Chippewa Valley Astronomy Update -- April 2023

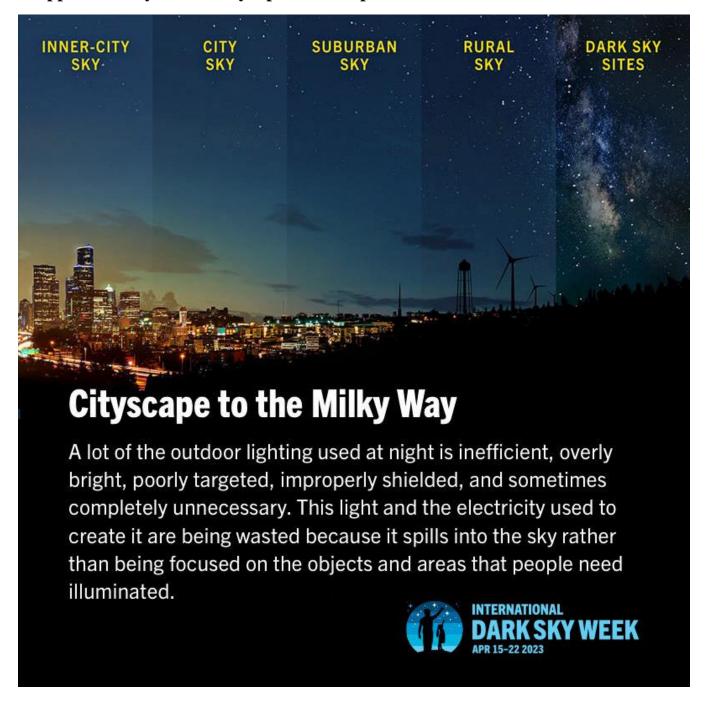


Figure caption: Was it dark enough for you to see the Northern Light display on March 24? City lights can brighten the night sky so much that you can't see the aurora, the milky way, or the fainter stars. Next week is designated International Dark Sky week, to remind us what we lose with light pollution.

Image credit: International Dark Sky Association

Dark Skies for stargazing,

Good lighting for good towns

By John Heasley

"In the end we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught." Baba Dioum (born 1937) is a Senegalese forestry engineer.

We celebrate International Dark Sky Week April 15-22. Starry skies are one more thing that makes the Chippewa Valley special. I remember many visits to western Wisconsin libraries to share astronomy programs. When I visit the small towns of the region, I watch for what makes them welcoming. Because I stargaze, I definitely notice the lighting being used and how well shielded they are. I also notice how lighting can enhance a town and create a mood. Lights that are excessive or too harsh or cause glare or trespass on homes make us want to leave. Lights that are appropriate and warmer and well-shielded invite us to linger.

As communities transition to LED lighting, we have a once in a generation opportunity to create welcoming lightscapes. Unlike other changes, good lighting is relatively easy and inexpensive.

Beyond creating a warm and welcoming ambiance, smart lighting reduces energy consumption, respects the ecosystem and wildlife, safeguards human health, promotes safety, and preserves the heritage of starry skies. The Illuminating Engineering Society and the International Dark-Sky Association have come up with Five Principles for Responsible Outdoor Lighting to enhance our quality of life:

Useful— All light should have a clear purpose. Before installing or replacing a light, determine if light is needed. Consider how the use of light will impact the area, including wildlife and the environment.

Targeted-- Light should be directed only to where needed. Use shielding and careful aiming to target the direction of the light beam so that it points downward and does not spill beyond where it is needed.

Low Light Levels-- Light should be no brighter than necessary.

Controlled-- Light should be used only when it is useful. Use controls such as timers or motion detectors to ensure that light is available when it is needed, dimmed when possible, and turned off when not needed.

Color-- Use warmer color lights where possible. Choose bulbs that are marked 2700 Kelvin or lower to limit the amount of shorter wavelength (blue-violet) light.

Explore darksky.org for more resources to make it simple to conserve the night. And visit lightpollutionmap.info to view your community from space. Choose enough light to find your way at night, but not so much as to be visible from low Earth orbit!

-- John Heasley is an astronomy educator and stargazer who enjoys connecting people with the cosmos.