

Astronomy Talk 11th April 2023

Lighting, Biodiversity and Health

This Zoom hybrid talk was given by BNSS member Steve Tonkin. 44 attended online and 5 in the hall.

We need light at night, but it needs to be done right. All the lights we see at night from space is pure waste of energy: 30% of a council's emissions are going straight up, which is a waste of money and unnecessary producer of CO₂.

Dark skies are needed for many reasons, including giving us the ability to detect incoming asteroids. Unfortunately, light pollution of the sky is increasing twice as fast as population growth. As astronomers, having a dark sky is what we want, and it's what the human race has had for tens of thousands of years, until the last 100 years or so.

The effect of night-time light on birds, insects, small mammals and even trees is catastrophic. Even marine algae are affected. We are used to fires etc. that give a reddish light, and this colour is not a problem. It's the white lights, with a strong element of blue, that affects nature so severely. There is a correlation between this and human health, including cancers and biorhythms. Unfortunately, the cheapest lights have a lot of blue in them.

What can we do? Together we can exert public pressure to put lighting into neighbourhood plans, e.g., maximum 2700 K lights and shielding for where the light isn't needed, especially above the horizontal.

From the comments and questions, many of the audience were interested to get involved, so the awfulness of the current situation was very well shown by Steve's talk.