**The March Night Sky**

Northwest of overhead is Takurua Sirius, the brightest true star in the sky. Southwest of the zenith is Atutahi Canopus, the second brightest star. Below Sirius are bluish Puanga Rigel and orange Pūtara Betelgeuse, the brightest stars in Orion. Between them is a line of three stars: Tautoru Orion's belt. To southern hemisphere star watchers, the line of stars makes the bottom of 'The Pot'. Tautoru points down and left to a V-shaped pattern of stars. This makes the face of Taurus the Bull, upside down to us. The orange star Taumatakuku Aldebaran is at one tip of the V making one eye of the bull. Continuing the line from Orion down and left finds the Matariki or Pleiades star cluster, low in the northwest. It sets after 10 pm, mid-month.

Takurua is the brightest star both because it is relatively close, nine light years away, and 23 times brighter than the sun. Puanga is a bluish supergiant star, 40 000 times brighter than the sun and much hotter but much further away. Orange Pūtara is a red-giant star, cooler than the sun but much bigger and 9000 times brighter.

The handle of "The Pot", or Orion's sword, has the Orion Nebula at its centre; a glowing gas cloud many

light-years across. It is a place where dust and gas in space is gathering together to make new stars. Some of the stars are much bigger and hotter than the Sun. Ultra-violet light from the new stars causes the left-over gas to glow, making the nebula.

Near the north skyline are Whakaahu kerekere Pollux and Whakaahu rangi Castor marking the heads of Gemini the twins. Whakaahu rangi is a hot white star like Takurua. Golden Whakaahu kerekere is bigger and brighter but cooler than Takurua and closer to us. Above and right of them is the star cluster Praesepe, marking the shell of Cancer the crab. Praesepe is also called the Beehive cluster, as its seen in binoculars.

Māhutonga Crux, the Southern Cross, is in the southeast. Below it are Ranginui Beta and Hakihea Alpha Centauri**,** often called 'The Pointers'. Hakihea is the closest naked-eye star, 4.3 light years away. Ranginui, like most of the stars in Māhutonga, is a blue-giant star hundreds of light years away.

Te Māngōroa The Milky Way is brightest in the southeast toward Māhutonga. It becomes broader lower in the southeast toward Scorpius. Above Māhutonga Te Māngōroa can be traced to nearly overhead where it fades. It becomes very faint in the north, right of Orion where we are looking toward the galaxy's nearby edge. The centre of the galaxy is in the broad part of the Te Māngōroa below Scorpius in the southeast.

Ngā Pātari The Clouds of Magellan, LMC and SMC are 2 small galaxies high in the south sky. They are easily seen by eye on a dark moonless night, looking like misty patches.

The full moon may look unusual on the 25th as it grazes the outer part of Earth’s shadow, the penumbra. It will be most in the shadow around 8:13 pm. The top edge of Marama the Moon will be darkest.

WHIRO MERCURY: sets at 8:20pm at the start of the month.

KŌPŪ VENUS: The brilliant ‘morning star’ rises soon after 5 am at the beginning of the month and around 6:30 at the end.

MATAWHERO MARS: At the beginning of the month Matawhero is just above Kōpū, looking like a medium-bright reddish star. It moves up and away from Kōpū as the month wears on.

KŌPŪNUI JUPITER: **T**he ‘evening star’ appears in the northwest at early twilight. It sets around 11 pm at the start of the month and 9 pm at the end. Marama will be near Kōpūnui on the 14th.

RONGO SATURN: Later in the month, Rongo appears and moves up the sky morning-to-morning. It is the same brightness as Matawhero. On the 22nd Rongo will be just to the right of Kōpū, with less than a full moon’s width between them. Matawhero & Rongo move up the sky while Kōpū stays put. By the end of the month Matawhero, Rongo & Kōpū appear equally spaced on a line. Marama will be near Kōpū on the 9th.

RANGIPŌ URANUS: Visible until 9pm at the start of the month

TANGAROA NEPTUNE: Visible until 11 pm at the start of the month

Adapted from notes by Alan Gilmore, University of Canterbury's Mt John Observatory

Stars are in red; star groupings are in blue.