## THE MILKY WAY

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We are the stars which sing, We sing with our light; We are the birds of fire We fly over the sky. Our light is a voice; We make a road for the spirits, For the spirits to pass over: — ancient Wabanaki "Song of the Stars"

In summer, we navigate backwater channels of star clouds arching overhead whose grandeur represents the largest deep-sky object visible to our unaided eyes: the Milky Way, our home galaxy, viewed from our perspective inside the galactic disk. On warm summer evenings, connect the bright stars: Vega in Lyra, Deneb in Cygnus and Altair in Aquila to form the Summer Triangle, a handy asterism for navigating the night sky and where misty clouds of starlight are split in two by the Great Rift. The Mi'kmaq saw the Milky Way as the Spirit Road that departed souls would follow (see front cover).

Grazing the southern horizon we find two cloudlets, Messier 6 and 7 (M6 & M7). M6 is the Butterfly Cluster, so named for meandering star chains creating the appearance of a butterfly when viewed in binoculars. M7 has been known since antiquity as Ptolemy's cluster (Ptolemy was one of the first to catalogue the heavens), observed as a bright patch on the southwestern edge of the star cloud NGC 6455. Both M6 and M7 fit together with the star Shaula in the same view of handheld binoculars.

The bright naked-eye knot in Sagittarius is M8, a star cluster emerging from the Lagoon of nebulosity and summer's version of the Orion Nebula (M42). Further north, notice the silvery billow of the M24 starcloud. In reality, we are looking through a porthole across the Milky Way onto a distant shore, where nebulae and star clusters abound. On the southeast border of M24, part of this intervening dust is visible as a greater-than symbol, ">". Two bright puffs loom over M24, where M17 (the Swan), and M16 (the Eagle), are forming stars within their stellar nurseries.

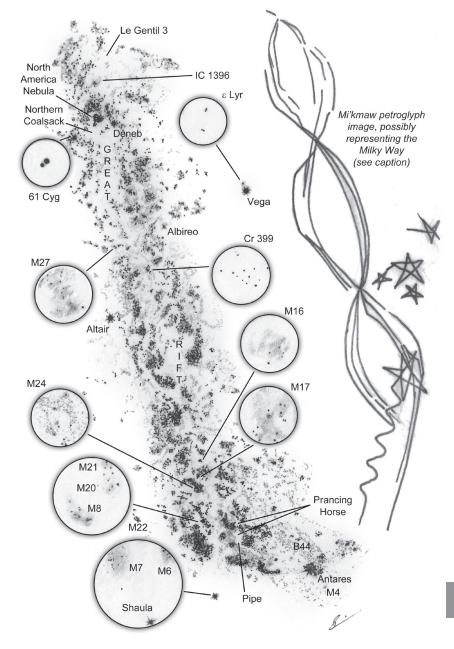
As we travel into Aquila, note the change as bright starclouds give way to intervening dust of the Great Rift. While many amateur astronomers are familiar with photos featuring the Dark Prancing Horse of summer, the Great Rift is actually the easiest dark-nebula complex to observe with the unaided eye.

In the western stream of the Milky Way, keen-eyed observers under dark skies will notice the bright fuzzy patch of Collinder 399, a perfect "Coathanger" seen through binoculars. Also in Vulpecula, use the binoculars to reveal the planetary nebula M27, the Dumbbell, where a Sun-like star has expired and its gas is drifting off into space.

In nearby Lyra, locate  $\varepsilon$  Lyrae, the famous Double-Double, with a separation of 208" splitting is possible with the eye alone while each in turn divides into two separate components at 100x magnification.

Continuing along the Great Rift, we enter into northern Cygnus and a dark pool just southeast of Deneb. This region is so dark observers began referring to it as the Northern Coalsack, a huge blank region where dense clouds of dark dust and gas obscure background stars. Just northeast of Deneb is the ghostly shape of the North America Nebula, appearing much as its namesake representing an area of bright star formation weakly visible without optics.

Finally, locate 61 Cygni, the nearby "Flying Star," in reality a binary system of K-type stars resolvable in 7x binoculars as a pair of brilliant crimson-orange stars, also referred to as "Bessel's Star" after the astronomer to first measure stellar parallax.



The petroglyph tracing (reproduced freehand above) is one of several from Kejimkujik Lake held by the N.S. Museum (George Creed Collection). The lines and stars have been interpreted as the Spirit Road by Klaus F. Wellmann in his book A Survey of North American Indian [sic] Rock Art (Graz: Akademische Druck- und Verlagsanstalt, 1979).