

Save our dark skies



Plumpton is one of the few villages in the south east that doesn't have street lighting. Sadly, however, the south east, while it enjoys more clear nights weather-wise than most other parts of the UK, is also one of the most light-polluted regions. So, despite our own low night-light levels, our ability to see the stars is diminished by the light pollution from Lewes, Brighton and Burgess Hill.

Less than 10 per cent of the UK population can see the full glory of the natural night sky. Yes, we need lighting at night, but it should be directed at the ground and only used when necessary. Light pollution is caused when light overflows. Where it is wasted upwards it reflects off the atmosphere, causing the yellow or orange smog that hangs over all urban centres at night.

But it isn't just about seeing the heavens; birds and animals are affected by light pollution. It can change their natural biorhythms, with serious implications for feeding and breeding. Night-time lighting near their roosts can make bats emerge later than usual and so may affect their foraging and hence breeding success. While some bats take advantage of white lights that attract insects at certain times of year, most of our scarcer bat species avoid lit areas and so lighting can affect their flight routes and foraging patterns. Where there is a high level of light pollution, some birds will sing all night, in anticipation of the dawn that they believe is imminent. This disrupts sleep patterns and prevents them resting. There was a long dialogue in one of the local papers a few years ago about a 'nightingale' singing all night outside The Fountain all through the winter. It was, it turned out, a robin.

Owl numbers are falling as light pollution reduces the areas of habitat where they can find food. Migrating birds are affected as they crash into night-time illuminated buildings, or become disorientated when they mistake lighted windows for stars.

Lights attract insects, which are killed when they strike the heat of the bulb, or circle the light until they are too exhausted either to feed or procreate, or get eaten by bats or other predators when they land on the ground.

Glow worms are severely affected by ambient light and glare caused by light pollution, which makes it harder for them to seek and find mates. Amphibian breeding migrations rely on the cover of darkness, as does the nocturnal feeding of newts and toads in our gardens. The aquatic ecosystems in our ponds are dependant on a natural day/night cycles – many invertebrates are only active at night. So please don't light your ponds.

The South Downs National Park Authority has recently launched a Dark Skies project, in recognition of the threat to wildlife and their habitats from light pollution. It has started the process of applying for International Dark Skies Reserve (IDSR) status and is currently measuring and mapping the quality of the sky over the South Downs for its application. Initial findings already show there are parts of the South Downs where the Milky Way, the Andromeda galaxy and the Orion Nebula can be seen with the naked eye and binoculars.

Once the mapping is complete, the SDNPA will work with local parishes and communities and astronomy groups to see how we can manage light pollution in the region.

For more information on the project, visit the SDNPA website at www.southdowns.gov.uk (click the 'Looking after' tab and then the 'Dark Skies' tab). For information about where to find dark skies in the UK, visit www.darkskydiscovery.org.uk. For information about the international Dark-Sky campaign, visit www.darksky.org/. And you can find out more about the ecological impacts of light pollution at <http://www.researchgate.net/publication/221959079>

So, for the sake of the species that share our gardens (not to mention your electricity bills), change your external lights to PIR ones that work only when needed, get a torch and, as you stroll home along Station Road, stop, look up and wonder at the beauty of our night sky – it is a rare and diminishing thing.

CJ/JW/TH