

Dark Skies

A BRIEF DISCUSSION ON DARK SKIES BY CHRIS SARA

FOREWORD

They say, “you don’t know what you’ve lost until its gone”, sadly, for most people living in urban areas they never knew what they had in the first place. This is the reality of dark skies around the planet due to increased industrialisation and urbanisation.

We are now starting to recognise the impact ALAN (Artificial Light At Night) has on our lives, and the lives of all living things on the planet. There is a movement to halt the progression of ALAN and even hit the dim switch to reduce it. There are many reasons to do this, reasons even greater than astronomy, if astronomy isn’t enough.

These effects include health, economics, environmental and science. Light pollution is one of those things that has gone unchecked for a long time. I suppose we see increased light as a sign of human progress. The problem is that we evolved in the absence of 24/7 light and now we are not equipped to adjust to its impacts.

It is something that is in all our hands to control. At home we can design our lighting better and within the community we can lobby councils and business to do their bit, by turning it down, or better still, turning it off.

Humanity as impacted the planet like no other life form. With great power comes great responsibility. It is time to stand up to our responsibilities and make the world a darker place, for the good of humankind.

Dark Skies and Light Pollution

As the world becomes more and more developed and populated the amount of ALAN (Artificial Light At Night) increases. Organisations such as IDA (International Dark-Sky Association) work to combat the spread of ALAN, but need us all for this to succeed.

This involves working with communities to become Dark Sky places. With the support of the community and local government rules and regulations can be put in place to stop the spread of bad lighting practices. There are many benefits to supporting these practices including:

- Increasing the visual excellence of the night skies
- Health and wellbeing of humans and nature. The proliferation of blue light has serious implications on human sleep and the life cycles of insects.
- Energy savings. Any light that is directed to the sky is energy wasted.

Smart lighting is to be encouraged even if you aren't interested in the night skies.

Stewart Island/Rakiura is a Dark Skies Sanctuary which means we meet standards around light pollution and astronomical sufficient. As one of the most southern inhabited places on the planet there are many reasons why astronomers will wish to travel to our shores. This creates tourism and scientific opportunities for our community and businesses. Maintaining our status is not a given and we need to be aware of things that could be detrimental to our night skies.

Many urban dwellers may never see the stars as we do and need to travel out into the countryside or even to other countries to experience what we have in our backyards. The Universe is a part of nature, just like the birds, plants and humans on Earth. Experiencing the wonders of the Universe is something that can offer great insight to our own existence and it holds the answers to many things still unknown about Earth itself.

Ancient travellers used the stars as markers for their voyagers across the seas. Without the stars the Pacific Ocean would have been a vast expanse that may have never been a place occupied by humans until more recent times.

Many cultures planted by the stars and looked to the stars for inspiration and spiritual guidance. With the increased pollution many people whom once learned the skies as part of survival have lost that aspect of their culture. Modern technology gives us many advancements but simply looking up and seeing the Universe spread across the heavens is a true wonder of nature; to miss that should be considered a tragedy.

The growing number of objects that are being launch into orbit is another serious concern. It becomes harder to capture images of deep space without your images being polluted by passing satellites. The importance of satellites to our current lifestyles is undeniable, however, we need to govern to what point this value is greater than the impacts on our everyday lives. On the planet we have struggled to balance our need with our greed. This is now placing us at a point of extreme choice. We may not be able to wine back the clock on Earth so it is important that we don't end up doing the same to space.

The onus falls upon us all to make the hard decisions about not only our terrestrial world but also the celestial environment. The Universe does not belong to us, so our choices around interaction with it must be made with a greater good in mind.