

Newsletter July 2025

Tāhuna Glenorchy was delighted to become New Zealand's 4th Dark Sky Sanctuary in February 2025!

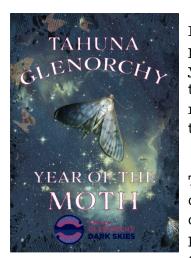
The area in red on the map outlines the sanctuary. The blue area taking in Glenorchy and Kinloch are not yet part of the Sanctuary, but we are working towards becoming an International Dark Sky Community which will make us one of the first in NZ. We can all play a part in this.

Dark Sky International is an organisation formed to help reduce light pollution and protect our night sky. They say on their website that...

Thanks to more than 193,000 supporters, members, and advocates in more than 70 countries, we provide leadership, tools, and resources for individuals, policymakers, and industry, to reduce light pollution and promote responsible outdoor lighting that is beautiful, healthy, and functional.

We hope to submit our Dark Sky Community application by the end of the year.





Meanwhile, the Tāhuna Glenorchy Dark Skies Group has lots of other projects on the go. At the Matariki Mid-winter Dinner we announced that this year is the year of the Moth. We have some speakers visiting us in September to talk to us about moths and butterflies and identify any moths we have managed to either photograph or collect in the moth diaries we gave out at the Matariki Dinner.

To create your own Moth Diary, use a notebook to record moth numbers, with dates and locations, photographs, or any dead moths you find in spiderwebs or on the windowsills. We are trying to establish a starting point of the moth population so that we can monitor any difference in moth populations as we get better at reducing our light pollution and increase plantings to encourage

moths and other insect who are great pollinators (and yummy treats for our bats and birds, too).

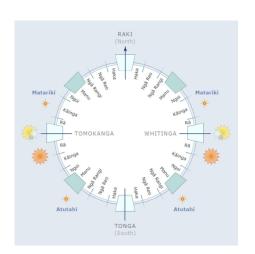


Star Talks: We are continuing to learn about the stars and will be sharing our knowledge with you via more star talks and evenings.

The Headwaters is also offering star talks with the use of their telescope including a meal and marshmallows at their Scheelite Shelter.



Star Compass: We have also obtained funds from QLDC to explore the establishment of a star compass.



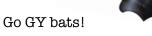


We are visualising this as both an art installation that will also be used to teach star lore and navigation techniques and will be part of our continuing learning journey. We are looking for ideas for a suitable location for this installation as it needs to be both accessible and have a good view of the stars. Some ideas include the green space behind the skate park (although the trees might block some of the stars at that location) or alongside the lagoon board walk. This will be the first inland star compass that we know of so it will take a bit of time to get it right.



detected in all 10 of the monitors placed around Glenorchy.

This has revealed that bats were



Winterstellar's Astrophotography

Exhibition has opened at Arrowtown Museum and is well worth taking a look if you are out that way and will be there til mid-July.

Bat Survey: We are also pleased to announce the results of our first village bat monitoring survey.

This is Andy Davey, the CE of Winterstellar at the opening in front of Brian Boyle's amazing Milky Way photo. To our knowledge, Andy is not a bat...



Learn the night sky

In the Dawn Sky, Venus is still the brightest object right now. It rises in the east at about 4:20 am in the beginning of the month and at about 5 am at the end of the month. Venus orbits the sun faster than the Earth, taking 225 days to complete one orbit. It recently passed between the Earth and the Sun and is now moving ahead of Earth in its orbit.

We can now easily see Puanga (Puaka) /Rigel in the dawn sky. As the sister of Matariki, Puanga rises earlier than Matariki and signals the start of the Matariki celebration. While the stars that mark the beginning of the Māori New Year may vary in some regions, the themes that underpin the ceremony and celebration are the same.

Takurua (the Winter Maiden)/ Sirius (The Dog Star) is also seen in the dawn sky just before sunrise. Sirius is the brightest star in the sky and just 8 light years away. It can also still be seen in the west just after sunset at about 7 o clock at the beginning of the month



The Evening Sky

The Milky Way is rising in the east at Sunset and the core of the Milky Way is easily seen. This is the brightest and broadest spot between the constellations of Scorpius and Sagittarius.

Photo credit: Jordan McInally



Photo credit: Corrine Davis

To the north east is an orange star called Arcturus and it sets in the west at around midnight. Don't confuse it with the red planet, Mars, which can be seen in the North West. It will set in the west at about 9:40 at the moment it is about 300 million kms away!

To the south the bright star Canopus can be seen. Canopus is circumpolar which means it is always visible in the sky and is an important navigation star.

The Southern Cross (Crux) and the pointers Alpha and Beta Centauri are almost directly overhead right now.

Hot tip! The phone app **Stellarium** is a great aid in identifying stars in the night sky. We highly recommend giving it a try for learning what's up there in the night skies.



Glenorchy Community Dark Sky Lighting Guide

To attain our Dark Sky Community status, it's crucial to focus on the lighting situation in Glenorchy. We need everyone to conduct a personal lighting survey or audit and start to think about the following questions:

Does your outside lighting fall only where it is needed?

Direct the light down, not up into the sky, and target your fixtures so that light does not spill beyond where it is needed. From eye level, the light source should be even with or recessed within the light fixture, ensuring that there is no visual discomfort, known as glare.

If the light spills beyond where it is needed, replace it with a shielded fixture or reorient the light so that it does not extend beyond where it is needed. Be especially mindful of light that spills up into the sky or onto other people's property.

Is the light source warm in colour?

Light bulbs manufactured today have a Kelvin (K) rating printed on the bulb or box. Low Kelvin ratings (3000 K or less) are considered "warm" in appearance and generally emit less harmful blue light than higher-Kelvin ratings. For home lighting, there are good options at 2700 K or less. Consider going as warm as possible as that will really help our wildlife.

> Our creatures of the night thank you for keeping our night skies dark!



We hope you enjoyed this month's newsletter. Let us know if there are things you'd like to learn about or just send us a hello at https://glenorchydarkskies.org.nz/contact/

Keep it starry!

Does your outside lighting serve a

clear and necessary purpose? Light is useful for safe wayfinding and

to help perform specific tasks. If you find that lights on your property are not necessary or useful, remove or disable them so that they are not accidentally turned on.

Is the light connected to active controls?

Switch off any exterior lights when possible. Light should only be used when needed, to reduce the impact on the environment and save electricity.

Outdoor lights that are necessary should be connected to a timer or motion sensor. Motion sensors should be set to times of five minutes or less.

Is the amount of light appropriate for the intended task? Use the lowest lighting level needed to perform the intended task.

Excessive light can contribute to glare, actually making it harder to see things well. If you find that the lighting level around your home is too bright for the task it is intended for, change the fixture's bulb to one with a lower light output or consider incorporating dimmers.