Mail Tribune

Lifestyle*

Seeing stars: The fight against light pollution

By Byline / By DEAN FOSDICK

Posted Feb 8, 2008 at 12:01 AM

For the environmentally concerned sky-watchers among us, it isn't enough that the world should go green. It should go dark green. As in, "Turn off all the unnecessary lights, please."

For the environmentally concerned sky-watchers among us, it isn't enough that the world should go green. It should go dark green. As in, "Turn off all the unnecessary lights, please."

Light pollution may not rank up there with climate change as cause for alarm, but a vocal community of stargazers believes it to be an important lifestyle and energy issue that must and can be resolved.

"Many people think of this as a trivial pursuit, simply a matter of flipping a switch," says retired astronomer David Crawford of Tucson, Ariz., co-founder of the International Dark-Sky Association, which he describes as something like "a nighttime Sierra Club."

"But you just can't do that in most applications. You have to build awareness. Good lighting is a big help because bad lighting is the problem."

Homeowners can do their part.

By "bad lighting" Crawford means "glare bombs," or horizontal beams that spoil vision and cause discomfort. There also is "sky glow," that semicircular yellowish cast visible hundreds of miles from the nearest city. And "light trespass," when the brightness from over-illuminated stores, streetlights, parking lots or misdirected backyard security lights spills onto and often inside others' property.

Along with wasting energy, light pollution removes contrast from the night sky, making it all but impossible to absorb the wonder and vastness of the Milky Way, with its hundreds of millions of stars keeping us company in our galaxy.

And "good lighting?"

"Not necessarily turned off, but lights redirected downward so they don't intrude into secluded zones or residential areas," Crawford says. "It's more a matter of attitude than mechanics. It's finally deciding that you don't want to infringe upon another person's nighttime privacy or into quiet corners."

Two-thirds of American cities are places where people can't see the Milky Way from their backyards, says Chris Luginbuhl, an astronomer with the U.S. Naval Observatory near Flagstaff, Ariz.

"The Milky Way often is the measuring stick for dark sky watchers," Luginbuhl says. "If you go to an atlas and take it from the Midwest to the East Coast, there are few places the size of a county that have unpolluted dark skies. Here in the West, there are only a couple of good areas where you can see and feel the darkness, but they're hard to get to."

Light pollution also confuses nocturnal animals and migrating birds, scientists say.

"It really wouldn't take a lot of money to solve this," says Crawford. "Most people who have changed their lighting systems have saved money in the process."

Robert Wagner of Kansas City, organizer of Midwest Citizens for Responsible Outdoor Lighting, calls light pollution "the most visible form of energy waste." He had reasons of his own for becoming an activist:

"I was upset about streetlights shining into my second-floor bedroom windows," he says. "I've been working with a variety of scientists and policy makers for a couple of years to help fight it."

Wagner tries to set night-sky brightness levels over designated areas. Intensity readings would be unrestricted for, say, football and baseball fields, road signs, in and around swimming pools, and around stairs and ramps. Restricted areas might include suburban streetlights or misdirected driveway lighting.

"We try to manage light as you would any pollution emission," he says. "Twenty-seven states currently have laws or proposed laws for energy lighting or eliminating upward directed lights."

Many night-sky advocates contest the need for brilliant, dusk-to-dawn security lighting at homes and businesses.

"It's kind of a double-edged sword," Wagner says. "That kind of lighting blinds good people and bad people alike. Two-thirds of all property crime occurs during the day, and as far as I'm concerned, the need for security lighting is a myth. It gets to where the cities have to pay for their streetlights rather than hire more officers to patrol the streets."

As important as darkness is to astronomers, it's even more important for the human spirit, the Navy's Luginbuhl says.

"There's a whole generation of children growing up, a large fraction of whom have never seen the stars," he says.

"Light pollution is like having thick air pollution that would only let you see a quarter of the way across the Grand Canyon or it would be like driving to the Tetons and not being able to see the peaks. People wouldn't stand for that."

Recommended reading:

"At Day's Close: Night in Times Past," by A. Roger Ekirch. (W.W. Norton, 2006).

On the Net: The International Dark-Sky Association, www.darksky.org.

You can contact Dean Fosdick at deanfosdick(at)netscape.net.



SIGN UP FOR DAILY E-MAIL

Wake up to the day's top news, delivered to your inbox