

## KEMBLE'S FIFTY-TO-THE-POLE PROGRAM

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*"I would like to present...a sample list of my favourite objects, most of which are within reach of an 8-inch scope in a dark sky. Such a program is a challenge and a test of your observing skills that yields unexpected, pleasant surprises, some frustration, and plenty of insight into the universe."*—  
Fr. Lucien J. Kemble (1922–1999) a.k.a. "Lamplighter"

Circumpolar deep-sky objects circle Polaris each night but are often ignored in favour of targets that "pass up and down so swiftly." We promise ourselves to get to them later, but a scarcity of programs means we are on our own, so Kemble set out "to observe and draw all the deep-sky objects within my telescopic limit from an arbitrary declination of +50° to the north celestial pole" as a guide. His list includes objects of mag. +13 and brighter, plus over 100 to mag. +15.5, totalling ~600 objects; he published a selection in *Deep Sky* magazine, Fall 1987.

Kemble's Cascade of stars flows 2.5° to NGC 1502, "a bright spurt of stardust from off-Milky-Way, a cluster of many double stars." IC 342 "The Hidden Galaxy," a barred spiral with a small bright core, is a stark contrast to NGC 1961's small nucleus and low surface brightness, making it a challenge. West of a neat little cluster of faint stars is the "elongated, diffuse" galaxy NGC 2146.

Though it is a double star, Kemble found some glow around IC 1851 similar to NGC 7023, "a gem of a reflection nebula." Using low power on the open cluster Trumpler 1, he saw "a charming tiny, boxlike group of stars in a rich starfield." Another pattern emerged in NGC 7510, "like a swarm of glowing gnats flying in a V-formation, a gorgeous cluster set off in a sea of black space." Modern observers view IC 1434 as a "mini-Kemble's Cascade." East of 16 Cygni but in the same field is NGC 6826, the "Blinking Planetary", a bluish star with a nebula that pops with averted vision, and north into Cepheus, NGC 6939, "a tight cluster of faint stars."

In Draco, NGC 6654 is an easy galaxy to see as "a round, bright haze"; nearby Kemble 2 is a "mini-Cassiopeia." NGC 6543, the "Cat's Eye" planetary nebula's sharp green hue contrasts with the ghostly groups of galaxies he hunted, such as the "especially satisfying" NGCs 5484, 5485, and 5486. In Ursa Major, an easier target is NGC 5308, "a bright galaxy with an almost starlike core." Near the bottom of the Bowl, NGC 3972 appears as an elongated glow rewarding persistent observers, while NGC 4175 sits "nicely nestled in a nearby field of bright stars." The galaxies NGC 2602, 2603, and 2606 are the faintest on his list, requiring dark skies and patience. Quick conquests are won with the bright, surprisingly easy NGCs 2320 and 2322, with many fainter galaxies in the same ½° field.

Near Polaris he found NGC 3183, "a large, oval, mottled galaxy with four or five faint starlike points," while NGC 2715 is "a large faint elongated spiral in a nice starfield." Two braces of galaxies are nearby, NGCs 5909 and 5912 forming "a fine pair," where 5912 has a brighter core, and NGCs 6251 and 6252, "a nice pair," the latter being Kemble's first mag. 15 object. NGC 188 closes in on the pole, among the oldest clusters and "bounded on the east and south by bright stars." Finally, NGC 3172, "Polarissima Borealis," the most northerly bright galaxy with its "small, faint, starlike nucleus" brings us to a close.

Kemble's observations demonstrate the rewards of taking on a challenge and what you can see if you actually take the time to look around on your way to the pole.

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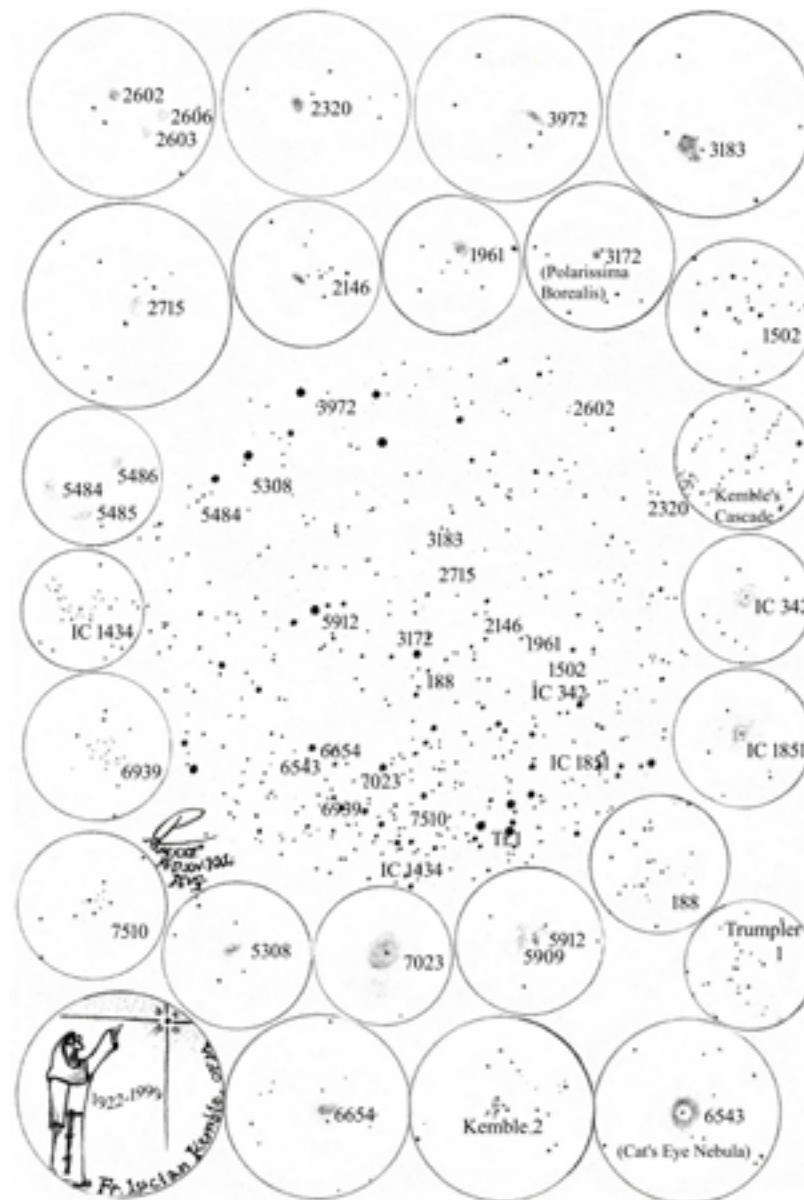


Diagram by Randall Rosenfeld

\*For 50 of Kemble's favourite objects north of +50° see [rasc.ca/supplements](http://rasc.ca/supplements)