

I started as a local authority lighting technician with Lanarkshire County Council, Scotland in 1958 but moved to England in 1971. After a further working life in lighting of nearly 40 years in the urban conurbation of the West Midlands I had forgotten all about stars and their visual glory. In 2008 I left my lighting design partnership business partner to look after lighting design in England while I returned to Scotland to develop lighting design work there – astronomy and stargazing were furthest from my mind.

Within weeks of moving from Coventry to Moffat - I just happened to be in the right place, at the right time, to take a telephone call from the Forestry Commission in Galloway. They needed a lighting engineer to translate the technical needs of the International Dark Sky Association (IDA) in America to get them to dark sky award status.

I suddenly realised that this was a refreshingly new story line to promote good lighting design. To me - the previous story line about energy conservation was getting a bit long in the tooth even although that energy story is in the news every day at present.

After I had written the first draft of the Galloway master plan I remember their manager saying that I had written it with a great deal of passion. As a lighting engineer - and not an astronomer - the concept of embracing light control from not just street lights, but also commercial property lighting and residential property lighting on a holistic approach all in one large project was a technically refreshing first - for me.

The Galloway Forest Dark Sky Park award success in 2009 has led me to many more dark sky place successes – the 13<sup>th</sup> was announced last October when North Ronaldsay joined the small UK list of IDA dark sky Communities - but I had only completed about 3 or 4 dark sky places when the Moffat over 60's Forum invited me, in 2011, to tell them all about my dark sky work.

I finished my presentation by saying I would like to bring my expertise to Moffat, it was ideally located in a dark rural setting, but I suggested it may be a **Bridge too Far** for Dumfries & Galloway Council to convert all the low pressure sodium street lights.

In the same way that I was in the right place at the right time to answer the telephone call from Galloway Forest I was saying the right things at the right time to give the D&G lighting engineer all the answers he needed to acquire a Scottish Government grant of £240K for an energy saving case study and we, together, threw in dark sky stargazing as 'value added' to saving energy.

So D&G Council gave Moffat better LED street lighting well before the rest of the Region – and a surprise to many Moffat residents. The connected load was reduced from 50Kw to 30Kw without reducing illumination levels on the streets and the sky quality darkness measurements - improved as did the visual appearance of the streets at night.

Moffat Dark sky started as a lighting engineering challenge – there was no astronomy club – although Moffat Academy did have one many years ago, but there were about 20 residents who put their name to an astronomy interest list which I started when I did a dark sky **public awareness** open day at the Moffat Town Hall just before I started the work on developing a lighting master plan for the area and carrying out a lighting audit in the town.

Although the street light conversion reduced upward light into the sky and we got the dark sky town award the outreach continues to this day to get other lighting installations to point downwards and not upwards.

The Control of light is not just for stargazing – there are other areas of benefit such as the residential neighbourhood, flora and fauna, birds and even some insects all benefit in some way from reduced visual obtrusion. Unlike energy saving – light obtrusion is visible to everyone and its reduction can be appreciated by everyone in the town. And it would be remiss of me not to mention the thousands of visitors to the town who return home with a mental picture of a town with something rather unique about it.

I keep repeating the message that - **The dark sky award has something in it for everyone** – you just have to work at it to find the benefit.

It is more like a partnership of disparate residents, professions and trades all working together in an effort to keep the sky clear at night.

It also has an important educational outreach message to the school behind us and beyond – something I know which is very dear to the Astronomer Royal's heart and perhaps she will say something about her future objectives.

I know we may have little control over the clouds at night - and I say little because I think the changing climate is creating greater cloud cover but as part of the award we require to make an annual report to the IDA to show that we are actually working together to mitigate upward light illuminating the atmospheric mist above our heads  
**regardless of our ability to stargaze.**

It took 150 man-hours of my time spread over 5 years to get the dark sky award for Moffat and it has taken another 5 years and countless man-hours from me and others to get to this opening day - so from me - a big thanks to all who helped with the construction and a special thanks to my wife who supported my absence from home while sorting out other peoples dark sky places.

So - from the IDA award grew the astronomy club - and from the astronomy club, under the brain storming chairmanship of Evelyn Atkins, grew the desire to have a sheltered housing with a permanently mounted telescope with astro photography capabilities - and from that desire, with a grant from Scottish and Southern Energy, grew our community observatory – and something far beyond anything I imagined when I said all those years ago that Moffat - as a Dark Sky Town - was a **Bridge too Far.**

In my 13 year "dark sky journey" I have completed 15 dark sky lighting master plans covering a combined area greater than 4,000 square miles with a survey audit of more than 26,000 external lighting units but more importantly the ensuing awards have brought the concept of combining the reduction of light pollution and the visual betterment of the night sky to a combined potential population audience of nearly 133,000.

I am at the end of my 63 year "lighting engineering journey" (I think) and hope that others who follow come to realise that the night time environmental impact is more important than putting dots on a plan at the desired spacing.

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