

## Preserve our Starry Night Skies

The stars are not brighter in the country...the sky is darker!

By Marcus Honnecke

Excerpted from an article in Colorado Country Life:

Living in the rural west we tend to take for granted our grand vistas and dark nights. We also tend to forget that the majority of Americans live in areas so blighted by artificial lighting that the night sky has disappeared.

Unfortunately the problem is not confined to large population areas. Rural areas are increasingly impacted.

Any outdoor light produces a phenomenon known as "sky glow". The more outdoor light and air pollution - the more sky glow. Large cities and major transportation corridors produce a tremendous amount of sky glow and can affect areas for hundreds of miles. There are no places left in the continental United States with truly dark heavens. There is a generation of our children growing up that have never seen the Milky Way or more than a handful of bright stars. The brilliant display of thousands of stars set against a velvet black sky that our grandfathers slept under is being replaced by a dull artificial glow.

The best solution for outdoor lighting today comes from innovation in design of the surrounding fixture rather than the bulb. The full cut-off outdoor fixture uses a highly reflective, specially shaped shield to reflect all the light produced by a bulb downward, utilizing the light that would otherwise be wasted. The full cut off outdoor light improves the overall efficiency and does the most to reduce unwanted sky glow.

Light is not free! As we enter the 21st century, energy has become more expensive and will become even more so over time. Unwanted and wasted light is estimated to cost the United States more than 2 billion dollars out of the 11 billion spent on outdoor lighting each year. The rationale for yard lights has been expanded to include security light, but that is a big city solution applied inappropriately to a rural problem. Rural outdoor lights left on all night provide little in the way of security and in fact may actually aid rather than impede theft or vandalism.

Here are a few questions we should ask the next time we pay the electric bill: What purpose does an outdoor light serve? Security, illumination, advertising, decoration? Would a smaller, more directed light serve your needs? For instance, installing a motion detector switch on lights used primarily for security has been shown to be much more effective in curtailing burglaries and vandalism than a light left burning all night long. Replacing a 'light bomb on a pole' with ground level lighting allows the human eye to better adapt to the dark-seeing more while using less energy. Most importantly, fully shielded full cut-off fixtures greatly increase your night-lighting 'bang for the buck'. It makes dollars and sense to take advantage of that technology.

**It is up to all of us, both in our own interests and for the good of the United States of America to be wise energy users. Help preserve what is left of the rural night skies before they too become just a memory. Dark night skies are part of what makes the rural West - the West.**

*About the author:*

*Marcus Honnecke has enjoyed the West's night skies from childhood. A fourth generation Colorado native, he and his wife live in North Park where they are members of Ranges and Rivers, a grassroots citizens organization*

*promoting quality-of-life issues in Jackson County. He built his own observatory near his home and has taught astronomy to students of all ages for decades.*

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