation Year

2017

Guidelines Version

2015

Your Name

Carol Cole Idaho Dark Sky Alliance Board President

Email Address

idahodarksky@gmail.com

Primary Contact

Carol Cole Idaho Dark Sky Alliance Board President

Primary Contact Email Address

idahodarksky@gmail.com

Primary Contact Phone Number

+208 (352) 3153

Secondary Contact Phone Number

+208 (352) 3153

What is the physical address of the Place?

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Ketchum, Idaho, 83340
United States

Is the site currently under Provisional Status?

No

Are you an IDA Delegate, Affiliate, or Chapter Representative?

No

Night Sky Quality Monitoring

Total average or typical zenith night sky brightness reading reported in the original application:

21.29

Provide the Tier you were certified under, if applicable:

Gold

Total average or typical zenith night sky brightness reading for this reporting period:

21.53

Upload your night sky quality raw data documents for this reporting period:



CentralIdaho_SkyQuality_SQ... .xlsx

Upload a map (PDF or image) that shows the locations and names of the places that were used to take SQM measurements:



CentralIdaho_SkyQuality_SQ... .pdf

Describe any changes detected in night sky quality from receiving your certification to the present:

We adjusted our SQM locations this year based on the ongoing monitoring project with the UCLA students. Most of the locations in 2022 were the same or in close proximity to the past locations and a few redundant or adjacent locations were not collected this year. The light dome/skyglow from the Boise and the Treasure Valley is still visible and remains about the same throughout the year.

Lighting Compliance

Reserves, please fill out the applicable row to describe your lighting compliance rate (%) with your Lighting Management Plan (whole numbers only):

	Year of Certification	Compliance % in Original Application	Current Compliance %	Anticipated % for Next Reporting Period
Core	2017	100	100	100
Periphery	2017	74	1234	1234

What actions have you taken to meet the requirements of your Lighting Management Plan/Policy during this reporting period? Include a summary of any actions taken with privately owned lighting that helped improve your night sky quality as well:

NOTE: 1234 indicates unknown data, not a % for compliance rates. :-)

There is no lighting within the CIDSr core area so it is 100% compliant with lighting requirements. The six jurisdictional entities within the Reserve continue to work on their facilities and with residents who live within the Reserve to retrofit non-compliant lighting according to their respective ordinances. All entities require dark sky compliant lighting for any new construction or remodels so the compliance continues to improve but we have not calculated overall compliance rate changes for this year.

- The Sun Valley Resort located within the City of Sun Valley received approval for a major renovation of the Lodge Apartments that includes changing out all outdoor lights within the 42-unit development to dark sky compliant fixtures. The project is approved and will be completed in 2023.

- Blaine County created an "Outdoor Lighting Compliance Checklist". The code states that all "building permits shall include lighting plans showing location, type, height, color temperature, amount of all proposed and existing fixtures and boundary of lights." An example of a completed compliance checklist, site plan, and lighting fixture cut sheet are attached.

Blaine County staff responded to and resolved four formal outdoor lighting violations. A sample contact letter is attached.

- Ketchum approved the Warm Springs Ranch Residences subdivision with 35 single-family residential lots in 2021. All the streets in this new subdivision are private and have no streetlights. Construction of the new residences began in 2022. Each new home will go through the building permitting process and will be required to comply with Ketchum's Dark Sky Ordinance.

The city also responded to twelve different dark sky complaints. Upon investigation, some properties proved to be compliant and others were brought into compliance.

Upload any relevant documentation showing examples of lighting changes made during this reporting period:

 CentralIdaho_Lighting_Blaine... .pdf	 CentralIdaho_Lighting_Blaine... .pdf
 CentralIdaho_Lighting_Blaine... .pdf	 CentralIdaho_Lighting_Blaine... .pdf

Have you used any fixtures from the IDA Fixture Seal of Approval (FSA) Program?

No

For International Dark Sky Communities and Reserves, have there been any changes to your local outdoor lighting ordinances? If yes, please describe and provide a link to the updated policy if available:

There were no changes to ordinances for any of the jurisdictions within the reserve in 2022.

Current versions are:

Blaine Co – 2021

Custer Co – 2010

Ketchum – 2017

Sun Valley – 2020

Stanley – 2018 (resolution)

Outreach, Education, and Media

Please fill out the following table to summarize all outreach efforts from the past reporting period (whole numbers only).

Total # of Events	# of Unique Efforts Offered	Total # of Attendees for All Events
29	28	911

Note - "unique efforts" offered represent different programs at your site. For example, all star/astronomy related events should be classified as one type of effort, "night hikes" as another type of effort, etc.

For each unique event type your Place hosted, provide all of the following information (up to 100 words per entry; 1000 total word limit): Event name; Date or range of dates of all events under that name; Number of attendees; Brief description of the event and the values that you promoted (i.e. wildlife/ecology, lighting, culture/heritage, IDSP status, ordinance/policy, astrotourism, energy security and conservation, human health, etc.).

1. BSU AstroTAC team Training; 3/25/2022; 5; Intern Training; CIDSr info and status, light pollution and research
2. BSU First Friday Boise; 11/4/2022; 65; public program; light pollution and research, CIDSr info and status
3. Constellation Crafts Community Library; 7/2/2022; 6; kids program; astronomy and observing;
4. CSI iSTEM conference; 6/13/2022; 11; teacher conference; light pollution and research, astronomy and observing
5. CWI iSTEM conference; 6/21/2022; 10; teacher conference; light pollution and research, astronomy and observing
6. Foothills School Program at Camp Perkins; 5/18/2022; 30; nature camp; astronomy and observing, CIDSr info and status
7. Hailey Antique Faire; 7/3/2022; 67; public festival info booth; CIDSr info and status, light pollution and research
8. Indigenous Astronomy Hailey Library; 7/14/2022; 21; public program; culture and heritage, light pollution and research
9. Indigenous Astronomy Stanley Library; 7/13/2022; 10; public program; culture and heritage, light pollution and research
10. Knowing the Night Sky Hailey Library; 6/30/2022; 17; public observing; astronomy and observing;
11. Perseid Party Hailey Library; 8/12/2022; 52; public observing; astronomy and observing, culture and heritage
12. Planet Habitability Stanley Library; 6/22/2022; 12; public program; astronomy and observing, CIDSr info and status
13. Riverstone School Program Boise; 4/13/2022; 18; school program; CIDSr info

and status, astronomy and observing

14. Sawtooth Botanical Garden New Moon Dinner; 11/4/2021; 40; Dinner and observing, CIDSr info and status, astronomy and observing

15. Sawtooth Botanical Garden New Moon Dinner; 2/1/2022; 45; Dinner and observing, CIDSr info and status, astronomy and observing

16. Sawtooth Salmon Festival; 8/27/2022; 45; public festival info booth; ecology and wildlife, light pollution and research

17. Solar Observing Redfish VC; 7/10/2022; 102; Trailside Discovery Station; astronomy and observing;

18. Solar Observing Stanley Library; 7/13/2022; 6; public observing; astronomy and observing;

19. Solar System Model and Stanley solar observing; 7/7/2022; 11; kids program; astronomy and observing;

20. Solar System Model and Ketchum solar observing; 7/6/2022; 25; kids program; astronomy and observing;

21. Solstice Sips and Stars Ketchum; 12/21/2021; 40; public festival info booth; light pollution and research, astronomy and observing

22. Stanley History Day booth and Solar Viewing; 7/9/2022; 22; public festival info booth; CIDSr info and status, astronomy and observing

23. Stanley School Program; 5/23/2022; 20; school program; light pollution and research;

24. Star Party Stanley Pioneer Park Fri; 7/8/2022 and 7/9/2022; 72 + 30; public observing; astronomy and observing, CIDSr info and status

25. Summer Solstice Celebration Ketchum; 6/21/2022; 57; public festival info booth; CIDSr info and status, astronomy and observing

26. Telescopes at Tamarack Lodge Ketchum; 11/5/2021; 17; Happy Hour Observing; astronomy and observing, light pollution and research

27. Telescopes, Tacos and Tequila Hotel Ketchum; 12/4/2021; 35; Happy Hour Observing; astronomy and observing, light pollution and research

28. Winter Solstice Soiree Ketchum; 12/21/2022; 30; public festival info booth; light pollution and research, astronomy and observing

Did you promote the IDA and its mission during your outreach programs/events? If so, describe:

All of our outreach programs include information about IDA, how we were designated as a Dark Sky Reserve, and other information about IDA's mission. We typically have some of IDA's brochures on hand to distribute at our events.

In 2022, we also updated our CIDSr information booth materials. The biggest improvement was to print four of the IDA traveling displays on heavy banner material that can be displayed in the booth. They provide a much more durable and professional display for our booth. New booth photo below.

Is there any programming, ongoing or planned, blending the arts and/or culture with dark skies? If so, describe:

Some of the school programs include student art projects.

What have you noticed about your visitors' experiences? For example, is attendance/visitation of dark-sky programs consistent, growing, or dropping off? Have visitors provided any feedback on their experiences at your site? Please describe:

While it's hard to compare visitation numbers in the past several years due to various pandemic related interruptions to event and travel plans, interest in the Reserve and attendance for programs has remained consistent over time. Visitors to the area are ALWAYS blown away by the stunning night sky in central Idaho.

Provide up to five photos of events you hosted this year:





Provide social media handles or website links used to promote dark skies (these will be added to your Place's IDA page):

Website: www.idahodarksky.org

Facebook: Central Idaho Dark Sky Reserve

<https://www.facebook.com/people/Central-Idaho-Dark-Sky-Reserve/100070205423934/>

Has your Place participated in any IDA-led initiatives such as International Dark Sky Week, the Under One Sky conference, or other relevant promotions during this reporting period?

Yes

If you answered yes to the previous question, please describe:

The City of Ketchum issued an International Dark Sky Week Proclamation.

At least one IDSA board member participated in several sessions of the 2022 IDA Under One Sky Conference. It was well worth setting alarms for all hours of the day and night!

Upload files of any media coverage (articles, interviews, etc.) about your site or dark-sky efforts you are involved with. This may also be a document with a list of links to the respective coverage.



CentralIdaho_Outreach_Ketch....pdf



CentralIdaho_Outreach_2002... .pdf

To update our records, please provide a photo of your erected sign with your respective International Dark Sky Place label:



Briefly describe how educational materials are being dispersed/provided at your Place:

CIDSR Brochures are available in all area visitor centers, made available to local businesses on request for distribution to their customers and sent in response to information requests.

City/county ordinance and compliance information brochures are distributed by the various jurisdictions.

Blaine County produced a new outdoor lighting brochure in 2022. And we continue to share our CIDSR Brochure.

Upload examples of new (not developed/provided by the IDA) printed educational materials that have been created this reporting period. These may include brochures, handouts, policy-related materials such as utility notices, and/or informative messages distributed through utility companies:



CentralIdaho_Outreach_CIDS... .pdf



CentralIdaho_Outreach_Outd... .pdf

Describe any permanent or temporary exhibits that have been created this reporting period (these may include trails, informative waysides, interpretation signs, gift shop items, etc.):

The Forest Service has a temporary Dark Sky exhibit on display at the Sawtooth NRA Visitor Center north of Ketchum.

Upload photos showing any of the above items you are currently providing (limit 5 photographs):



SavingtheDark_020323_Boise.pdf

Briefly describe any efforts undertaken to reach new audiences. If this was not part of your efforts last year, describe what you plan to do to engage new visitors in the 2023 reporting period:

We continue to attract a broad audience with our programs, events and other

outreach efforts. Starting in 2022 the BSU AstroTAC team with support from NASA's Science Activation Program grant has presented astronomy related programs throughout southern Idaho and eastern Oregon. Much of their outreach has targeted rural areas where such programming is typically less available. The AstroTAC team has extended their programs into new communities so they are providing information to new audiences even if those new contacts are never able come to the Reserve. Their programs tend to be more astronomy and STEM focused so we are working on ways they can incorporate more information about light pollution and the dark sky reserve into their AstroTAC framework.

We are also planning two outreach events in February 2023 in the Boise and Treasure Valley region to connect with more people in that area. See attached poster and the Partnership Section for more information about that effort.

Partnerships

Have you worked with any external partners to promote the dark-sky movement within and outside of your Place's boundaries? If so, identify these partners and explain the result of this collaboration:

Idaho Dark Sky Alliance

The Idaho Dark Sky Alliance (IDSA) was established in 2021 as a 501(c)(3) nonprofit organization to help manage the day-to-day operations and fundraising needs of the Reserve. IDSA functions under the general direction of the CIDSR Oversight Group which includes representatives from Sun Valley, Ketchum, Stanley, Blaine County, and the Sawtooth National Forest. The board proposes, seeks funding for, and implements projects that support dark sky outreach and monitoring efforts.

BSU- NASA Science Activation Program Grant

We are working with Dr Brian Jackson, a professor in the Physics Department at Boise State University and an IDSA board member, on a NASA Science Activation Program grant he received in 2021. The program's goal is to build an astronomy and STEM outreach network centered on the Central Idaho Dark Sky Reserve. A successful first year provided numerous public stargazing and education outreach presentations within the reserve and the region by BSU AstroTAC students and the CIDSR Astronomer in Residence.

Visit Sun Valley

One of the ongoing Central Idaho Dark Sky Reserve partners is Visit Sun Valley. The coordinated efforts with them has resulted in increased exposure both locally and nationally including:

- Dissemination of information by the Visit Sun Valley Visitor Center agents
- Landing page and Event calendar listing on visitsunvalley.com
- Variety of blogs
- Social media coverage
- Paid media partnership inclusion
- PR coverage inclusion

Were you awarded any grants or funding for projects during this reporting period? If yes, please describe:

No

Have you collaborated with an IDA Delegate or IDA Chapter on dark-sky issues since the last reporting period? If so, please describe:

No

Are there any ongoing conservation and/or research programs at the site? If so, who runs them, and what are the goals?

We are continuing our work with Dr Travis Longcore and the UCLA Institute of

Environment and Sustainability to monitor light pollution. The purpose of the project is to develop a long-term strategy to track light pollution trends affecting the Central Idaho Dark Sky Reserve. The student teams collect sky quality data and other information while they are on-site using a Sky Quality Camera and Sky Quality Meter and then analyze the data once they are back at UCLA. The program started in 2021 with five students. In 2022 there were two students and another group of students will be coming in 2023.

Briefly describe future plans (in 2023 and beyond) to engage with existing and new partners and how you will expand the dark-sky movement:

Boise and Treasure Valley Outreach Events

IDSA is working with the Oregon Outback Dark Sky Network and BSU to start a conversation with the city of Boise and within the Treasure Valley about the impacts of and ways to mitigate light pollution. The goal is to improve lighting and reduce light pollution, evidenced by the skyglow from Treasure Valley lighting that is visible within the Reserve and throughout southern Idaho.

As a first step we are planning two screenings of the film “Saving the Dark” in February 2023 to raise community awareness. The two events, at BSU in Boise and the Four Rivers Cultural Center in Ontario, Oregon, will also include a panel discussion with dark sky advocates and experts to answer questions and inspire further action. The target audience for the film screening is the general public and city staff who deal with lighting issues. The hope is to host a follow-up presentation later in the spring or at least to provide information and contacts for more specific dark sky friendly lighting options and design.

Success in Light Pollution Control, Leadership, and Future Threats

For Dark Sky Reserves, briefly describe any new (or ongoing) examples of night sky friendly installations on private sites and/or public spaces such as roadways or parks:

All lighting within the reserve whether public or private is regulated by existing lighting ordinances, so any new or updated outdoor lighting must be dark sky friendly. The two projects mentioned previously, Warm Springs Ranch Subdivision in Ketchum and the Lodge Apartments in Sun Valley, are examples of dark sky friendly private developments.

Have the "threats" identified in your application for certification:

Stayed the same

Provide a brief description of how you will continue to manage "threats" over the next year:

Since the skyglow from the Treasure Valley is one of the identified threats to the sky quality within the Reserve as well as in the Treasure Valley, the film screening and panel discussion event will hopefully start the conversation about managing increased and inappropriate lighting.

Change in Ownership, Place Size, or Access

Have there been any changes to the size, access and/or boundaries of your Place (this could be property acquisition, sale, road development/closure, easement access, etc.)? If so, please describe:

No

What is the total size of your Place (in square kilometers only)?

3668

For Dark Sky Communities and Reserves, what is the current population size?

6026

Additional Information

What do you consider the greatest single benefit of the IDA certification to your location?

It provides a common goal and shared interest for the communities and residents within the Central Idaho Dark Sky Reserve to celebrate and preserve the stunning night sky in central Idaho.

Did you have any dealings with IDA over the last 12 months regarding any certification issues? How were they handled by IDA?

No specific involvement regarding certification but the staff is always helpful and knowledgeable in my interactions with them.