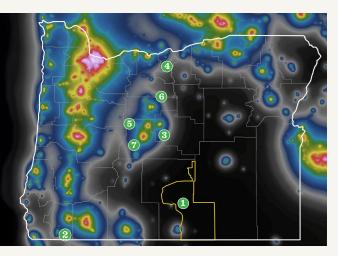
# **DARK SKY TOURISM** WHAT IS IT AND WHY SHOULD MY COMMUNITY GET INVOLVED?

Oregon is already known for its natural beauty by day, and thanks to our plentiful dark skies, we now have an opportunity to become an international stargazing destination.

However, this work can't happen on its own. Rural Oregon communities around the state have been taking action to reduce light pollution by considering how, when and where we use artificial light at night. From enacting municipal and county outdoor lighting ordinances, to garnering certification of the world's largest Dark Sky Sanctuary by DarkSky International, Oregonians are setting a future in motion where communities can take advantage of the economic benefits of dark sky tourism and ensure our beautiful night skies are visible for generations to come.



### International Dark Sky Places (as of April 2025)

- 1. Oregon Outback Dark Sky Sanctuary
- 2. Oregon Caves National Monument & Preserve
- 3. Prineville Reservoir State Park
- 4. Cottonwood Canyon State Park
- 5. City of Sisters
- 6. City of Antelope
- 7. Sunriver

### What is Dark Sky Tourism?

Dark sky tourism includes astrotourism (e.g., stargazing, astrophotography, chasing eclipses and auroras, and visiting facilities related to astronomy, like observatories and planetariums) and other special night-time activities such as nocturnal creature guided tours, Indigenous and cowboy storytelling, moonlit snowshoeing and canoe tours and more. While many Oregonians are fortunate to enjoy magnificent night skies, more than 80% of Americans can no longer see the Milky Way from their homes.

### **Overcoming Obstacles to Reclaim the Night**

There are several challenges to overcome in improving the darkness for night sky viewing—some are real, including innate human fear of the dark and the initial cost of retrofitting light fixtures to be more dark sky-friendly. For communities who choose to retrofit lights, the return on their initial investment is typically seen in under two years. That said, most of the perceived challenges to improving night sky viewing are actually based in misperceptions. Let's bust some of those myths.

**Myth:** If outdoor lights aren't on all night, a property will be more susceptible to crime.

**Actual:** The majority of crime occurs during the day. There is no scientific evidence that increased lighting deters crime. In fact, some studies show that over-lit areas attract certain types of crime. Smart lighting, such as motion lights, offer better solutions and minimize light trespass.

#### Myth: Brighter and whiter light is better and safer.

**Actual:** Bright, white light creates harmful glare and degrades our night vision, creating safety issues as it becomes more difficult to see our surroundings. It also adversely affects our metabolism and harms flora and fauna, making it a human and environmental health issue. In most new streetlight demonstrations, residents choose warmer and dimmer lighting as their preferred option.

**Myth:** Dark sky advocates don't want any lights in our town. **Actual:** Advocates seek dark skies, not dark ground. Focused, context-sensitive lighting reduces energy costs, eliminates light trespass, maintains rural character, and increases safety.

**Myth:** You can't see color well under those warm-colored (i.e. lower Kelvin temperature) lights, and they use more energy and are more expensive than whiter lights.

**Actual:** Most new warm-colored lights are on par with new whiter lights for color rendering and are only about 2% less energy efficient, a difference that is shrinking as warmer color temperature lights come into higher demand.

# How to Improve Sky Quality

The good news is that by following just five responsible lighting principles we can reduce light trespass, sky glow, glare and environmental hazards while improving safety.

Some communities are leading by example and retrofitting their public lighting with dark sky-friendly lights. Some have gone further by developing an outdoor lighting ordinance to address local lighting. Communities in Oregon with newly adopted dark sky-friendly lighting codes that meet the five responsible lighting principles include Sisters and Antelope. DarkSky International provides a model lighting ordinance that can be tailored to a community's needs, as well as a large inventory of different types of responsible lighting (available at darksky.org).

# ORIENTATION COLOUR INTENSITY TIMING

# The five responsible lighting principles include:

- 1. Use light only WHERE it is needed
- 2. Direct light so it falls only WHERE it is needed using shielding
- 3. Use warmer color lights to minimize the harmful effects of bluerich white light on living things and star visibility
- 4. Don't use light any BRIGHTER than is necessary for the task at hand; use the lowest light level possible
- 5. Use outdoor light only WHEN it is needed; use controls such as timers, dimmers, or motion detectors

### Sustainable Tourism through Community Engagement

Dark sky tourism is a type of ecotourism. It minimizes impact on the environment, respects local cultures and supports local economies. It encourages overnight stays, which result in higher spending per visitor and additional revenue for the community's businesses and through lodging taxes. In addition, dark sky tourism can extend the tourism season in areas where traditional tourism is seasonal. For example, long winter nights are great for stargazing, allowing destinations to attract visitors during the off-season.

Travel Oregon conducted a survey of visitors that confirmed that dark sky viewers seek less crowded places, overwhelmingly find minimizing environmental impact important in their experience, are twice as likely to participate in a guided tour and will likely engage in shopping and eating/drinking while visiting their destination. Destinations with Dark Sky Place certifications gain credibility with astro- and eco-tourists and the potential to earn significant media coverage from national and international publications.

Dark sky tourism benefits increase when community-based networks are established and maintained. This not only increases tourism benefits but also assures that any potential negative impacts from tourism are promptly addressed, minimized or avoided entirely. Whether a business, community, organization or public land manager is just beginning to consider incorporating dark sky themes into their endeavors or if plans are ripe for pursuing a Dark Sky Place certification, it's important to build and maintain alliances (such as through the local or regional destination management organizations). Outreach is an essential engagement tool.

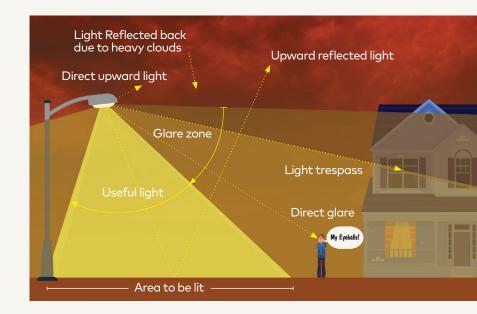
We'd love to help you foster these connections. If you'd like support getting in touch with destination management organizations in your area, please reach out to destinationservices@traveloregon.com.

# **Available Resources**

**Travel Oregon:** Access the Oregon Dark Sky Tourism Toolkit, engage with the Dark Sky Tourism Learning Community, or request a personal consultation with a dark sky expert. Industry.TravelOregon.com/darkskies

# DarkSky International: Darksky.org

 $DarkSky \,International \,Oregon \,Chapter: {\tt DarkSkyOregon.org}$ 



# **Light Polution Terms**

**Skyglow** - brightening of the night sky over inhabited areas; can often be seen as a light dome from areas beyond the source.

**Uplight** - upward directed/unshielded lights that contribute to skyglow.

**Glare** - excessive brightness produced by overly bright and/ or unshielded lights (Note: if a light makes you squint, that's glare).

Light Trespass - light emitted onto other properties, irritating neighbors, and adversely affecting the health and well-being of humans and wildlife.

**Clutter** - bright, confusing and excessive groupings of light sources.

**Blue-rich White Light** - light in shorter wavelengths of the light spectrum (between 380 nanometers and 520 nm) that is more susceptible to scatter and thus travel farther. Blue light is also the most disruptive to our nighttime environment because it mimics daylight, disrupting the hormone production and sleep cycles of both animals and humans.

Fully shielded - refers to fixtures that do not allow light above a 90-degree angle (full cut-off) and that keep lamps under a canopy or recessed so they are not visible beyond the horizontal angle.

**ALAN** - Artificial light at night that depending on design, may or may not create light pollution.