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COMMISSION for DARK SKIES

PROTECT THE NIGHT



NEWSLETTER OF THE BRITISH ASTRONOMICAL ASSOCIATION'S COMMISSION FOR DARK SKIES

www.britastro.org/dark-skies

**This twice-yearly newsletter now appears
free of charge on the BAA website**

Any queries from former subscribers: contact.office@britastro.org

Dark Skies in Parliament: another Lords debate

The CfDS is indebted to **David Smith**, Social Change and Advocacy Officer of the invertebrate protection charity **Buglife** (www.buglife.org.uk), for heading up a new approach, supported by us, to the Government through the medium of the **All-Party Parliamentary Dark Skies Group of MPs** (appgdarksdies.co.uk). APPG members in the House of Lords had previously secured a debate, on December 14 last year, and DEFRA and DHCLG ministers had noted the approach but suggested more research was necessary on the negative effects of blue-rich exterior lighting. David reports on the second debate, on September 6: "The debate was very much in favour of addressing light pollution... there was an appreciation for the number of supporting organisations/businesses sharing the APPG's concerns.

The Minister nearly committed to a review on light pollution – this would help determine if secondary legislation is the correct way to address the issue. He also committed to pushing harder on other departments to tackle the problem. As a note, DEFRA is the responsible and coordinating department for light pollution.

It is disappointing that the amendment did not go to vote, given the feeling within the chamber. There is a good chance it would have succeeded – however, at this stage non-government amendments are unlikely to proceed in the commons, particularly given the number that are being put forward. We have made progress and there is a platform to continue work, principally to secure a review and help to influence the next round of target setting under the Bill".

On the next page of this newsletter is a reminder of the ten policies the APPG commends to the Government, as a result of submissions by Buglife, the CfDS, the CPRE and others.

Encouraging Star-Quality Lighting

The APPG Dark Skies Group of MPs' ten policy recommendations for the Government

1) Expand the scope of the planning permission process; 2) Strengthen Statutory Nuisance provisions; 3) Strengthen the National Planning Policy Framework; 4) Set standards for the brightness and colour temperature of lighting; 5) Set standards for the direction and density of lighting; 6) Legislate for the appropriate times of use for lighting; 7) Establish a regulatory standards body; 8) Create a 'Dark Sky Cities' initiative; 9) Entrench the responsibility for dark skies within government; 10) Emphasise the role of education.

Art for dark skies

Proceeds to the CfDS

Go to
britastro.org/dark-skies/cfds_about.php?topic=art
to see our selection of paintings
for hire at a rate you choose.



Featured:
Euler's World
by Christine Wakelin

A fantastical dreamscape
celebrating the work of
pioneering Swiss
mathematician
and physicist Leonhard Euler
(he's in the picture!)

Framed original, frame 88 cm x 74 cm.

ON THE CAMPAIGN TRAIL

UK Dark Skies Partnership

Dan Oakley (Dark Skies director, South Downs National Park International Dark Sky Reserve), Neill Mitchell (CfDS webmaster) and CfDS coordinator Bob Mizon are currently putting together the website for the new UK Dark Skies Partnership. The partners in this new venture, mostly National Parks and AONBs, raise awareness among the general public and in Parliament of the need to curb light pollution. Website pages feature strategies, documents and links. The CfDS website will report when the UKDSP site goes live.

The Chase for stars

Steve Tonkin, dark sky advisor for the Cranborne Chase AONB International Dark Sky Reserve, and colleagues have been approaching summer camping and festival organisers who install 'pop-up' over-the-top lighting which compromises the Reserve's star-strewn night sky. This phenomenon is yet another symptom of the fact that the UK planning process does not capture

such excesses, which would be illegal in more enlightened (no pun intended) countries with proper light pollution regulations, such as France and Mexico.

Dorset darkness

CfDS supporter Sara Harpley invited CfDS' John Macdonald and Bob Mizon to the Isle of Portland B-side Festival in September 2021 for a special presentation on light pollution and biodiversity, followed by stargazing beneath the starry skies in the south of the promontory. Local astronomers and naturalists are aiming to create a Dark Sky Community here and are using CfDS Sky Quality Meters to assess the quality of Portland's night sky.

Continued...

More stars for minors

CfDS supporter **Isabelle Ficker** has compiled a list of children's books on the night-time environment, with special reference to nature's need for darkness to thrive. Ask at www.britastro.org/dark-skies/enquiries.php for details. Below we report on the latest title on this aspect from one of the world's best-known dark-sky advocates, **Paul Bogard**. Find him on YouTube TED Talks!

Stars over Somerset

The **Somerset Levels Stargazers** group (www.somersetlevelsstargazers.co.uk) are long-time advocates of dark skies and have hosted the CfDS' stand several times. Watch their website for ongoing news of a Dark-Sky event planned provisionally for April 22 2022 at the Community Hall in Othery, 7 miles (11 km) east of Bridgwater.

DARK SKIES AROUND THE WORLD

Recent correspondence to the CfDS has come from Australia, Austria, France, Germany, Italy, Ireland, Malta, Saudi Arabia, Slovenia, Turkey, the USA.

French Polynesia:

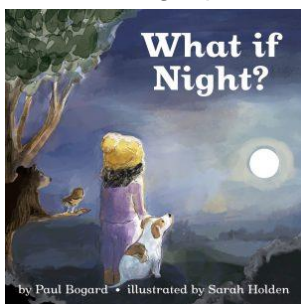
A study* concluded in June 2021 by Schligler, Cortese *et al*, in Moorea, French Polynesia, provides further evidence of the effects of current lighting practices on wildlife: this time, coral reef fish.

The authors warn of "the growing number of studies showing the negative impacts of artificial light at night (ALAN) in marine ecosystems, especially along coastlines and in close association with levels of light pollution and population density. ALAN is already a risk to our marine ecosystems and will only exacerbate in the future. Marine-protected areas (MPAs) are not excluded from ALAN and due to the current lack of legislation; 20% of MPAs are already exposed to ALAN and 14.7% are exposed to increasing levels of light pollution". **Long-term exposure to artificial light at night from both onshore installations and skyglow decreases survival and growth*:

<https://royalsocietypublishing.org/doi/10.1098/rspb.2021.0454>.

USA

Paul Bogard, associate professor of English at Hamline University in Saint Paul, Minnesota, is a world-renowned light pollution campaigner and a great friend of the CfDS. Paul visited the UK in the 1990s on a



fact-finding tour, and later wrote a definitive book *The End of Night* (ISBN 978 03 1618 2911). He has a new title, *What If Night?*, a children's book exploring and explaining the issues of light pollution and how even the youngest reader can take action on bringing back the stars, thereby helping our beleaguered planet. Its description on sale sites reads "*The night sky over most cities is now nearly 100 times brighter than in the last century and children are missing out on the experience of the natural darkness. This charming story, along with stunning watercolours of night sky and wildlife, presents the thrill and wonder of a child exploring darkness without fear*".

Mexico

José Miguel Rodríguez Espinosa (La Palma, Canary Islands, Spain / International Astronomical Union) helps organise the United Nations' *Dark and Quiet Skies for Science and Society* online forums. The next will be on October 3-7. José writes: "Today, technological progress, in particular artificial illumination of urban areas, has made it more and more difficult to observe the night sky in its pristine magnificence. Also, remote sites chosen to host the most sophisticated astronomical observatories because of their favourable location, are becoming gradually endangered by light pollution, radio signals interference and artificially induced climatic modifications. More recently, an additional negative impact on the observation of the night sky emerged from visual interference of the mega-constellations of artificial satellites in low Earth orbit". For information go to research.iac.es/congreso/quietdarksky2021/pages/home.php. The last *Dark and Quiet Skies* attracted over 400 participants from all over the world, including 3 from the CfDS committee.

Who's on the Commission for Dark Skies Committee? Occasional changes to the Committee's membership mean that supporters can lose track of who's who. The current members are:

Kerem Asfuroglu (Institution of Lighting Professionals, lighting consultant), **Dr Chris Baddiley** (physicist and technical consultant), **Dr Darren Baskill** (University of Sussex), **Carolyn Bedwell** (Leicester Astronomical Society), **Graham Bryant** (Honorary Fellow University of Portsmouth, Hampshire Astronomical Group), **Howard Lawrence** (C. Eng., M. Inst. Mech. Eng.), **Phil Lucas** (Wessex Astronomical Society, communications), **Neill Mitchell** (Wessex Astronomical Society, CfDS website), **Bob Mizon** M.B.E, F.R.A.S. (Coordinator), **Professor Martin Morgan-Taylor** (Law Department, de Montfort University), **Dr Nick White** (M.Inst.Phys.). Advisors include **Dr John Mason** M.B.E, F.R.A.S. (physicist and broadcaster, South Downs Planetarium) and **Dr Paul Marchant** (statistician, research fellow Leeds University).

New stocks of the CfDS' 40-page A4 handbook '**Blinded by the Light?**' are available.

Prices: **£3.50** direct purchase without postage; **£5.00** (incl. postage) for UK, and £3.50 each extra copy.

Contents include: *The Environment Problem, The Disappearing Universe, Environmental Aspects, Lighting and Crime, Light Pollution and Human Health, The Cold Light of Night: LED Lighting, Action that can be taken about Light Nuisance, Monitoring Light Pollution, Bad Lighting – the Problems. Appendices: Lighting Assessment Principles and a sample letter for complainants about poor-quality lighting.*

Hidden Stars, our new A5 12-page children's guide to protecting the starry sky, is also available. It is designed for older primary and all secondary levels and is beautifully illustrated by CfDS committee member and graphic artist **Kerem Asfuroglu** and by astrophotographers who support the cause. **£2.50** inc. postage. Contact Bob (see below) to order.

CfDS Fighting Fund

Standing orders or donations are always welcome. Please notify Bob Mizon on 01202 887084 if you can support the CfDS in this way.

CfDS thanks recent donors: Anon., Archant, Gerry Bond, Nigel Buchanan, Bill Cobb, Matt Dugas, Hugh Hale, Richard Howson, Derek Kimpton, Francis Marchant, Marcus Price, Alan Snook, Bob Stuckey, Steve Tonkin, Somerset Levels Stargazers, Wessex AS. Apologies to any donor inadvertently omitted.

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Queries to the CfDS

Queries and comments to the CfDS can be made via the form on www.britastro.org/dark-skies/enquiries.php
You will be directed to an appropriate member of the CfDS team.

To all astronomical societies

Do you have a dedicated light pollution officer? Most societies don't. Please consider this, as it is important to have a national picture of the extent of light pollution and local trends in night sky visibility. Keep in touch and support our work.

www.spacerocksuk.com supports the CfDS.

Meteorites, tektites and impactites: Sikhote-Alin, Canyon Diablo, Barwell, lunar meteorites, Martian meteorites...