

## OPHIUCHUS, THE SERPENT BEARER

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*To the Phantom's back the Crown is near, but by his head mark near at hand the head of Ophiuchus, and then from it you can trace the starlit Ophiuchus himself...but his hands are not at all so bright; for faint runs the gleam of stars along on this side and on that....Both firmly clutch the Serpent, which encircles the waist of Ophiuchus, but he, steadfast with both his feet well set, tramples a huge monster. — Aratus*

Southern Ophiuchus is the best Milky Way region for exploring on late spring nights. One of the 48 constellations listed in Ptolemy's *Almagest*, in classical mythology the Centaur raised Ophiuchus, teaching him to heal, but the snakes on his staff taught him to raise the dead. Rasalhague,  $\alpha$  Oph, the "Head of the Serpent Collector," is among the brighter stars in the summer sky. On Ophiuchus's shoulder, Ptolemy lists 66, 67, 68, 70, and 72 Ophiuchi as a distinct pattern, eventually known as Taurus Poniatovii; this defunct summer bull is framed perfectly in binoculars. Small telescopes split 4th-mag. 70 Oph, one of the finest colourful double stars, and a short star hop from 66 Oph is Barnard's Star, discovered by E.E. Barnard as the second-nearest star and one of the fastest moving, but at mag. 9.5 requires patience and a good finder. Barnard's motion against the stars is evident over the 41 years of observation by Rick Huziak. A binocular field northwest is IC 4665, the Summer Beehive, appearing as the terminus of an off-piste branch of the Milky Way and among the best open clusters for wide-field instruments. Farther east in this branch is NGC 6633, discovered by de Chéseaux. This naked-eye cluster curls around a 6th-mag. star in small telescopes and binoculars. Nearby NGC 6572 is one of the best planetary nebulae, shining as an emerald-green 8th-mag. diamond. Large instruments show a couple of nearby 11th-mag. gems in the globular cluster NGC 6426, which appears as a ghost in a 12-inch telescope, while NGC 6384, a rare summer galaxy, requires dark, transparent nights.

Stay up late and observe the "duelling clusters" M14, M10, and M12, which run across the middle of Ophiuchus and combine with M9, M19, M62, and M107 to create a grapevine of globular clusters, all easy targets and showpiece objects in a 12-inch reflector. M10 is a favourite for small scopes, easy to find with well-defined extensions; for larger reflectors, M107 pairs well in the same field with V Oph, a brilliant crimson-red pulsating Mira-type carbon star 1.5° east. Locate this field by star hopping south of  $\zeta$  Oph, the nearest O-type star, and one of the most famous "runaway stars," having likely been expelled from a double-star system when its more-massive companion exploded. Near  $\zeta$  Oph is Sharpless 2-27; use a broadband nebular filter in a rich-field telescope to see this huge horseshoe-shaped nebula extending as far as V Oph and looping back up to  $\nu$  Oph. For an easier challenge, centre  $\delta$  Oph in a low-power field to view a beautiful symmetrical scattering of stars flanking  $\delta$  Oph.

The most well-known Barnard discoveries are dark nebulae and Ophiuchus is home to many: the Dark Horse Nebula, visible to the unaided eye from dark skies; with binoculars, B59, B78, and B77 form the Pipe Bowl and Stem, while B262, B63, B64, and B268 help fill out the horse. The easiest way to see them is to centre  $\theta$  Oph in your binoculars and sweep southeast. From the best sites, B72, the Snake Nebula, is visible in telescopes as a broken "S" with B44 extending from the forelegs of the horse. B44 is a long, dark filament terminating at 22 Sco. Nearby Rho Ophiuchi is among the best multiple stars, while the ethereal Rho Ophiuchi Nebula, made famous in long-exposure images, is elusive, requiring perfect skies but just 50-mm binoculars to detect. From more southern latitudes, telescopes of all sizes can ferret out many ethereal nebulae in this region.

The above is a selection from this *Observer's Handbook*, which details at least 49 objects worth seeking out in Ophiuchus during 2022.

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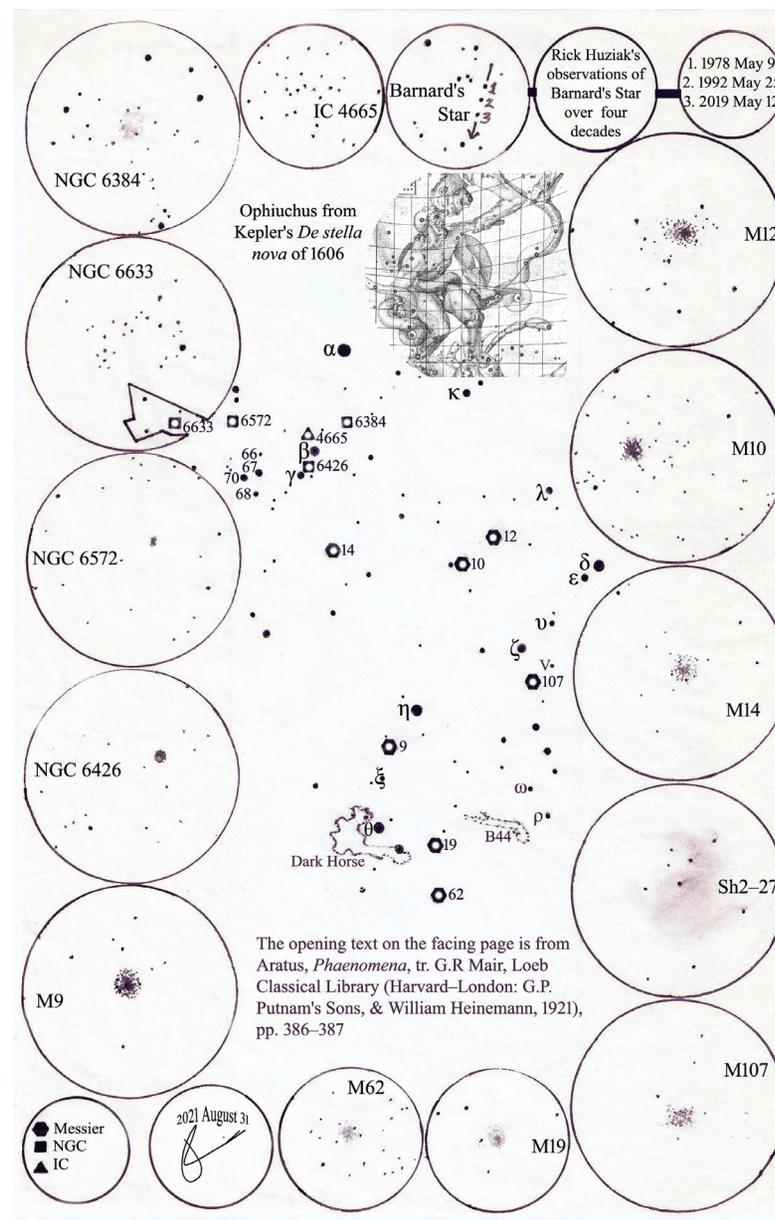


Diagram by Randall Rosenfeld