



APPLICATION FOR PROCLAMATION

(Please complete and submit your completed form to the Town Clerk @ clerks@richmondhill.ca at least three weeks in advance of the occasion)

Please Print

ORGANIZATION NAME: International Dark-Sky Association (IDA)

CONTACT NAME: Mr. [x] Mrs. [] Ms. [] Miss [] Uthayan Thurairajah

ADDRESS: 7 Hua Du Avenue

CITY/TOWN: Markham

PROVINCE: Ontario POSTAL CODE: L6C 0T2

HOME PHONE: BUSINESS PHONE: 289-982-4622

FACSIMILE: EMAIL:

PROCLAMATION REQUESTED (Name or title of proclamation): International dark sky week (IDSW)

DATES OF PROCLAMATION (Please check and insert dates)
[ ] Day(s) [x] Week From April 15 to 22, 2023.
[ ] Month

PURPOSE OF PROCLAMATION (Please check all that apply):
[ ] Civic Promotions [x] Public Awareness Campaign [ ] Charitable Fundraising Campaign
[ ] Arts and Cultural Celebration [ ] Special Honor for individual or Organization
[ ] Other (please explain)

DESCRIPTION OF YOUR ORGANIZATION (Please include a brief description and any other relevant information related to your request. Additional information/documentation may be attached to this application):
Please see attached a draft Proclamation
Proclamation for International Dark Sky Week (IDSW), from April 15 to 22, 2023.

Has the same or a similar proclamation been requested of the Richmond Hill Council in past years?
[ ] Yes (insert date of previous request)
[x] No (new request)

You must provide the draft wording for your proclamation in order to receive an official signed proclamation from the Mayor. Please see attached

The personal information on this form is collected under the authority of the Municipal Act. The information is used for the purpose of processing the application for proclamation. Questions about this collection of information can be made to the Town Clerk (905) 771-8800.

SIGNATURE: DATE: March 9, 2023

PLEASE RETURN OUR COMPLETED APPLICATION FORM TO:
Office of the Clerk
225 East Beaver Creek Road
Richmond Hill, ON L4B 3P4
clerks@richmondhill.ca; Fax 905-771-2502



# CELEBRATE THE NIGHT WITH INTERNATIONAL DARK SKY WEEK

## Light Pollution is a Severe Hazard for Human Health and Wildlife

By OUE Research Institute



International Dark-Sky Week 2021 is rapidly approaching. International Dark-Sky Association (IDA) invites everyone to discover the night during the week of April 5-12, 2021. Every year, IDA hosts International Dark Sky Week (IDSW) to raise awareness about light pollution's many adverse effects. It is always held when the sky is darkest and the stars most visible. This annual event was created in 2003 by a high-school student, Jennifer Barlow. Since then, International Dark Sky Week has grown to become a worldwide event and a key component of Global Astronomy Month.

Thousands of years ago, the ancient Greeks looked up at the mass of stars that stretched across our sky and, believing it looked like flowing milk across



the darkness, called it galaxies kuklos, meaning the "milky circle." Later the Romans called it via lactea, meaning the "milky road."

However, look upon a given night and, if you are like two-thirds of the population, you will wonder just what it was those Greeks and Romans were looking at. The reason we don't see the stars is due to light pollution. The artificial light has led to longer working hours and has changed the black sky of the night to one with a dull orange glow, devoid of stars.

### Light Pollution & Impacts



Light may have its place, but what concerns many astronomers and scientists is precisely how that lighting is being used. Light pollution can be over lighting, light trespass, clutter, glare, sky glow. The sky glow reduces people's ability to see the sky, which lights up the countryside to harm wildlife.



The consequences are far-reaching. Many studies have shown that light pollution affects both humans and animals. From sleepless nights to depression in humans to driving off species from their natural environment, the results have been seen worldwide.

Beyond the night sky's impact, many forms of light pollution impact the environment in various ways. There are significant impacts just from light at night to insects to migratory birds that fly at night, both of which can be thrown off in navigation. When there are tall illuminated structures, birds will fly directly into them at night and crash. Another effect has



been observed on sea turtles. Several studies have found that newly-hatched sea turtles use brightness cues — precisely the water's reflectivity — to orient themselves to the ocean's safety. But lighting near beaches can confuse the newborns, ultimately leading to their death. Rather than head toward the sea, they may head toward parking lots or buildings.

Eliminating light pollution is important because it is a type of pollution that changes the environment. The natural environment is one that all lifeforms have adapted to live. Once we change that environment, and by lighting up the night, we fundamentally change that environment.

### Light Pollution & Cancer Risk

Not all artificial light has the same effect on humans; the most concern is blue light. Our eyes have something called intrinsically photosensitive retinal ganglion cells (ipRGC). The ipRGCs are sensitive to blue light and are believed to be connected to our circadian rhythm, regulating our

day and night cycles. Blue means daylight, which tells the brain that we are supposed to stay up. But, with the advent of electric light, our detectors get confused, never resting, always with some low-level light flowing in through the night.

A 1999 health study on nurses found that they had a 60 percent greater chance of developing breast cancer. They work night shifts when the body should be sleeping. If you are on shift work, you are up all night, and not only that but your eyes are bathed by the white fluorescent or LED light of a hospital corridor. Your melatonin does not get released either because these twilight detectors keep telling your brain, no, no, you can't go to sleep yet because it is still daytime. Twilight indicates that Sun is below the horizon because of the gradual decline of light. Melatonin hormone combats the developing cancer cells. Therefore, they did not benefit from the natural mechanism in their body to fight cancer.

Humans need a high level of light before seeing the high level of melatonin suppressed. That is why people worry about working shift work. There is considerable circumstantial evidence that the blue component in white light at night that you see more and more is hazardous.

### Adapting the Night Life

Though the IDA was started by two astronomers 25 years ago with the idea of trying to take back the night for stargazing, it has since developed into a worldwide organization aimed at promoting better lighting options for humans' benefit wildlife health.

Billboard lighting, parking lot, car dealerships, street lighting that travels up rather than down to its intended area also trouble both the IDA and the Royal Astronomical Society of Canada (RASC). They encourage municipalities to use more "effective" lighting. That may mean full cut-off light fixtures, which reduce glare and direct lights to the area they need to illuminate, and no over-illumination. The IDA's message is not about turning off all the lights and plunges everyone into darkness and turmoil but using them more efficiently. We should be far more careful and thoughtful about designing and manipulating light at night.

There are ways that homeowners can do their part. The first thing is to check any lights that you can control. Dark skies are not just beautiful to watch with the naked eye, but there are additional benefits. By limiting light pollution, we conserve energy, save wildlife that is confused by bright lights, and positively impact human health. In short, we are at a loss by the disappearance of the stars from our life.

During the week, dark sky defenders worldwide connect over a shared goal to protect the night. Everyone is invited to join International Dark Sky Week 2021.

