

HEAVENLY NEWS

“Light Pollution”

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Imagine a young person living in a city where the only object to be seen in the night sky is the moon. Light pollution is fast becoming a major problem not only in cities but also rural areas throughout the entire world. The light we are emitting is seriously reducing our ability to view the night sky. This loss of dark sky might be acceptable if light pollution was the inevitable price of progress but it is not. Most light pollution comes from inefficient light sources.

Visitors from the Sacramento area are amazed at the night sky and the number of stars visible when they visit our observatory. The Milky Way Galaxy can usually be seen and for most it is a first. Yet the docents at the observatory prefer even more remote sites up the hill when viewing with their own telescopes. We know the farther away you are from the lights, the darker and better viewing the night sky becomes.

Light pollution is defined as excessive or obtrusive artificial light. Outdoor light pollution can be seen as sky glow, light trespass, glare, light clutter and energy waste.

- Sky glow is the light seen over populated areas which is light directed or reflected up into the sky. This glow is the most irritating to astronomers because it reduces contrast in the night sky making it impossible to see anything but the brightest stars.
- Light trespass is another problem for astronomers as it occurs where poorly shielded or aimed light fixtures cast light into unwanted areas. Light shining into a window at night can actually cause sleep deprivation.
- Glare results from the excessive contrast between light and dark areas in our field of view. Oncoming car headlights can cause glare as can someone turning on a white flashlight at the observatory.
- Light clutter refers to excessive groupings of lights such as badly designed street lights. They can be something as simple as advertising lights which are purposely designed to distract drivers and can actually contribute to auto accidents.
- Energy waste is a result of light pollution. Lighting accounts for one-fourth of all energy consumption worldwide. Over-illumination and the non-beneficial upward direction of light constitute the greatest energy wastage.

What can we do to reduce light pollution? Here are some suggested ways:

1. Light only an area that needs to be lighted. Do you really need to light the area?
2. Light only when you need to light. Does it need light all night long?
3. Use only as much light as is required. Can you use a lower wattage safely?
4. Use a full-cutoff light fixture designed to shine into the ground and not across property lines or upward into the sky. Light shades are available for existing fixtures if replacement is not an option.
5. Install motion sensors that can actually pay for themselves reducing electricity.

The International Dark Sky Association (IDA) was formed in 1988 to preserve and protect our nighttime environment. Each year one week is chosen during which everyone is encouraged to turn off all unnecessary lights. National Dark Sky Week is April 20th through April 26th this year from 10:00pm to 12:00am. For more information on how to reduce light pollution the IDA can be reached at www.darksky.org.