

Seabird Threats

Lighting at Kalama Park

- ☛ Predation by Introduced Species
- ☛ Human Disturbance & Development
- ☛ **Electric Light at Night**

WHAT IS LIGHT POLLUTION?

Inappropriate or excessive use of artificial light at night (ALAN).

Light pollution has serious environmental consequences for wildlife and climate, as well as negative impacts on human health.



View from Haleakalā, Maui, showing the spread of city lighting. Photo by Patrick Latter

Contact Us

MNSRP

*Working to locate, protect,
and enhance
seabirds and their habitats.*

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Maui Dark Skies

Reduce light pollution
Save the night sky
Protect native species!



Cory's Shearwater grounded as a result of light distraction. Photo by Airam Rodriguez

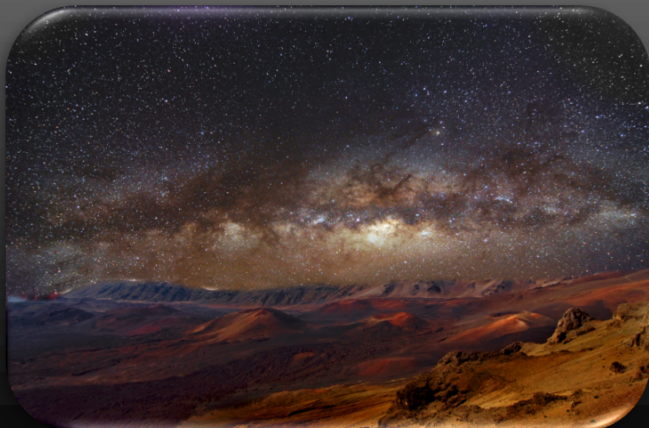
Light Pollution Facts

How Is It Harmful?

✈ **Health.** Studies suggest that artificial light at night disrupts our natural sleep patterns, increases stress, and puts us at risk for major illness.

✈ **Ecosystems.** Light pollution can harm all organisms, whether it be through their behavior or biology. Local species effected include seabirds and other migratory birds, sea turtles, coral, fish, and insects.

✈ **The NIGHT.** Over 1/3 of the world's population, including 80% of North Americans, cannot see the Milky Way because of light pollution. Even in Hawai'i astronomical research is threatened by encroaching nighttime lighting. "Brighter" doesn't mean "safer"—glare can blind or impair our vision, especially at shorter wavelengths (blue light).



Rob Ratkowski – Milky Way at Haleakalā Crater

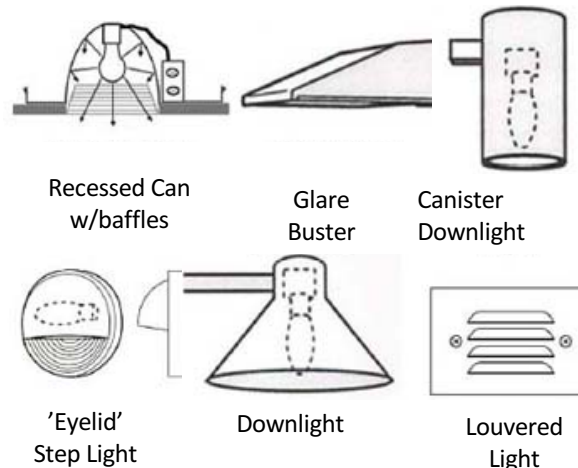
What We Do



Rob Ratkowski – Moonbow over Venus

- ★ Recover, evaluate, and release downed seabirds; while collecting data on lighting's ongoing impact on wildlife.
- ★ Provide community outreach and educational programs, including programs about eco-friendly lighting.
- ★ Appeal to local businesses and lawmakers regarding lighting upgrades and requirements.

Examples of shielding methods for eco-friendly lighting



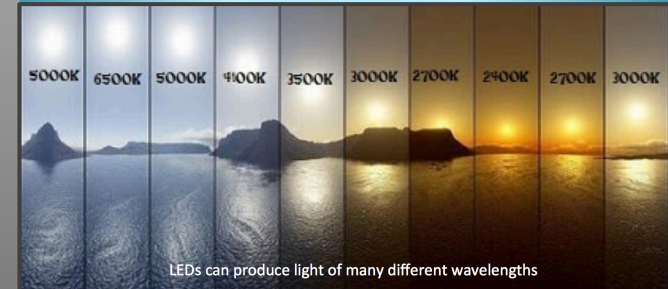
Solutions

Keep lights **LOW**, **SHEILDED**, and **LONG**

✈ County regulations dictate that lights must not shine above the horizontal plane – they must be focused **down**.

✈ **Shielding** prevents light energy from escaping upward.

✈ **Long wavelengths** (warmer light) are less polluting and safer for wildlife.



LEDs can produce light of many different wavelengths

Wavelength of natural & artificial light is variable. LEDs can be filtered to emit warmer light (2700K)

Recognize and preserve Dark Sky Places with the International Dark-Sky Association at www.darksky.org.

Learn more about the Maui County Outdoor Lighting Ordinance no. 3430, bill 85, chapter 20.35. File online lighting complaints with a **request for service** at www.mauicounty.gov

See how light pollution regulation is helping wildlife in Florida at www.myfwc.com/conservation/you-conserve/lighting/