

One Good Target

With Some Other Sights Worth Seeing
While You're in the Neighborhood

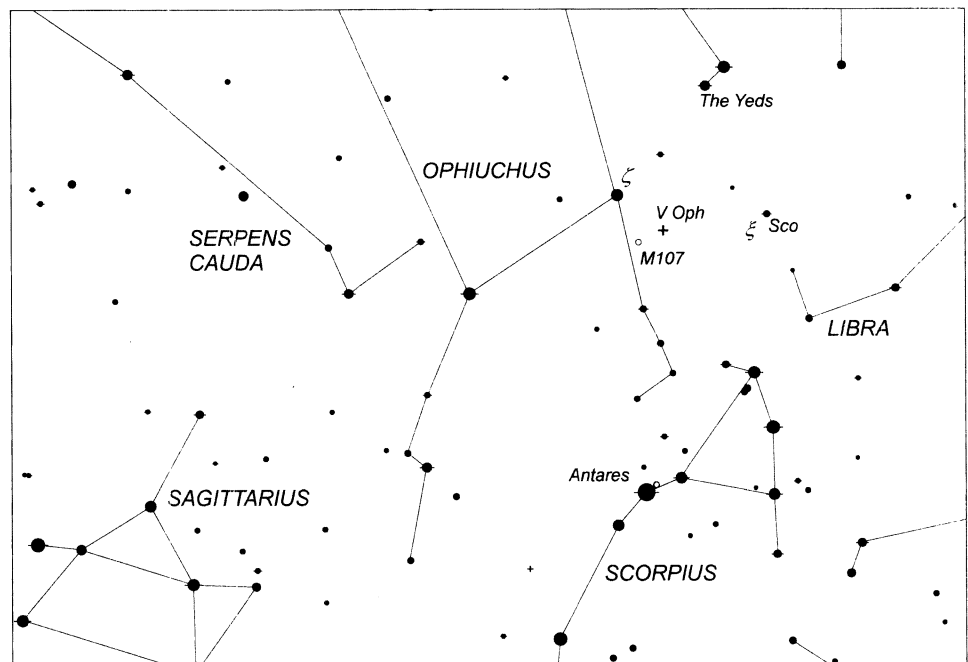
June

A So-So Globular Cluster in Ophiuchus (M107)

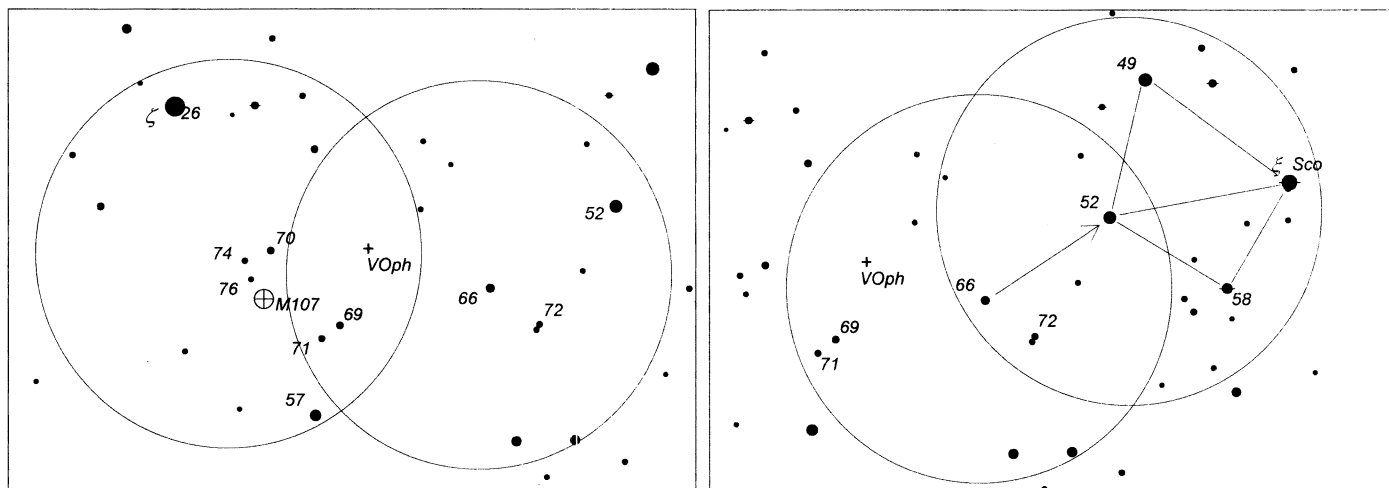
with side trips to a challenging red carbon star
and a glorious double pair

One of the unavoidable truths of visual astronomy is that some of our targets aren't quite as impressive, beautiful, or stunning as others – but they're still worth at least an occasional visit, if for no other reason than to remind us just how special those top-shelf targets really are. This month's primary target, globular cluster **M107** in Ophiuchus, is one of those lesser lights. It glows at mag 8.1 and spans a diameter of 4 arcminutes, which isn't bad for a globular cluster – although it does make M107 the smallest and faintest of the seven Messier globulars in Ophiuchus, only a quarter as bright as the constellation's big three: M10 and M12, which were covered in the June 2022 edition of OGT, and M62, near the constellation's southern border.

***This month's targets:
area view, stars to mag 5***



M107 is easy to find, 2.7° SSW of mag 2.6 Zeta (ζ) Ophiuchi, at the constellation's western hip. In a finder scope (or binoculars), as shown below left, it appears as a glowing spot with a bright starlike center; a pair of mag 7½ stars point to it. Because the brightest stars in M107 are only 13th magnitude, small scopes don't show much more detail than the finder. The cluster takes on a grainy appearance in 6" scopes, and the edges begin to resolve in 8" instruments at high power. This one doesn't get much better than that.



While you're in the neighborhood, look to the west side of your finder field (or pan west until a mag 6.6 star is near center, as shown above left) to find **V Ophiuchi**, a deep red carbon star whose brightness varies between a relatively easy mag 7.3 and a quite challenging mag 11.6. To find it, start by putting the two stars to its south in a 1° eyepiece field as shown below, then pan one field to the NNW and your quarry will be roughly centered in the view. Like all carbon stars, V Oph is at its reddest when it's least bright, so it's worth some effort to catch when it's in the fainter parts of its range.

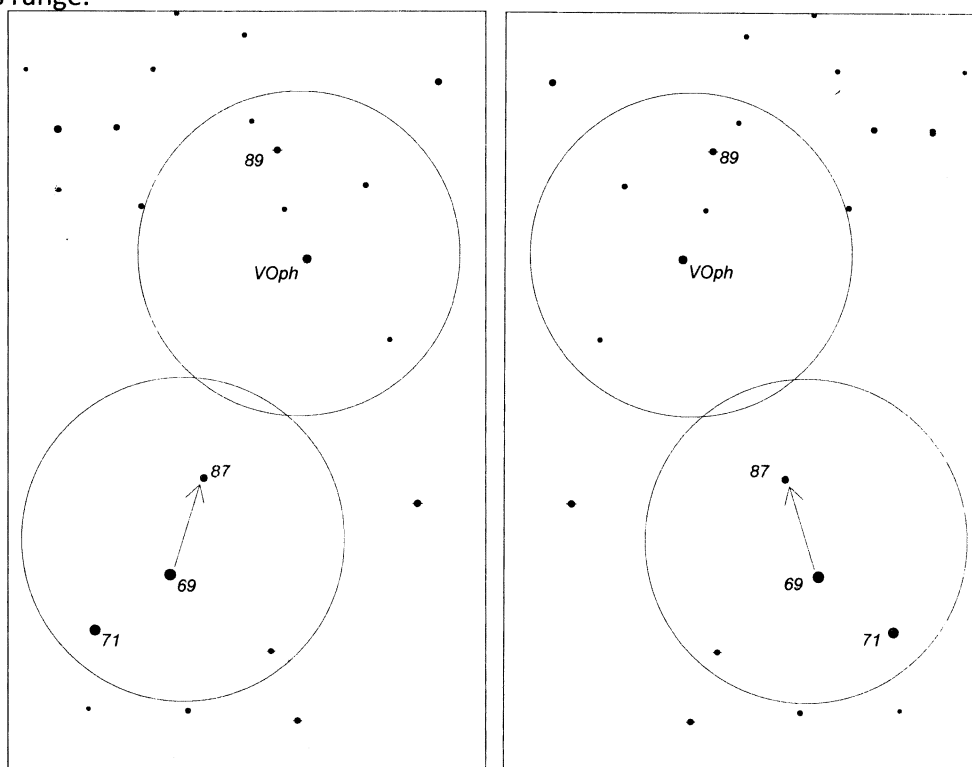
**Top left: M107 and V Oph,
5° fields, stars to mag 8**

**Top right: Xi Sco and Σ1999,
5° fields, stars to mag 8**

**Center right: V Oph,
1° fields, stars to mag 10**

**Far right: same,
mirror-reversed**

**All: North at top,
selected mags noted,
decimals omitted**



Before packing up for the night, go back to the finderscope view and pan one field farther to the NW, as shown at top right, to reach a triangle of relatively bright stars. The most westerly star in the triangle is **Xi (ξ) Scorpii**, which forms a magnificent double pair with **Struve (Σ) 1999** immediately to its south. Although OGT usually leads off with the month's "wow" target, we saved the best for last this time. Xi is a lovely white + orange pair, mags 4.2 + 7.3, separated by a close but comfortable 7½ arcseconds. Less than 5 arcminutes to its south is Σ1999, a fainter but wider pair comprising two orange stars, mags 7.4 + 8.1, separated by an easy 12 arcseconds. It's a pretty and somehow restful view, and a fitting place to end an evening in the southern reaches of the early summer sky.

Rick Gering / June 2024