



Committee: Environment

Question of: Protection of the Dark Sky and the Starred Sky

Students Officer: Johanna Niebeling & Maria Pardo

Introduction:

Dark sky places are important to protect as they provide a cultural heritage and a scientific purpose. One can clearly see that, due to air pollution, the visibility of stars has decreased steadily during the last century, which is unfortunate. Our lifestyle is the main reason for that, so it is our duty to do our best to protect the areas where stars can still be observed very well. That is why the UN calls upon every country to contribute their knowledge and wisdom so that together the member states are able to present possible solutions in the Environment Committee.

The Issue:

The Dark Sky is becoming really rare as air and light pollution is increasing. Light pollution, or Photo pollution, refers to excessive use of light, which is a consequence of urbanisation, and leads to light being present in the night environment. This can disturb the ecosystem and it is a serious threat to the nocturnal wildlife. Places where stars can be observed clearly are about to extinct, so the International Dark Sky Association (IDA) was founded to protect these very areas, acknowledged as Dark Sky Preserves. The IDA defines a Dark Sky Preserve as a “*a public or private land possessing an exceptional or distinguished quality of starry nights and a nocturnal environment that is specifically protected for its scientific, natural, educational, cultural, heritage and/or public enjoyment mission of a large peripheral area.*” Due to astronomic purposes, in Dark Sky preserves artificial light pollution is prohibited.

The first Dark Sky Preserve was recognised 1993 in Michigan (US) at the Lake Hudson State Recreation Area. In the present there are around 75 Dark Sky preserves, reserves and parks, most of them in The United States of America as well as in Canada. A Dark Sky Reserve is made up of a dark zone which is surrounded by a populated periphery and with a certain policy in place that protects the darkness of the area. International Dark Sky Parks are more touristic, meaning that they (publicly or privately owned) provide a Dark Sky program for visitors. Besides the IDA there are many International Dark Sky Communities which consist of a legally organised community and show a special dedication towards the Dark Sky and have implemented measures as the implementation and enforcement of quality lighting codes, dark sky education, and citizen support of dark skies.

Key Events

Event/Date	Explanation
13/9/2018 – Symposium on promotion and protection of the night sky Conference	The symposium is devoted to all aspects of artificial light at night (ALAN), including environmental issues related to an excess in its use and potential socio-economic benefits of dark skies for tourism in rural areas and natural parks, with a special focus on marine and coastal areas.
26/9/2018 – Riding the lightwave of technology Conference	Riding the Lightwave of Technology was held within Australia's First Dark Sky Park, at Siding Spring Observatory. This three-day conference discussed lighting policies, science research, public policy, health and well-being and, tourism developments with the aim of seeking solutions to the issues facing night sky preservation.
20/6/2013 – The bright side of the night Conference	The conference will focus on the humanities and the social sciences including history, literature and arts, geography, urban planning, politics and economics and will discuss various aspects and research approaches concerning lighting and light pollution.

Previous Attempts to Solve the Issue

1. The International Dark-Spy Association (IDA) is in charge of an award-winning flagship conservation program which recognizes and promotes excellent stewardship of the night sky. They have been certified more than 65 International Dark Sky Places (IDSPs) worldwide across six continents, comprising more than 58,000 square km. The IDSPs program offers five types of designations: communities, parks, reserves, sanctuaries and urban places. IDA designates IDSPs following a rigorous application process requiring applicants to demonstrate robust community support for dark sky protection and document designation. Regular status updates ensure that designated places continue their commitment to dark sky preservation. An International Dark Sky Place designation helps enhance the visibility of designated locations and foster increased tourism and local economic activity.
2. The issue is also being tried to be solved through education and outreach. Concretely, the IDA organises an annual general meeting which brings together a wide-range of policymakers, scientists, thought leaders, grassroots advocates, government representatives and others to discuss night sky preservation. IDA also gives talks, presentations and exhibits at conferences and tradeshows throughout the year including



the annual Artificial Light at Night Conference, the European Symposium for the Protection of the Night Sky and the Light Fair and Strategies in Light. In brief, it provides civilians with different means of learning about light pollution and encourage them to get involved in the matter.

3. The first UK law tackling light pollution came into force in 2006 under Section 102 of the Clean Neighbourhoods and Environment Act (2005). Exterior lighting joins noise and smells on the list of things that can be treated as a Statutory Nuisance; things your local council's Environmental Health Department can take legal action against. The law makes 'exterior light emitted from premises so as to be prejudicial to health or a nuisance' a criminal offence. This law doesn't tackle all forms of light pollution, only incidents of particularly bad lighting from some types of premises which cause people real nuisance. But CPRE would like to see it used, to raise awareness of the issue and to help people who really are suffering from severe light pollution.

Possible Solutions

- Set an amount of Dark Sky Preserves which every Member State of the UN should have to or is encouraged to match.
- A UN project could help funding the creation of the above-mentioned Preserves, as many countries cannot afford them.
- Find ways to reduce Photo pollution in general so that the necessity of Dark Sky Reserves may decrease. That would be a more ecological approach maybe regarding energy-saving lightbulbs.
- When having to use electric light, civilians should use the correct bulb for the task: 300-500W is far too bright for a small area; it wastes energy and can dazzle possible witnesses. 150W is often more appropriate, and uses less energy – saving you money.
- When the light is installed, one must ensure that it shines only where needed, on an area where intruders might be seen by people nearby. People can do this by adjusting the timer to the minimum period necessary to save energy and cut their bills.

Bibliography

Breyer, Melissa. "The World's 11 Certified Dark Sky Reserves, Where the Stars Run Riot." *TreeHugger*, Treehugger, 11 Oct. 2018, www.treehugger.com/natural-sciences/11-dark-sky-reserves.html.

"Home." *Dark Sky Reserve*, www.idahodarksky.org/.

"The International Dark-Sky Association (IDA)." *International Dark-Sky Association*, 4 Dec. 2018, www.darksky.org/our-work/conservation/idsp/reserves/.

Parks Canada Agency, and Government of Canada. "Dark Sky Places." *Toronto Maple Leafs - History and Culture*, 26 July 2018, www.pc.gc.ca/en/voyage-travel/experiences/ciel-sky.

Dark Skies Awareness, Dark Skies Awareness: Light pollution-what is it and why is it important to know? <http://www.darksbiesawareness.org/faq-what-is-lp.php>



The International Dark-Sky Association (IDA), International Dark-Sky Association, February 13, 2017 <https://www.darksky.org/light-pollution/>

What is Light Pollution? Globe at Night <https://www.globeatnight.org/light-pollution.php>

How can we help curb light pollution?, NASA https://nightsky.jpl.nasa.gov/news-display.cfm?News_ID=745

The symposium, SYMPOSIUM ON PROMOTION AND PROTECTION OF THE NIGHT SKY, February 24, 2018 <https://capraianightsky2018.com/topics/>

Travel Ogg Pty Ltd, Riding the Lightwave of Technology - Travel Ogg Pty Ltd Reservations <https://fredwatsontours.rezdy.com/234970/riding-the-lightwave-of-technology>

Bright Side of Night, Loss of the Night App - Verlust der Nacht_EN

<http://www.verlustdernacht.de/brightnight2013-en.html>