Visit Central Oregon Dark Skies Content 4.11.23

INTRODUCTION

Central Oregon is a vast region, with a variety of experiences in any season and for any given interest. From Sunriver to Sisters and from Prineville to Madras, and everywhere in between, there are endless opportunities to explore. But the sky that hovers above us – which also happens to be endless – is one of the constants.

Cerulean by day and inky black by night, the region's dark skies provide another surprising and welcome dimension to Central Oregon. The region is home to two International Dark-Sky Association certified attractions that are part of the global Dark Sky Places Program, including Sunriver and Prineville Reservoir State Park. At a time when 80% of the country's population can no longer view the Milky Way from their home because of light pollution, dark skies are becoming less common every year.

As more amateur astronomers and everyday stargazers expand their curiosity for space through stargazing and astrotourism, there is perhaps no better place to do so in the Pacific Northwest than here in Central Oregon.

In fact, Visit Central Oregon has an entire section of its website dedicated to <u>Observatories and Stargazing in Central Oregon</u>, which provides information on where to go, what to look for, and when to visit. In the meantime, we've put together this useful guide to help guide you in the right direction – much like the North Star.

REGIONAL OBSERVATORIES ROUNDUP

Central Oregon is home to one of the largest concentrations of public accessible observatories in the U.S. With three fully-equipped observatories (Pine Mountain Observatory, Oregon Observatory, and Worthy Environmental Hopservatory) and a fourth less developed but equally impressive observatory (Dee Wright Observatory), the region's famously dark skies are easily explored at any one of the following venues.

Pine Mountain Observatory (seasonal)

Operated by the University of Oregon Department of Physics under a special use

permit from the Deschutes National Forest, Pine Mountain Observatory is perched at an elevation of 6,300 feet, 34 miles southeast of Bend. Though primarily used for advanced scientific research and other astronomical observations, the observatory is open to visitors on weekends during the spring and summer months and its distance from the ambient lights of Bend makes it an ideal location to take advantage of the High Desert's dark skies.

Pine Mountain Observatory uses a combination of observatory staff and volunteer amateur astronomers to conduct tours. Guides provide assistance looking through a variety of telescopes, from small portable scopes to a research-grade, 24-inch telescope that was installed at PMO in 1967. Guides also educate visitors about the various sky objects observed, ranging from stars and constellations to the International Space Station and Elon Musk's Starlink satellite constellation. This, while also discussing current astronomy topics and technologies and answering visitor questions.

An adjacent Forest Service campground accommodates overnight visitors (reservations required), and a number of other self-guided activities are also available, including bird and wildlife watching, mountain biking, hang-gliding, hiking, and horseback riding.

Visitor note: The last 8 miles of the road to Pine Mountain Observatory are unpaved. Visitors should depart Bend with a full tank of gas, plenty of clothing for all conditions, and sturdy shoes. There are limited services available at the observatory, and travelers should expect the drive to take approximately one hour each way. Call ahead or visit www.pmo.uoregon.edu for hours of operation.

Oregon Observatory

As the largest publicly accessible observatory in the nation, the Oregon Observatory in Sunriver boasts high elevation (4,163 feet), dark surroundings, and good air quality that combine to make it a special thrill for all ages.

With more than 30 different telescopes for nighttime stargazing and daytime solar viewing, visitors will have the opportunity to spend more time viewing and less time waiting in line for a quick glimpse of the skies above.

Located less than 2 miles from the Lodge at Sunriver Resort, and located within one of Central Oregon's two International Dark-Sky Association (IDA) certified Dark Sky Places, the Oregon Observatory also features planetarium shows, star parties, solar viewing, youth summer space camps, and more.

Visitor note: Tickets must be purchased online, in advance, through the www.snco.org website. In addition to the awe-inspiring and educational experiences that await visitors to the Oregon Observatory, the adjacent Sunriver Nature Center provides an immersive introduction to the High Desert's native fauna and flora.

Worthy Environmental Hopservatory

One of the most unexpected observatory settings in the country isn't found atop a remote mountain or in the middle of some isolated location. Rather, it's found at a brewery on the east side of Bend. The Worthy Environmental Hopservatory is perhaps the perfect marriage of Central Oregon's love for craft beer and its abundance of dark, starry skies.

The Hopservatory opened in May of 2017 with the goal of raising scientific literacy. The Hopservatory also aims to educate visitors about big and unwieldy concepts like scale, size, time, distance, and speed in our solar system and beyond.

A 16-inch research grade telescope gives visitors the opportunity to gaze upon galaxies, planets, star clusters, nebulae, and the moon, all guided by the facility's resident astronomer. The Hopservatory is open for night sky viewing Wednesday through Friday. Hours vary by season depending on sunset time, and a \$5 donation is suggested.

In addition to night sky viewing, the Hopservatory also offers a daytime solar viewing experience through a mobile Hydrogen Alpha telescope with protective filters that allow stargazers to view sunspots, solar flares, and more.

All proceeds from the Hopservatory support <u>Worthy Environmental</u>, which aims to connect people to the natural world and cultivate a community of environmental stewards working together to build a greener and healthier planet.

Visitor note: In keeping with the theme, visitors can enjoy a pre- or

post-stargazing pint of Worthy Brewing's Lights Out Milk Stout or Cosmic Crisp interstellar cider in the adjacent restaurant and pub.

Dee Wright Observatory (seasonal)

As much a terrestrial observatory as it is a celestial one, the Dee Wright Observatory is built entirely of lava rock and set in the middle of an expansive lava field at an elevation of 5,187 feet.

Completed in 1935 by the U.S. Civilian Conservation Corps, what the Dee Wright Observatory lacks in technology it more than makes up for in the unique setting of this less developed historic observatory. While it does not boast telescopes and is not an observatory in the traditional celestial way, the Dee Wright Observatory atop McKenzie Pass provides an incredible opportunity for amateur astronomers to view the night sky in a setting almost devoid of artificial light.

At 65 square miles in size, the surrounding lava field is so expansive and lunar-esque that in 1964, NASA conducted drills with astronauts here as they prepared to travel to the moon.

Visitor note: The Dee Wright Observatory is located 15 miles west of the town of Sisters up a narrow, paved road. There are no services available at the observatory, and the access road is closed to vehicles in winter approximately 7 miles west of Sisters.

CENTRAL OREGON'S DARK SKIES AT-A-GLANCE

As one of the West's leaders with regard to the protection and preservation of dark skies, and educating visitors about their critical importance, Central Oregon's Dark-Sky Association-certified attractions may be growing. In addition to Sunriver and Prineville Reservoir State Park, three other attractions – the City of Sisters, Black Butte Ranch, and Pine Mountain Observatory – are pursuing IDA Dark-Sky Places certification.

Sunriver

Certified: Aug. 3, 2020

Designation: Dark Sky Friendly Development of Distinction

In August of 2020, the Central Oregon community of Sunriver received its certification as a Dark Sky Friendly Development of Distinction, part of the International Dark-Sky

Association's Dark Sky Places Program.

Home to the Sunriver Nature Center & Observatory (<u>www.snco.org</u>), Sunriver was the first International Dark-Sky Places recognized in Oregon and one of only 142 recognized worldwide at the time of its certification.

Prineville Reservoir State Park

Certified: May 7, 2021

Designation: International Dark-Sky Park

In May of 2021, Prineville Reservoir State Park received its certification as an International Dark-Sky Park, part of the International Dark-Sky Association's Dark Sky Places Program.

The certification recognizes the exceptional quality of the park's night skies as well as the park's efforts to install responsible lighting and educate the public about light pollution. At the time of its certification, Prineville Reservoir was one of only 174 locations worldwide that had followed a rigorous application process for dark sky certification.

Prineville Reservoir State Park was selected for its expansive dark skies, which Park Rangers provide interpretation of on weekends. Camping is available by reservation through the <u>Prineville Reservoir State Park</u> website.

OTHER PLACES & WAYS TO VIEW DARK SKIES IN CENTRAL OREGON

Beyond Sunriver, Prineville Reservoir State Park, and the region's four observatories, there are a number of other locations, tour operators, and events that cater to stargazers. And if all else fails, just find a dark corner of the region and look up!

Cove Palisades State Park

While there are no formal stargazing programs at <u>Cove Palisades State Park</u>, the park's setting makes for an ideal backdrop for amateur astronomers to view the night sky. The combination of the Deschutes and Crooked River canyons, the placid expanse of Lake Billy Chinook, towering rimrock cliffs, and the lack of artificial light can make it difficult to choose between gazing up at the night skies, or looking around at the surrounding landscape.

Wanderlust Tours

If your idea of stargazing includes venturing a little further out into nature, but you still want the comfort and convenience of a naturalist-led experience, <u>Wanderlust Tours</u> offers a variety of stargazing opportunities year round, including their popular <u>Moonlight & Starlight Snowshoe Tour</u> in winter, and their <u>Starlight & Moonlight Canoe Tour</u> in spring, summer, and fall.

Oregon Star Party

A fixture in Central Oregon since 1987, the <u>Oregon Star Party</u> is held over six days each July in the Ochoco National Forest east of <u>Prineville</u>. Annually attracting as many as 1,000 stargazers to a venue that is considered to have the darkest skies of any major star party in the contiguous United States, Oregon Star Party takes place in a primitive 40-acre setting with unobstructed (and unpolluted) 360-degree views at an elevation of 5,000 feet, near Indian Trail Spring.

Among the highlights of Oregon Star Party include notable astronomy speakers, a designated telescope park, observing programs, astrophotography, youth programs and activities, food and other vendors, and more.

WHY DARK SKIES MATTER

Since the electrification of homes, streets, parks, buildings, and more, technology and a 24/7 global economy have been at conflict with the frontier of darkness. Combined with an ever increasing worldwide population, the convenient, sometimes unnecessary use of artificial light at night (ALAN) has steadily decreased the magic, mystery, and wonder of our night skies worldwide.

As part of their ongoing initiatives to educate society, organizations such as the International Dark-Sky Association and others provide a number of resources and recommendations that everyone can adopt to help minimize their light pollution footprint including:

- Use light only where needed
- Use light only when needed
- Use only the least amount of light needed
- Shield and direct light downward
- Use amber-colored lighting outdoors where feasible

In an effort to raise awareness of the global ALAN crisis and the need for preservation of our planet's dark skies, <u>International Dark-Sky Week</u> was established in 2003. Held annually during the week of the new moon in April (in 2023, April 15-22), International Dark-Sky Week coincides with Oregon Dark Sky Week, a statewide educational and awareness effort that includes a number of astronomy-focused classes, presentations, events, and other activities.

Did you know: Light pollution is increasing at twice the rate of population growth worldwide, and 83 percent of the global population now lives under a light-polluted sky.

CENTRAL OREGON DARK SKIES FAQ

Q: When is the best time for stargazing in Central Oregon?

A: With clear skies in abundance and artificial light in short supply, there's never really a bad time for a dark skies experience in Central Oregon. That being said, timing your viewing with a new moon phase often produces the darkest skies and best stargazing opportunities. Additionally, observatory access and hours of operation do vary by season, with Dee Wright Observatory and Pine Mountain Observatory being largely inaccessible during winter months.

Q: Do I need a special permit?

A: Central Oregon's night skies are free for all to enjoy, and the opportunities to do so are abundant in Central Oregon. Most commercial observatories either charge an admission fee or accept donations to help offset operating costs. Access to <u>Oregon Bureau of Land Management</u> property is generally free and does not require a pass or permit, while stargazing at <u>Oregon State Parks</u> facilities and on <u>U.S. Forest Service</u> land may require an entry fee or permit. Always be respectful of posted signs, and never trespass onto private property.

Q: I don't have a telescope. Can I still stargaze?

A: The short answer is YES! Three of the four major observatories in Central Oregon boast research-grade telescopes that the public can use for staring up at the heavens.

Q: Are there guided tours & trips available?

A: Yes! While not technically 'guided,' the Pine Mountain Observatory, Oregon Observatory, and Worthy Environmental Hopservatory are staffed (hours vary by

location and season) with experts who are happy to help you maximize your stargazing experience. If you'd prefer to venture further out into nature, <u>Wanderlust Tours</u> offers a variety of stargazing opportunities year round, including their popular <u>Moonlight & Starlight Snowshoe Tour</u> in winter, and their <u>Starlight & Moonlight Canoe Tour</u> in spring, summer, and fall.

Q: What should I wear?

A: Most stargazing experiences take place in an outdoor setting, and the nature of an observatory is such that even in an indoor setting, it's likely to still be an open-air experience. As such, visitors and amateur astronomers should plan accordingly by dressing in layers, wearing sturdy shoes, bringing a flashlight or headlamp – preferably with a red lens or covered with red cellophane, and being prepared for all weather conditions regardless of season.

FOR MORE INFORMATION

Still looking for more? Check out these links for additional information about the region's dark skies opportunities, as well as some broader information about dark skies, astronomy, and more.

Pine Mountain Observatory

Alton Luken, Operations Manager, <u>aluken@uoregon.edu</u> 34 miles SE of Bend (Google map <u>HERE</u>) 541-382-8331

Oregon Observatory

Paul Poncy, Observatory Director, paul@snco.org
57245 River Rd.
Sunriver, OR 97707
541-593-4394

Worthy Environmental Hopservatory

Grant Tandy, Observatory Director, grant@worthyenvironmental.org
495 NE Bellevue Drive
Bend, OR 97701
541-647-6970, ext. 220

International Dark Sky Association - Oregon Chapter

Michael McKeag, Chapter Director, <u>michael.mckeag@darksky.org</u> P.O. Box 777
Bend, OR 97709
idaoregon@darksky.org

Visit Central Oregon

Katie Johnson, Senior Marketing Manager, <u>katie@visitcentraloregon.com</u> 57100 Beaver Drive, Building 6, Suite 130 Sunriver, OR 97707

Prineville Reservoir State Park

Prineville, OR 97754 800-551-6949

Local links:

<u>Enjoy a Magic Night Stargazing in Central Oregon</u> (Black Butte Ranch) <u>Stargazing in the Backyard</u> (Sunriver Resort) Oregon State Parks

News & editorial coverage:

Oregon's Pristine Starry Skies (Travel Oregon)

Protecting Oregon's Dark Skies (Oregon Public Broadcasting)

Best Observatories in Oregon for Seeing the Stars (That Oregon Life)

Fight Against Light (The Source Weekly)

Other useful links::

Constellations
Kids Astronomy
NASA Space Place (for kids)
Moon Phases Calendar
International Space Station Tracker
Starlink Tracker