Let There Be Dark
Submitted by Rhonda Coleman, Pine Vista Drive

Central Oregon is a remarkable environment, and Woodside Ranch is a special community.

As homeowners, we strive to be good custodians of the neighborhood birds and trees, and we do our best to feature, supplement and care for the natural beauty of our surroundings. But there exists an environmental polluter we may be contributing to that we haven't considered (or even known it existed): light pollution.

Light pollution—also known as photopollution or luminous pollution—is defined as "excessive, misdirected, or obtrusive artificial light" that results in sky glow, light trespass (light shining into adjacent property where it isn't wanted), glare, and over illumination in the outdoor environment from the light that's present naturally.

Simply put, light pollution is the shining of man-made sources of light where it does not belong. Adverse consequences are multiple, and some of them are not yet known.

All living creatures rely on the Earth's regular rhythm of day and night to manage their internal cycles. The biological rhythms in wildlife, regulated by an internal clock which is synchronized to environmental cues and determined by the length of nighttime darkness, is disrupted by the degradation of their "photic habitat".

Under the glare of artificial light:

- Frogs refrain from singing their mating chorus.
- Nocturnal animals like bats, coyotes, raccoons, deer and moose have their specialized night vision compromised and suffer from increased predation and lower birth rates. (As light favors predators, the nocturnal animals that are their prey lose the cover of darkness to hide. Rodents, which live as both predator and prey, unnaturally prosper.)
- Owls cannot see properly and the area of their feeding habitat is reduced.
- Birds that navigate at night become disoriented; migrating birds can become captured by artificial lighting and collide with buildings, or fly in circles until they drop from exhaustion.
- Fishermen, take note: mayflies—who have just a few hours or days to reproduce—are essentially "vacuumed" away from their natural habitat by electric lights. (The insect deaths resulting from this swarming represents an enormous loss for the species and its aquatic predators.)
- Mammals that attracted to artificial lighting become easy targets for unnatural predators.
- The circadian rhythms of songbirds is disrupted, causing males to sing earlier in the morning (which attracts potential mates), and natural selection is compromised.

Other animals that don't live in Central Oregon suffer elsewhere. Fireflies and other luminescent creatures aren't visible to their mates and can't use their glowing flash patterns, a form of communication. Sea turtles can't nest, and their hatchlings—who use light reflected on the water—can't find their way to the sea near brightly lit seaside developments.

In an unnaturally illuminated environment, animals aren't able to use the protection of darkness to safely forage, mate, hunt, sleep, and migrate. The far-reaching ramifications of light pollution on the ecosystem is unknown. We're only beginning to appreciate the consequences of our manmade lighting of the night.

Humans are also attuned to the 24-hour seasonal cycle of light and dark that has ruled the planet for millions of years, and are adversely affected by too much light at night, both indoors and out. (You may be surprised to learn that most people on Earth live in places where it's not dark enough to for their brains to recognize that it is night.)

Light pollution also competes with starlight in the night sky, interfering with astronomical observations (and preventing parents from teaching their children about the constellations from their backyards). What a shame to live in such a beautiful scenic area with clear skies—coveted by amateur astronomers in Oregon and throughout the Northwest—and not be able to enjoy all the stars overhead.

Unpleasant light that intrudes on an otherwise natural or low-light setting is a side effect of civilization that includes exterior and interior lighting, advertising, commercial properties, offices, factories, streetlights, and illuminated sporting venues. What can be done?

Good news: There are plenty of things each of us can do to mitigate the effects of light pollution in our small community with a small amount of time and a small amount of money.

The problem is easily remedied by making more responsible choices. Light pollution leaves no residue and the ill effects can be immediately, 100 percent reduced. Just change (or turn off) the light!

1. **Shield your light.** Direct the focus into to the area you specifically wish to illuminate, while keeping it out of the sky, a neighbors yard, and the eyes of wildlife and passersby. You'll save money, too: when your light is focused where you want it, the same area can be lit with a lower wattage bulb, reducing energy.

2. **Turn off your light!** Simply flick off the switch. Light only what you need, when you need it. Turn off porch lights and flood lamps when you come indoors.

It's that easy. Combating light pollution is a matter of awareness and the choice not to be careless—and exerting a little bit of extra effort with our outdoor lighting choices.

Want to help with the global "dark-sky movement"? Since the 1980s, concerned people have been campaigning to reduce the amount of light pollution globally. For more information, contact the International Dark-Sky Association, a non-profit advocacy group—visit http://www.darksky.org/