OTTAWA'S NATURAL ENVIRONMENT

BLINDED BY THE LIGHT

Dark Sky Preserves open a door to the universe



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the pathway of our home galaxy – the Milky Way – courses across the heavens. As my eyes adjust, black silhouettes of the surrounding white pine forest appear, and once again I am humbled by

bove me, the night sky is velvety black. Against it,

nature's beauty.

While contemplating dark skies, people can feel connected to our distant ancestors who, like us, gazed at the mystery of the heavens. From their wonderment would spring their culture's superheroes, gods, and creation stories.

Here in the Ottawa Valley, we're fortunate to be able to appreciate dark skies where "light pollution" doesn't obliterate the sky. And if they become world travellers, they can look upwards to see different celestial phenomena. Australia, for instance, offers Antipodean-sky views of constellations such as the Southern Cross.

Darkness itself is important to life. So important, that in 1988, a group called the International Dark Sky Association (IDSA) was set up to preserve the view – worldwide – of night skies unimpeded by "light pollution," from lamps, housing, industry and other sources that impede visibility.

It's an environmental issue because many creatures are disturbed by artificial light – from moths attracted to lamplight, to all sorts of other critters. Migrating birds die after flying into lit-up skyscraper windows at night. Baby sea turtles find their way to the ocean by heading towards the illuminated path of the moon on its surface, but light from street lamps, beach houses or hotels confuses them. The large eyes and other adaptations of nocturnal predators such as owls evolved to enable them to hunt in darkness. Ambient light reduces their hunting areas and thus their food supply.

And night light affects human beings too. The IDSA website (darksky.org) reports that "health researchers have established that exposure to artificial light at night reduces the human body's production of melatonin, the hormone that tells the body's organs and systems that it is dark." When that happens,



No man-made lights competed with the southern stars at our roadside camp west of the Atherton Tablelands in north-eastern Australia.

people sleep poorly, increasing their risk of depression, diabetes and cardiovascular problems.

International dark sky preserves (DSPs) are areas designated by the Royal Astronomical Society of Canada where artificial light pollution is low enough to allow unimpeded astronomical observation and ordinary people can see the night sky in all its primordial beauty. These areas offer infrastructure so ordinary people can observe the night sky.

So far, 17 of them have been set up in Canada, a recent one at Jasper National Park, designated in 2011. Rogier Gruys, an official for the park, said "the Town of Jasper is working hard to adopt environmentally sensitive, energy-efficient lighting which minimizes light pollution."

Closer to home, Stephan Paape started the AstroPontiac initiative in West Quebec, building support to establish a dark sky viewing area in the Pontiac region. Check out his popular night-sky-watching events, where astronomers bring telescopes so visitors can view the sky and hear expert explanations of what they are seeing.

Near Ottawa, the closest designated DSP is in North Frontenac township. The viewing area was set up in 2013 at 5816 Road 506, near Plevna, Ont. That's about two hours driving time from Ottawa.

The Ottawa Valley also has dark-sky-watching destinations in Lennox and Addington County, Westmeath Lookout, Basin Depot and Foymount (Ontario's highest populated point).

Katharine and Eric Fletcher live north of Quyon, Que., where they enjoy dark sky over Gatineau Park.



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