## CAMELOPARDALIS by Chris Beckett & Randall Rosenfeld

A "Lamplighter moment" is simply an occasion where, through careful observation of the mundane, one unexpectedly discovers something profound, something achieved by Lucian Kemble fairly regularly during his lifetime.

- David M.F. Chapman

Camelopardalis...well if you want to see a black hole just take a look between Perseus and Polaris, or so goes the old joke because no stars exist here brighter than 4th magnitude. The region looks like a void from city cores. However, in this region, previously left for warnings of "There be Monsters," lies some of the best hunting grounds for the smallest binocular to the largest reflector. Just one catch, though, bright guidepost stars are non-existent, and there are no familiar fields from your Messier objects. Perhaps the gentle giraffe was meant to ease observers' trepidation, though Hevelius is said to have begrudgingly added Plancian's odd animal to the northern polar sky. The Greeks are responsible for the confusing name as they saw the creature we now know as a giraffe possessing features of both camels and leopards and this area of the sky has befuddled more than its share of observers ever since.

In 1980, "unattached" RASC member Lucien Kemble<sup>†</sup> swept up a colorful chain of about twenty stars using humble 7X35 binoculars he described as "...a beautiful cascade of faint stars tumbling from the northeast down to the open cluster NGC 1502." This Wide-Field Wonder, visible to the unaided eye as a faint glowing contrail, became known as Kemble's Cascade, now a popular asterism and a great starting point for locating nearby Finest NGC objects.

Located 1.4° south of NGC 1502's stellar "pool" of two dozen stars lies the planetary nebula NGC 1501, a granular ellipse whose ripples and bright, easily visible, central star give rise to the common name "Oyster Nebula." NGC 2403 is the brightest most northern galaxy not listed by Messier during his comet sweeps, an odd miss since it is now considered a right of passage for novice comet hunters to have a moment of excitement when they stumble upon it. Listed as a "Brightest Galaxy" in this Handbook, it is easily swept up in binoculars while modest telescopes reveal NGC 2404, a star-forming region, beneath a line of foreground stars. Moving north about 5°, we come upon the strange irregular dwarf galaxy, NGC 2366, where a large luminous HII region (Mrk 71) sits at the southern end just opposite another dwarf galaxy, NGC 2363. This pair make for a strange concentration appearing as an out-of-focus binary, and they join a bright foreground star for a dramatic scene.

Next head into far northern Camelopardalis to NGC 2655. This slightly elliptical galaxy has a bright, round nucleus when viewed through moderately sized telescopes. While near the pole be sure to observe the colorful double star 32 Cam. On the way to the next galaxy, check out the carbon stars S Cam, a pulsating variable star; RU CAM, a Cephiad Variable; and ST Cam. These burning embers are easy to pick up and they display brilliant orange-red coloring. Near Cassiopeia is Challenge Object galaxy IC 342, a challenging low surface brightness allows visibility in smaller instruments using low power, while large telescopes may over-magnify this spiral out of sight. Also in these borderlands is Stock 23, a coarse rectangular grouping of 25 stars, easily visible without any optical aid. Binoculars frame this cluster among the many nearby bright nebulae and clusters of the region.

Barnard 8, 9, 11, 12, and 13 form "a large irregular lane" over 6° in length as described by the great observer. Barnard was the first to systematically catalog dark nebulae, he was an RASC Honorary Member c. 1900, and he compared this lane to his "E" in Aquila. While easily seen with any binocular from reasonably dark locations, there are no bright nebulae or starfields to contrast this "void" in space. A few degrees east brings LeDrew 4 (Alessi 2); discovered by Ottawa RASC binocular observer Glenn LeDrew, it appears as an umbrella through binoculars. A few degrees southeast of LeDrew 4 is NGC 1708, categorized as a "non-existent NGC" until Patrick Brennan of Regina re-acquired it in 1976. Writes Brennan, "it is triangular in shape, elongated north-south, 20'x15'...It contains about 10 stars of magnitudes 10 and 11, with a score of fainter ones." It is no surprise that an entire star cluster could be lost for almost 150 years in Camelopardalis, but maybe, if you crane your neck and aim your instrument at this blank spot in space, you can find something new, or at least fill an evening pondering the question, "why is there a giraffe in the northern sky?"



Diagram by Randall Rosenfeld

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