

One Good Target

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

May

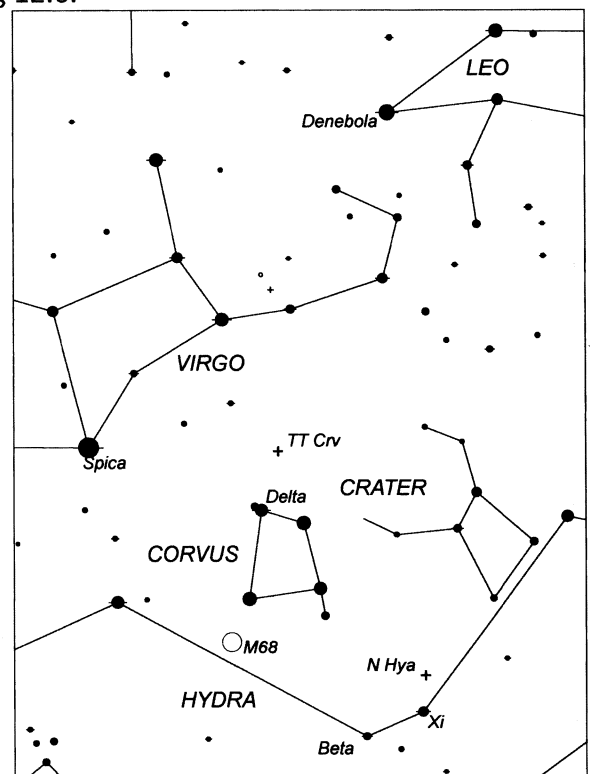
A Globular Cluster in Hydra (M68)

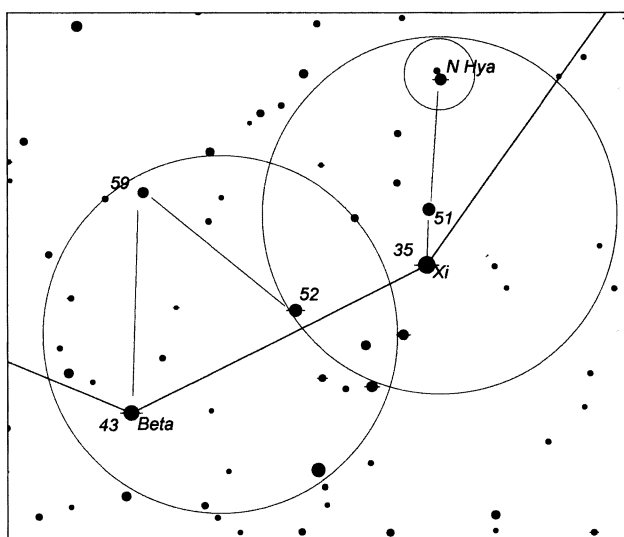
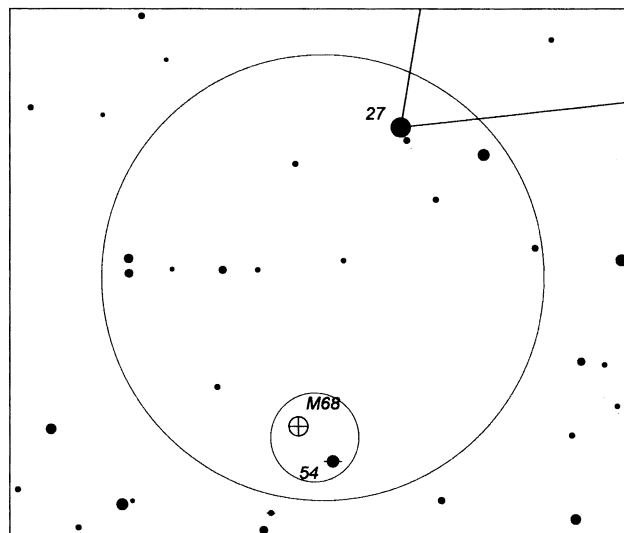
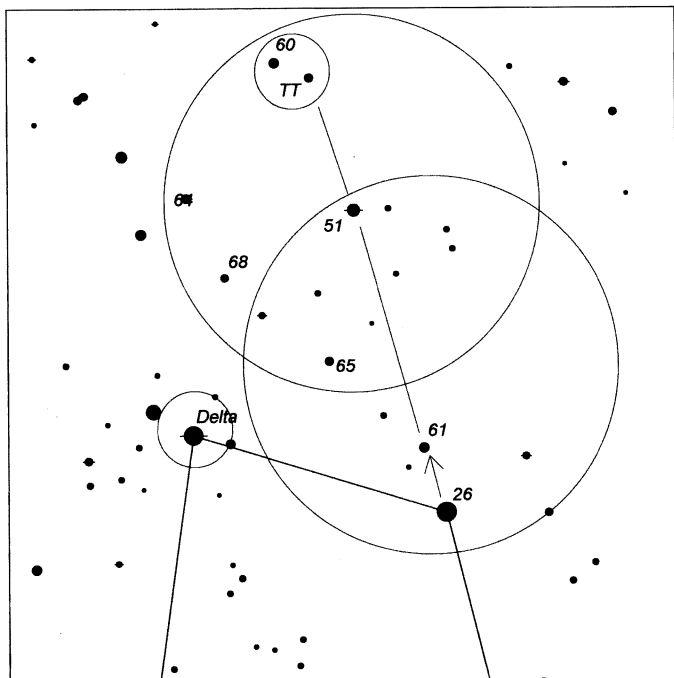
with side trips to a red giant in Corvus
and a couple nicely-colored double stars

Hydra (The Water Snake) is one of the constellations we inherited from the Greeks and Romans, who based it on a similar constellation conceived by the Babylonians. It's both the largest and the longest of the constellations we recognize today, stretching an enormous distance from west to east, as if nature wanted to underline the panoply of Spring zodiacal constellations from Cancer through Leo and on to Virgo: it's so long that its tail rises more than six hours after its head! Despite its impressive size, Hydra was mostly ignored by Messier, who found only three of his "comet-like objects" within its borders. One of them is our principal target this month: **M68**, a globular cluster Messier discovered in 1780. It's not very dense for a globular, containing only about 100,000 stars molded by gravity into a sphere just over 100 light years in diameter. At a distance of 33,000 light years from us, it covers an area 11 arcminutes wide and glows at an integrated magnitude 8.0. Its brightest individual stars are mag 12.6.

M68 is surprisingly easy to find: just follow a line down the left (east) side of the "tent" figure of the constellation *Corvus (The Crow)*, then another half step along the same line to the cluster, which sits just a half-degree NE of a mag 5.4 star. (To find Corvus, follow the familiar path beginning at the handle of The Big Dipper, then "arc to Arcturus, spike to Spica, and curve to Corvus"). Binoculars or a finder scope will show M68 as a glowing spot of diffuse light, contrasting with the pinpoint precision of the adjacent field star. It's featureless in small scopes but shows mottling in 4" instruments, and begins to resolve at high power. Try it around 100x, then bump up the magnification as conditions permit. The edges resolve in 6" scopes, while 8" scopes show dozens of tiny stars splattered across a bright underlying mist. The entire cluster resolves nicely (but not completely) in 10"+ scopes at high power.

This month's targets (showing stars to mag 5)





Finder charts for this month's targets:
5° fields / 1° insets,
North at top, stars to mag 8,
selected magnitudes noted,
decimals omitted

While we're in the neighborhood, let's go back to Corvus to check out a couple interesting stars. First is the star where we began our search for M68: **Delta (δ) Corvi**, which medieval Islamic astronomers named *Algorab (The Crow)* after the constellation's Greco-Roman name – Alpha (α) Corvi was named *Alchiba (The Tent)*, which is the constellation's Arabic name (and a much easier image to see in these stars). Delta consists of a mag 3.0 yellow primary 24 arcseconds away from a much fainter mag 9.2 lilac companion, producing a gorgeous pastel pair. You should be able to split it around 40x, but it might take a bit more due to the large (300x) difference in brightness between the two component stars. To reach our second target in Corvus, we'll follow a line along the right (western) side of the tent upwards for roughly one more step to find **TT Corvi**, a red giant pulsating variable whose brightness meanders across a narrow range from mag 6.5-6.6 over an 11 day period. It's a startling red spark against the dark background sky.

Before packing up for the night, let's return to Hydra for one more double star. We'll start on the right (west) side of the Corvus tent again, but this time we'll follow the line *down* one more step to one of Hydra's pattern stars, mag 4.3 Beta (β) Hydrae. From there, scan 4.7° WNW to the next pattern star, mag 3.5 Xi (ξ) Hydrae. Our target, **N Hydrae**, is 2.6° NNW of Xi. It pairs a mag 5.8 white primary with a mag 5.9 violet secondary just over 9 arcseconds away, and can be split at medium power – 75x to 100x should do it nicely. It's a strangely regal view, and a fitting spot to end our evening's explorations.

Rick Gering / May 2025