**The June Night Sky**

**Takurua/Sirius**, the brightest star, twinkles like a diamond. It rises in the west at dusk and sets in the southwest around 9 pm, mid-month. **Atutahi/Canopus**, the second brightest star, is in the southwest. This is a 'circumpolar' star which circles the South Celestial Pole clockwise but never sets from Aotearoa NZ except for the most northern places. Around 1 a.m. it will be near the southern horizon, twinkling colourfully.

**Ruawāhia/Arcturus** is the bright orange star in the north sky and sets in the northwest in the morning hours.

Māhutonga/Crux, the Southern Cross, is south of the highest point or zenith. Beside it, and brighter, are **Beta** and **Alpha Centauri (Ranginui and Haikihea)**, in a line pointing at Crux. Alpha Centauri is the closest star visible to the naked eye, while Beta Centauri is a hot, extremely bright blue-giant star much further away.

Orange **Rehua/Antares**, high in the eastern sky, is a red giant star, much brighter than the sun. It marks the body of Scorpius, on its back . In the evening at this time of year, with its tail curving off to the right. By midnight the scorpion's tail is directly overhead. In Māori star lore the tail is the 'fish hook of Maui'.

Further right is Orion. At its centre, the 3 stars of Tautoru/Orion’s belt are part of a shape often called ‘the pot’. Above the belt is bluish- white Rigel; below is orange Betelgeuse. In June Orion can be seen setting in the evening with ‘the pot’ tipped on its side.

Te Māngōroa/The Milky Way is brightest and broadest in the southeast, narrowing then fading in the western sky. The Milky Way is our edgewise view of our galaxy, a pancake of billions of stars including the sun. A scan along the Milky Way with binoculars will find many clusters of stars and some glowing gas clouds.

Ngā Pātari/The Clouds of Magellan, **LMC** and **SMC**, in the lower southern sky, are luminous patches easily seen by eye in a dark sky. They are two small galaxies about 160 000 and 200 000 light years away. They are

much smaller than our galaxy but still contain billions of stars.

The Matariki/Pleiades cluster reappears after a couple of months hidden behind the sun. This star cluster is quite faint, so even in a dark sky it has to be well above the horizon before it can be seen. It becomes visible again in the eastern dawn sky in mid to late June, making it a good marker for the winter solstice, our shortest day. In Māori lore it heralds the New Year, a time of celebration. This year Matariki is easily located just to the left of Pareārau/Jupiter, the brightest object in the dawn sky. On the 15th ,

The sunspot that caused the aurora 11 May is facing us again from the 6th. So there may be more opportunities to see the southern lights in Northland.

Bright planets are visible in the late night or morning sky. And 3 line up near the moon in the morning sky on the 30th - Saturn, Mars and Jupiter. The so called Parade of the Planets on the 3rd is not really. The view of Mercury & Jupiter will be masked by the sun and Uranus & Neptune will be too faint to see. So all you will be able to see is Mars and Saturn. Another social media hoax!

KŌPŪ/VENUS is not really visible this month as it passes behind the Sun but will return in July.

WHIRO/MERCURY moves behind the sun on the 14th & will reemerge in the evening sky at the end of June.

MATAWHERO/MARS rises around 4 a.m. mid-month. It is medium bright and orange red in colour. It is small in a telescope. The Moon will be near Mars on the morning of the 3rd.

PAREĀRAU/JUPITER, the brightest object in the dawn sky, rises in the northeast about 6:30 a.m. mid-month.

RONGO/SATURN rises due east around 1 a.m. at the beginning of the month; around 11 p.m. at the end. It is medium-bright with a cream tint. By dawn Saturn will have moved to be north of the zenith. On the morning of the 28th, Matariki Day, the Moon will be very close to Saturn.

**Bold** represents single stars, blue indicates groups of stars – constellations or clusters.

Sources:

Alan Gilmore, University of Canterbury's Mt John Observatory <https://www.scitech.org.au/explore/the-sky-tonight/>

<https://earthsky.org/astronomy-essentials/visible-planets-tonight-mars-jupiter-venus-saturn-mercury/>

<https://www.space.com/planet-lineup-visible-june-3-2024>