

The Surrey Hills at Night



Sunrise – A new beginning

Welcome to our first edition of 2021. Whilst our eNewsletters have performed an important role in keeping us in contact with our readers, we move into a new year with the return of a hard copy edition. The electronic version has, however, been well received so our intent is to intersperse paper editions with electronic ones. This will allow us to communicate more with you whilst keeping our costs down.

Although our outward facing activities may have been constrained during 2020, a lot of work has continued behind the scenes. Our Chairman's Views item on page 2 will touch on this but our theme for this newsletter comes from a new and exciting initiative which came to fruition just before Christmas.

During 2020, the Surrey Hills AONB Board, along with other bodies such as Surrey Wildlife Trust, CPRE, RSPB and the



Guildford Astronomical Society had been discussing the issues relating to light pollution in the Surrey Hills and what could be done to reduce it. These discussions

coalesced into a project entitled Dark Skies Matter (www.darkskiesmatter.org.uk) and the Surrey Hills Society (SHS) is pleased to be a key part of this initiative.

In the following pages we will take a look at various aspects of the Surrey Hills at Night and some of the issues raised by our modern lifestyle with its heavy use of artificial lighting. A small number of National Parks in other parts of the country have also been taking steps to retain their status as dark areas or to reduce light pollution where possible. We have a lot to learn from them in addition to bringing some new challenges to the topic the Surrey Hills is close to London and has a far higher population density than any of the other Dark Skies areas of England.

It is strange to think that it was only in 1881 that Godalming became the first town in England to have electric street lighting. Until then, every generation had the opportunity to enjoy the night sky and our world without significant light pollution. How things have changed. Totally unlit areas are now the





exception rather than the rule, whilst excessive and wasteful use of lighting has often become a symbol of affluence or poor design rather than need.

Not all use of artificial light is bad. The key is to use the right light, in the right place, at the right time. We hope that these brief articles will help you to understand the backdrop within which this Dark Skies project has been established. Some of the issues raised are beyond the ability of the individual to resolve. However, there are many small changes that we, as local residents, can make to turn our area into a better place for humans and wildlife. It really is a case of many small changes to our actions having a large beneficial outcome.

The Surrey Hills Board website also has more information on this topic at www.surreyhills.org/board/dark-skies



www.surreyhillssociety.org Registered Charity number 1125532

Chairman's Views

Looking back at our last Surrey Hills Views which was published in late 2019, I'm forcibly struck by the photographs of our events, where we were all grouped together and cheerily waving at the camera. Isn't it strange how such pictures now immediately ring alarm bells following the seismic events of the last year? It is great that we are now able to publish our Newsletter again and I am particularly grateful to Stan Baring Solicitor for sponsoring this issue.

Lockdown has enabled us to develop a number of new initiatives. We have greatly improved our social media and I would like to thank Tilda Street for lending her professional support. We already have 1700 followers on Twitter, Instagram and Facebook combined. Tilda's job is done and Diane Cooper is now leading our social media team. If anyone would be interested in helping us with content, please email **info@surreyhillssociety.org**.

We have also started regularly updating our News section of the website. Please do take a look occasionally and learn a little more about what is going on in the Society and the Surrey Hills in general.

In 2019 the writer, Julian Glover, was commissioned by the Government to carry out an independent review of the National Parks and the AONBs. One recommendation was that every school pupil should spend a night "under the stars" to encourage a greater connection with nature. The Society has supported the Girl Guides Movement and the Surrey Hills Trust has funded the Leatherhead Youth Project weekend adventure trips. I am developing our "Into the Wild" project with Rob Fairbanks, the AONB Director. As life begins to return to normal, we anticipate that there will be a large number of people (old and young alike), who will greatly benefit from getting out into the countryside – whether it be for a walk, doing conservation work or something more adventurous. The Government has announced a number of schemes that will assist with this programme and I am very much looking forward to implementing some of the plans that we have spent so much time discussing during lockdown!

Gordon Jackson



Volunteer Profile – Sall Baring

I moved to Guildford in 1987 having previously lived in Burnley, Lancashire. When we had our second daughter we moved to Godalming and have lived in the same house overlooking the River Wey for 24 years and have no plans to move.

My introduction to the Society came in 2014 when I was singing in the Godalming Operatic Society's production of Princess Ida with our then chairman, Christine (Chris) Howard, at the Leatherhead Theatre. Chris needed a company to take over as sponsor of the Society's newsletter. As I worked with my husband Stan at our firm of Solicitors I was happy for us to take on that role.

In the same year Chris co-opted me onto the events committee. I also joined the newsletter team and was responsible for updating the events on the back page of the newsletter. At the end of January 2020 I was 'promoted' to become chairman of the events committee, taking over from Jeff Holliday who has done a wonderful job. I wonder if he knew what was going to



happen in March of that year?

In 'normal times', away from SHS and work, I enjoy singing, entertaining, walking, dining out and meeting up with friends. I have two beautiful daughters who are 25 and 26, one living in Guildford and one in Toronto, Canada. We obviously see one on a more regular basis. For our wedding anniversaries we tend to treat ourselves to a special meal out and we were lucky enough to enjoy a fabulous meal at Sorrel's in Dorking between the lockdowns last year. I am greatly looking forward to when we can all enjoy our chosen pastimes again.

The volunteers in the Society are a lovely bunch and between us we arrange many varied events, some of which are exclusive to the Society. Over the last six years I have learnt so much about the Surrey Hills and all the team are very much looking forward to organising events where we can actually meet up. I would encourage you to join us and reap the benefits of exploring our wonderful Surrey Hills.



AONB News

Tread carefully to respect the Surrey Hills



With the past year having drawn more people than ever towards our green spaces in an effort to find fresh air for exercise and to reconnect with nature, the Surrey Hills AONB

Leith Hill Greenway

The first Surrey Hills Greenway route was installed during autumn 2020. Known as the 'Leith Hill Greenway' this 15km multi-user, mostly off-road route links Box Hill with Leith Hill. You can discover the nature rich hillside and views of Box Hill, the spectacular vineyard of one of the UK's largest wine producers at Denbies Wine Estate and the majestic tower on top of Leith Hill with its sweeping views towards London in the North and the English Channel in the South.

Greenways are safe, off-road access routes for walkers, family cycling, wheelchairs and horse riders, connecting people to facilities and open space in and around towns, cities and the countryside.

A large, clear, version of the map illustrated here may be found by visiting www.surreyhills.org/ discover-route/leith-hill-greenway



The Surrey Hills Society and Surrey Hills AONB

new Rail to Ramble project covering the section

Great Western Rail network. The campaign is to

are working with the South East Communities

Rail Partnership to promote walking between

Rail to Ramble 2021



is calling on people to remember to tread carefully when walking in the countryside.

In accordance with current government Coronavirus guidelines, those that do choose to walk in the countryside are being urged to do so mindfully of both the environment and the wildlife that calls the Surrev Hills home.

Staying on marked paths and keeping dogs on leads is particularly important when it comes to protecting wildlife and vulnerable species. Disturbing birds during the breeding season (March-August) may mean that they fail to nest or lead to abandonment with eggs failing to hatch and chicks dying from lack of food, cold or predation. It is also a criminal offence to disturb wild breeding birds.

Inspiring Views 2021

Two new Surrey Hills Arts Inspiring Views projects are set to launch this Spring across the Surrey Hills AONB, improving access and celebrating special locations through innovative, sculptural seating - 'Radius' will be installed at Denbies Hillside, Dorking and 'Portal' at the Titsey Estate, Tandridge.

Radius is made up of oak battens which will be engraved with poems written by local poets and inscriptions from members of the public. Donations received for the battens will be used by the Surrey Hills Trust Fund to maintain the artwork, views, other Inspiring Views projects and towards transforming lives and habitats in the Surrey Hills.

Both sculptures are located just off the North Downs Way National Trail and have been funded through the Surrey Hills Trust Fund and European funding from Interreg EU as part of the EXPERIENCE project which is delivering sustainable experiences to attract visitors to Surrey. Kent. and the North Downs Way National Trail. For further information on both projects and other Surrey Hills Arts initiatives visit; www.surreyhillsarts.org





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Our Countryside at Night

As the sun sets over the countryside, workers and visitors head for home, but the fields and woods aren't left deserted. This is the time when much of our wildlife becomes more active and heads out to feed or move around its territory.



Although many of our wild birds may be creatures of dawn to dusk, mammals such as badgers, foxes, rabbits, bats and deer will be out and about. Smaller creatures too will be scurrying around in the undergrowth once the kestrels, sparrow-hawks, etc. have ceased their hunting for the day. However, for them, the threat will not be over since owls appear in search of their evening meal and add their distinctive calls to the night air.

Superficially, this might seem like an unchanging scene through the ages but the last century has had a massive impact on the ability of our wildlife to survive and thrive.

We have created the era of fast moving vehicles which can mow down any creature that happens to be crossing the road at the wrong time. How often have you seen dead badgers, foxes and deer at the roadside during an early morning drive?



Another animal severely threatened by traffic is the common toad, which makes the treacherous journey to its breeding pond each spring. Often hundreds of them attempt to cross the road at the same time, meaning the death toll when a car appears is huge. The Surrey Hills has several important populations of toads, newts and frogs. You may see toad crossing signs appearing each February/March and if you are driving at night you might come across groups of bucket and torch wielding volunteers out gathering the toads from the roads to prevent them getting squashed.

We have also introduced artificial light to the night-time countryside. The effects of this are less obvious but, in some cases, have been just as disruptive as vehicles. Birds that migrate or hunt at night navigate by moonlight and starlight. Artificial light can cause them to wander off course.

It is believed that moths also navigate via the moon, so artificial lighting at night can disorientate them. We all know the phrase "Like a moth to a flame", but bright lights often become hot and burn the moths. It is now thought that these insects may be just as important as bees for pollinating our plants and so they are a key part of our ecosystem.

Amongst our nocturnal mammals is the bat. These swooping, birdlike, creatures provide a welcome sight as you sit quietly in your garden at dusk on a summer evening.



More accurately, there are at least 14 species of bat resident in the Surrey Hills and some of them live for over 30 years. There is even a thriving Bat Society (www.surreybatgroup.org.uk) whose members, along with other wildlife groups, are putting up bat boxes and replacing hedgerows which, it is understood, assists bats with their navigation.

The hedgerows also form green highways for our toads and other creatures to travel along safely. Meanwhile, we are now seeing policy initiatives to help our wildlife move around. For example, land bridges and tunnels under roads are now mandatory when planning new developments. Supporters of the Dark Skies Matter initiative, local planning authorities and many other environmental groups are encouraging people to turn off unnecessary lights at night. Their recommendation is that where external lighting is really necessary, motion detecting units should be used since they are much more efficient, effective and wildlife friendly than leaving bright lights on all night.

Chris Howard & Ken Bare





Enjoying the Night Sky

John Evans founded our Dark Skies Matter initiative which relates to many cultural and environmental issues around dark skies and light pollution. However, he is also a keen astronomer so we asked him to help us in recognising the features of our night skies.



www.surreyhillssociety.org

The darker parts of the Surrey Hills AONB are the best places in the county to experience the thrill and inspiration of a naturally dark sky. On a clear night, with the unaided eye, or binoculars if you have them, there is always much to see.

As night falls on a clear sky, the daytime beauty of the Surrey Hills gives way to the wonder and mystery of the stars. The winter constellations shine brilliantly, colourful, strikingly patterned and rich in ancient lore. However, by mid-evening in late March, looking south from the Surrey Hills, they have begun to swing away, as the Earth's movement around the Sun ushers different background stars into view. Orion, lord of the winter nights, now tilts away into the west with dazzling Sirius, the brightest star in the sky, following.

Soon, during northern hemisphere evenings, the stars of spring will climb the eastern sky, with Leo, paws first, leading. When summer comes, Cygnus the Swan, with long neck and outstretched wings, will cruise the silver path of the Milky Way. Low to the horizon towards the South Downs, the star clouds of Sagittarius will glow at the galactic core and in October, the rising of the Pleiades star cluster, whispering its faint music into the twilight, will herald the coming of autumn.

This cycle of wonders is always there. To discover it, you don't need special equipment or special knowledge, you just need to go and look. There are plentiful viewing points in the Surrey Hills and access is good. Headley Heath, Leith Hill and Winterfold are all excellent spots. The CPRE's Night Blight website www.nightblight.cpre.org.uk also shows you where to find the darkest skies.

There are numerous guides to help you find your way around the sky. One of the very best is Stellarium, a free app that has a version for all devices. The Moon has a beauty all its own, but its brightness makes the stars, especially the fainter ones, harder to see. So, nights with no bright Moon are best for star-gazing. Plan ahead what you're going to look for. Wrap up warm and take something warming but non-alcoholic to drink. Allow 20 minutes or so for your eyes to become dark-adapted and don't look into lights. A dim red torch preserves your night vision best. That also means no looking at phones or tablets, unless they have a red 'night' option. While heeding current distancing guidance, observe with others because it's more rewarding, safer in the event of mishap and a lot more fun.



Night-time in our Towns and Villages

For most of her adult life, Christine Howard, one of our Vice Presidents, has been involved in local rural initiatives. She has also been Town Centre Manager for Guildford and is the Chairman of Visit Surrey – the county's official tourist board. Here she gives her thoughts on night-time leisure activity in our towns and villages.

I love living among the dark skies of the Surrey Hills AONB where there is a presumption against street lighting. As a long serving parish councillor, I have seen many comments from new residents to the village complaining about the lack of lighting. However, each time we do a village



questionnaire it comes back that the majority of people appreciate the dark skies in our area.

This does not mean that villagers don't go out at night, because we do. I love pulling on my wellies, snuggling into a warm coat, getting my torch out and heading across the common to our cosy pub or an event in our village hall. I also enjoy going to one of Surrey's beautiful historic market towns to enjoy the nightlife that is on offer there.

By night our towns transform into cosmopolitan hubs full of restaurants offering a huge variety of cuisine from countries around the world. There is a thriving cultural offering of theatres, comedy clubs, bars and nightclubs. With the University of Surrey based in Guildford, this town has always had a reputation for a lively nightlife for young people.

In the past, I remember stories of 'no go' areas in Guildford and older people fearful to venture out at night in the town. However, those days are long gone and Guildford is now the only town in Surrey to boast the coveted Purple Flag Award. It's a bit like



being given a Blue Flag for your clean beaches, and it's quite an achievement to qualify.

Gaining the Purple Flag Award was a joint project led by Guildford Borough Council, Experience Guildford (the Business Improvement District for the town), Pubwatch, Street Angels and the Police – along with many others. It was a huge project to put together but it has paid dividends with a thriving night-time economy.

The Town Safety and Venue Liaison Manager in Guildford is none other than Pete Lambert, who we all know in the Surrey Hills Society, as one of our walk leaders. He works for Experience Guildford and makes sure that all visitors who come to enjoy the town after dark feel safe and have a wonderful evening.

So what is Light Pollution?

In simple terms, light pollution happens when lights cause illumination in places other than where they are targeted or being on when they are not needed. This may sound straightforward but, as is shown in the graphic, there are several ways in which light can escape from the desired target and be reflected or directed elsewhere.

In many cases, the causes of light pollution can be down to the poor design of the light source. Changing the shape of a shade or recessing the bulb can significantly reduce the sideways directed light. In some cases, the design is so poor that light actually shines up above the lamp – and then gets reflected off clouds or higher buildings. The banner picture on the front page shows the wasted light shining upwards from Dorking.

A specific type of light pollution happens when this escaping light enters the windows of neighbouring properties. This is called 'light trespass' and in severe cases may even give rise to legal action. Poorly sited external security lights are a classic example of this problem.

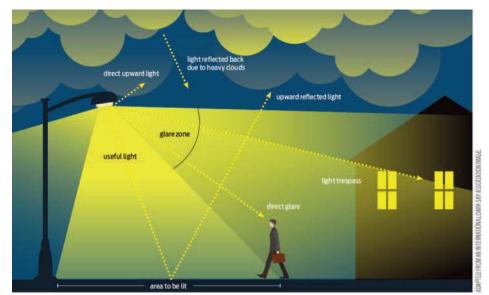


The term also covers lights which are on when they are not required. This is not only wasteful but, as indicated elsewhere in this newsletter, can cause disruption to humans and wildlife.

Many light fittings have now been replaced or

adapted for LED lights. Unfortunately, some of these emit strongly at the blue end of the spectrum and cause even greater light scattering and upward reflected light. Technology may be wonderful but life is never simple!

Ken Bare



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Dark Skies – A CPRE Perspective

Kristina Kenworthy is the CPRE representative on the Surrey Hills AONB Board. Here she explains why CPRE are so supportive of the Dark Skies Matter initiative.

CPRE, the countryside charity, has campaigned for many years to preserve and restore rural tranquillity, and has developed a map of England showing the areas suffering daytime disturbance from noise and visual intrusion. The charity also champions night-time tranquillity and calls for 'true darkness' and star-speckled skies. Light pollution is destroying the beauty of the twilight, the quality of a midnight sky and depriving our children of the pure magic of looking up to a starry night. Sadly, there are fewer and fewer places where the heavens can be appreciated. CPRE Surrey has therefore teamed up with other local partners in this major partnership project, Dark Skies Matter, under coordinator John Evans.

Polluting our night skies is wasteful, damaging to our health and wellbeing, it disrupts wildlife behaviour, and disorientates migratory birds. Lighting the night sky contributes to energy waste and therefore to climate change. In Surrey we are fortunate to have so much countryside despite proximity to the metropolis. Even then, few of us can truly get away from the glow of human habitation and activity at night. Consequently, in a rural landscape as precious and vulnerable as the Surrey Hills AONB, we must pay particular attention to the threats from light pollution. We must cherish the opportunities for night-time



Preparing for Star Count

darkness and a starry sky that still exists. CPRE has just held its annual Star Count, a public science project which is helping us map and understand how many people currently have the opportunity to enjoy and appreciate the stars at night. This is a wonderful bit of home science for our lockeddown schoolchildren and their parents!

CPRE objects to development schemes that could harm people's night-time joy. The special views from Box Hill, Newlands Corner and St Martha's Hill, amongst other viewpoints, could all be spoiled by inappropriate projects within our Surrey Hills AONB that cause light pollution. These projects can often impact on local amenity and the dark landscape, as well as nature conservation. We are only just tuning into this form of pollution and its ill-effects. It is time for planners and policy-makers to factor this into their decisions – and for us all to take stock.

More details of CPRE involvement and support to the Dark Skies Matter campaign may be found on our website www.cpresurrey.org.uk/news/dark-skiesmatter-sign-the-pledge/

How Planning supports Dark Skies

With light pollution in the Surrey Hills AONB recognised by many as being a growing problem, the most recent Surrey Hills AONB Management Plan 2020-2025 now includes a more restrictive policy than the previous Plan. Management Plan Policy P2 states:

"In remoter locations, with dark skies, development proposals causing light pollution will be resisted".

The supporting text justifies this policy by the following:

"To avoid developments in remote locations causing light pollution, large areas of glazing and roof lights should be avoided without automatic blinds or shutters being operative in times of darkness and poor light. Any unnecessary external lighting will normally be resisted but where circumstances exist it should be designed to minimize light pollution".

In providing AONB planning advice on planning applications to District and Borough Councils I have therefore been taking a stronger line where I consider light pollution would be a problem. I am now able to back this up by quoting the Management Plan and the fact that the Surrey Hills AONB Board agreed recently to become a Founding Supporter of Dark Skies Matter. Each case will be different depending upon how remote the development would be and the extent and form of glazing.

Contemporary buildings can be acceptable in the Surrey Hills, but they are usually characterised by large areas of glazing from which artificial light can shine.

In the Surrey Hills, light pollution can create three main problems relevant to planning control. The first is the glare into the night sky reducing the ability to see the stars. The second is light shining like a beacon against a dark landscape background. The third is the effect upon wildlife.

Floodlighting of all-weather sports fields can cause serious light pollution despite measures to mitigate light spillage, but this problem needs to be balanced against the health and wellbeing advantages of participating in sport, especially for school children.

It remains to be seen what weight planning case officers and Planning Committees give to the degree of light pollution in balancing their planning decisions and whether applications are refused on the grounds of light pollution. I have found architects, when their clients agree, receptive to incorporating measures to mitigate light pollution, where feasible, by the use of shutters or technical solutions. It is too early to assess whether these or other measures are successful in practice.

Clive Smith Surrey Hills AONB Planning Adviser







To contact us, please email info@surreyhillssociety.org Or phone 07530 949302

Please note that our postal address and landline are currently not in use due to Coronavirus restrictions

@surreyhillssociety
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Dark Skies Initiatives from our Neighbours

The South Downs National Park (SDNP) stretches for over 140km from the border of Surrey and West Sussex in Haslemere and goes all the way to the south coast. The most western part of the Surrey Hills AONB joins the National Park's Serpent Trail in Haslemere and links to the start of Surrey's Greensand Way.



SDNP holds the status of being an International Dark Sky Reserve

awarded to them in 2016. It's called Moore's Reserve to honour the numerous contributions to British astronomy made by famous local resident, Sir Patrick Moore. This award has been given to seven reserves across the UK including Snowdonia, Exmoor and the Dales & Moors of Yorkshire, all of whom received the award in 2020.

The National Park ran a very successful first Dark Skies festival in 2019, with a roadshow event going to selected market towns across the Park, including a popular 360 Virtual Reality experience, which appealed to all ages. Their Dark Skies festival in 2021 held in mid-February looked a little different to the first one due to the restrictions imposed by Coronavirus. It was a digital festival featuring a combination of recorded films and live streams. One of the Park's rangers, who was instrumental in the SDNP becoming an International Dark Sky Reserve, features in a short film about how to get the most out of their dark skies.

Events Programme

Due to the uncertainties of Coronavirus restrictions, we are unable to give a listing of forthcoming events on this page.

We are still developing and delivering as many events as we can so please refer regularly to the Events page of our website www.surreyhillssociety.org for the current situation.

Please note that the number of attendees tends to be restricted at present and the events book up quickly. **Check the website regularly!** We will continue to send out our periodic Mailchimp emails with details of forthcoming events but be aware that these are reminders of what is coming up and, in general, these events will already have become live on the website.

Mailchimps and other SHS emails

The Society sends out electronic communications to all its members in the form of an upcoming events Mailchimp email, occasional emails about specific topics or activities plus periodic electronic newsletters. As a paid up member, you should be receiving all of these. If you believe that you are not doing so, please check your Spam and other email folders and tabs.

If you still cannot see any communications from us, please email us at **info@surreyhillssociety.org** so we can check that we have your current email address correctly recorded.

Rangers in the reserve had plans to host their own 'Star Party' for star-gazing and nocturnal walks – these are now on hold until it's safe to host outdoor gatherings. There is also a Dark Skies Discovery Site Guide helping people connect with the best spots to view the night sky, for their own family visits when possible (see map). For more information, see the South Downs website and search for Dark Skies.

There's no doubt that star-gazing in the night skies is a popular family event and likely to become a leisure activity once again when we are all free to explore. Closer to home in our Surrey Hills, two different organisations running extreme night runs have approached the AONB office to hold events during 2021.

Other initiatives are going on elsewhere that could be adapted for the Surrey Hills. A growing number of adults want to get out and walk at night for various reasons, including time to reflect and enjoy a bit of personal space whilst allowing our senses to adapt and be heightened in the dark.

Diane Cooper



Acknowledgements

This newsletter could not have been created without the input of many contributors and helpers. In particular, we thank John Evans, founder of the Dark Skies Matter initiative, and Kristina Kenworthy of CPRE for their articles.

Thanks must also go to Stan and Sall Baring whose company has kindly sponsored this newsletter.

Our appreciation goes to the following for use of their images:

John Evans: Night-time Dorking from Box Hill (p.1), Milky Way (p.5)

Dani Maimone: Sunrise – a new beginning (p.1), Guildford High Street at night (p.6)

National Trust Images – Chris Lacey: Wey Festival at Night (p.1), Marshmallow toasting (p.8)

Leatherhead Youth Project – Preparing for a night under the stars (p.2)

Gary Bendig on Unsplash: Fox (p.4)

PBarlowArt from Pixabay: Badger (p.4)

CPRE: Preparing for Star Count (p.7)

Gregory-Hayes on Unsplash: Rural Building (p.7) South Downs National Park Authority, Map (p.8)