



# [Your Name Here]-1

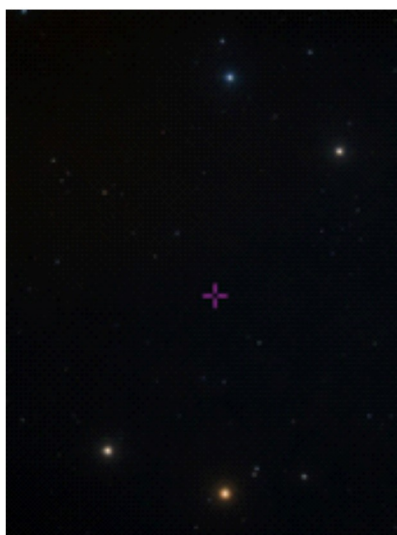
Brad Young, Astronomy Club of Tulsa

One of the joys of sweeping the night sky is the plethora of lines, figures and shapes seen in the star fields. Many groups of stars that you see aren't among the official constellations and are called asterisms. Some are large enough to be seen with the naked eye, and others show up best in a telescope. Quite a few are listed in books and other references, and you probably know many of them already. For instance, the Big Dipper is an asterism. It's part of the constellation Ursa Major but it's not actually a constellation itself. The shape we see as a dipper has been seen by many cultures over time, and given different names and mythology, but the constellation itself includes more stars, and even another asterism, [3 Leaps of the Gazelle](#).

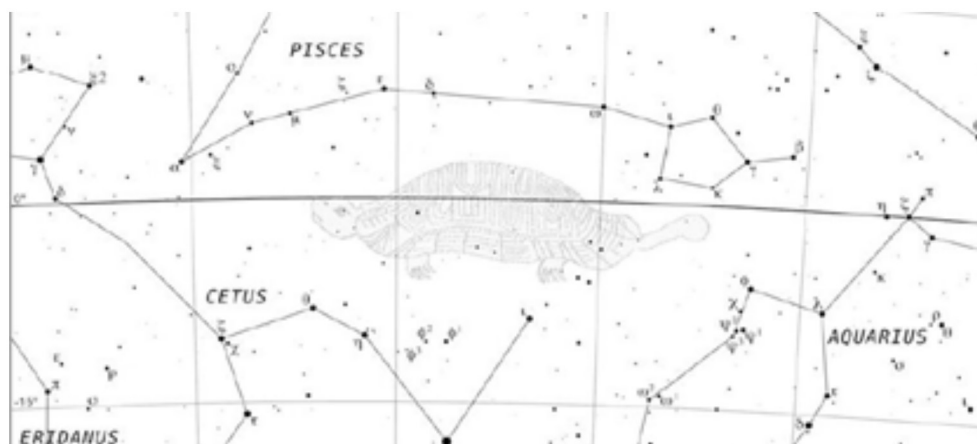
Of course, people see different groups in their own way even today. Asterisms may be generally known or published, part of an obsolete constellation, or unknown (except for in the eye of the beholder). The following examples might encourage you to look for these groups, or sweep along in the sky, making up your own as you see interesting shapes or beauty.

## Little Box and Lawn Chair

Over the years, I have found dozens of beautiful little fields and groups and have a few favorites, many from satellite hunting. One is what I call the Little Box. This group of four stars first drew my attention because it is near the First Point of Aries, where the Sun is located at the Spring Equinox. Later, I learned it is also part of an extinct constellation called Testudo, which was shown on star atlases and maps in the West until it was removed with the [adoption of the 88 official constellations in 1930](#). Testudo the Turtle consisted of what I call the Little Box plus a few more stars to the east along the Pisces / Cetus border. The star at the southwest (bottom right) is 30 Pisces.



Little Box



Testudo the Turtle

The Little Box is especially useful to me because geosynchronous satellites flare up and become easy to see in autumn. For my latitude, they appear to pass right through the box during early October. I had noticed it long before my interest in satellites, but now I use it to find them every fall. Now that I know its history, I enjoy it all year long.

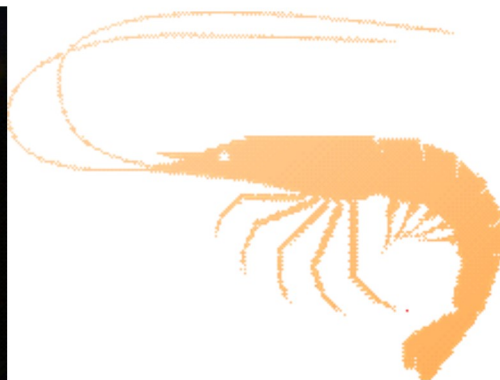
On the other side of the sky, there is a group of 7th magnitude stars at 10h 21m -50 in Sextans that looks like a lawn chair, and I use it for the same purpose as the flaring satellites pass right through or right next to it. I like to think it is a stellar version of my lawn chair as I sit and look at it. As far as I can find, this is a "Brad" group – not published by others.



The Lawn Chair

## Under the Sea (and Ground)

Other groups abound such as 67, k, u, and 72 Tauri just above the Hyades. It's a group of four stars that look a bit like a shrimp. This winter, Mars has passed by this group three times during its opposition loop. John Chiravalle includes this as part of his asterism the Fishhook in "Pattern Asterisms", but I see only this part, and as a shrimp. There are lots of asterisms and [former constellations](#) with this common shape, such as Gryphites (Shellfish), Hippocampus (Sea Horse), Hirudo (Leech), and Patella (Limpet) to name a few.



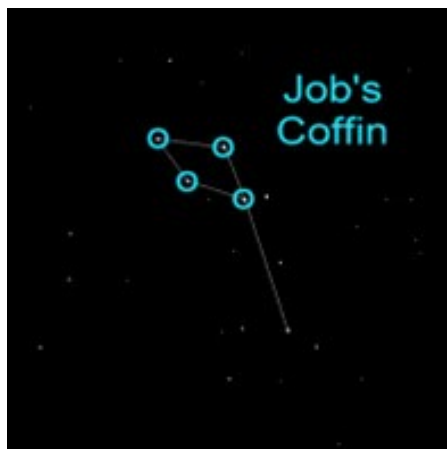
Shrimp

It also resembles the star cluster Melotte 31, also called the [Flying Minnow](#) that is near AE Auriga, a runaway star (a star with high proper motion) that lights the Flaming Star Nebula. The group is hard to miss on your way to that object. AE Aur is at the upper right, with its nebula, and the bright star at the south end of the Minnow is 16 Aurigae.



Flying Minnow

All of these resemble Delphinus, the Dolphin, an official constellation which includes its own asterism, [Job's Coffin](#). This asterism is the diamond shape formed by the four bright stars in the head of the Dolphin as shown below.

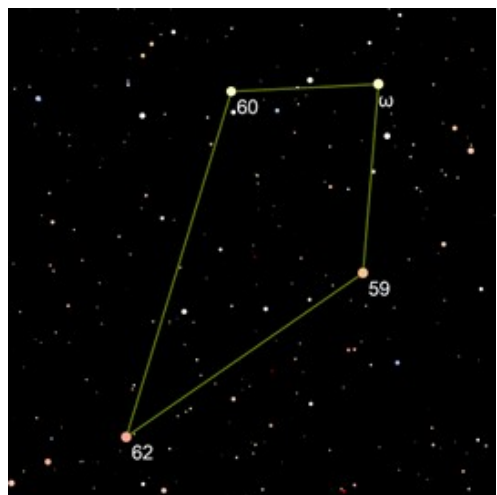


## Snail and a Slice

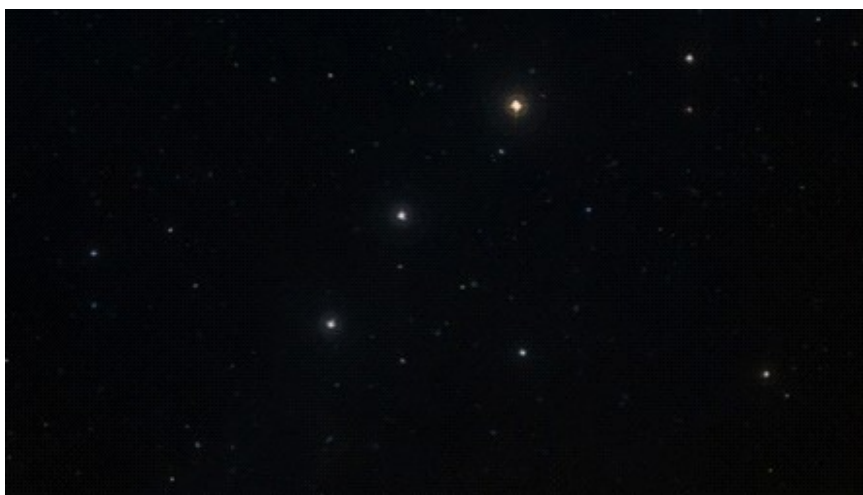
[Terebellum](#) in southeastern Sagittarius is another group, named by Ptolemy, that is not a constellation itself. It consists of four stars (59, 60, 62,  $\omega$  Sagittarii) and is near Messier 55. Named for a snail (I don't see it), the Chinese had another idea, and called it Dog Territory. It was included in their [wide collection](#) of groupings in modern Sagittarius.

Just north of the horns (g and d) of Capricornus, is a little group of four or five stars that looks a bit like a slice of pizza. This little group is made up of 42, 44, 45 Capricornus and three others. In 2022, Saturn was moving through it during its opposition. [Classic star charts](#) usually show only 42 plotted (as "d" in this case) and it does not appear to be a known group. And it must be plain cheese, as there are no stars inside the group for toppings. *Note – [some sources](#) list the Summer Triangle as the Pizza Slice, but the original name is well established.*

There are uncounted other little groups all over the sky – it would be easy to find groups of your own that resemble a bird or a box or some other object that you can easily remember.



Source: Wikipedia



Pizza Slice

## Alternate Views

Another way of viewing these groups is to see how other cultures have viewed them, in both location and time. The stars were a fundamental part of the mythology and philosophies of all countries, empires, and even prehistoric tribes. At my website, view information on the [Alternate Constellations Observing Program](#) and see the list of resources there on cultural astronomy. There are [also other programs](#) on Asterisms and the official Constellations to help you enjoy our sky more. You may find your favorite group there, as an obsolete constellation, or an ancient Akkadian warlord.



# Build Your Own Catalog

Deep sky objects can hold the same type of individual objects that only you “know about”. One of my favorite sites to see is the dark nebula leading to the Cocoon Nebula in Cygnus. I start by viewing it naked eye (in a very dark sky) and follow with “zooming in” on the nebula itself with the telescope. I don’t know of an official name (“bradding?”) for this sort of observation, but gradually admiring an object’s surroundings with the eye, or binoculars, and then homing in with power and resolution is a great way to view many deep sky sights. And, in a way, that experience is your own, part of a personal catalog.



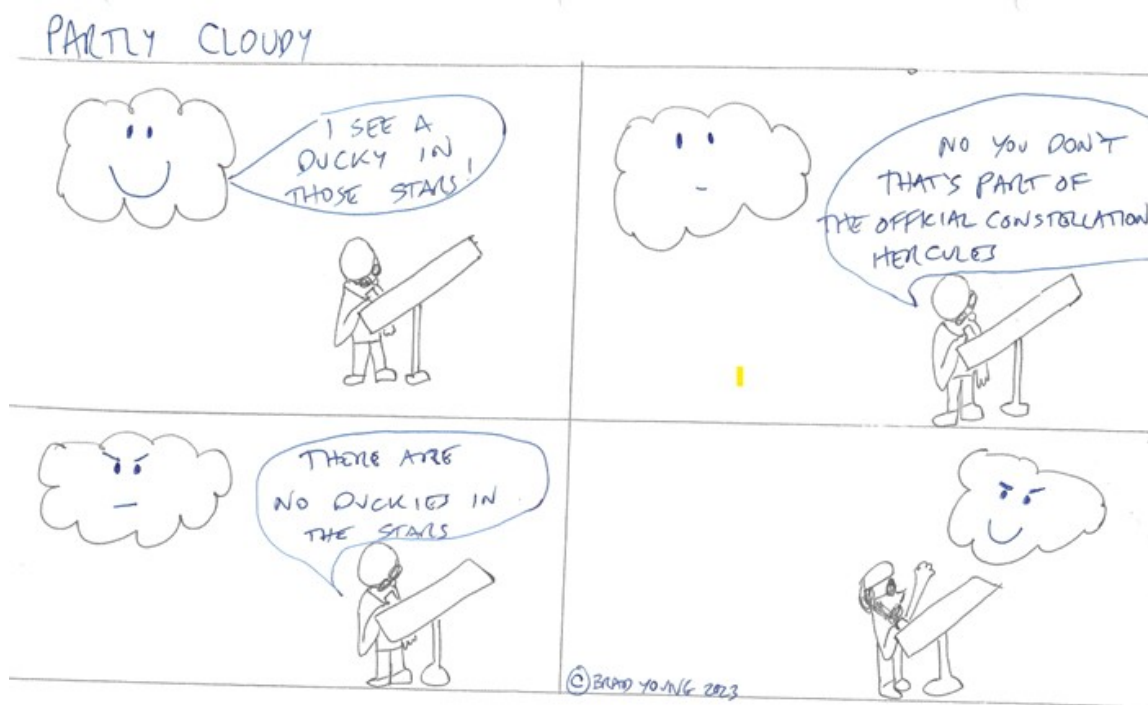
*Cocoon Nebula (IC 5146), LDN 1042 and vdB147 in Cygnus (by Jonathan MacCollum)*

I learned about this method when I first began observing and discovered the field surrounding NGC 6871 and 6883 along with Biurakan1 and 2 in Cygnus. Although the area contains cataloged open clusters, back then I didn't have good charts (or computer). It seemed to me that the loop de loops, wide double stars, and connecting lines and whorls of stars between all of these objects was something that only I knew about. I returned to that field repeatedly to enjoy the interaction between the clusters and the Milky Way surrounding it.



*Drawing by Richard Orr*

Sweeping the sky and star fields surrounding a target object is often as rewarding as the target object. There's a lot of interesting stuff out there that may not be cataloged, but it's beautiful nonetheless and near objects that you're looking at anyway. The next time you're observing, look around your object and if there's not a neat clump of wide double stars or a line or circle of colorful field stars. If no one's looking, you can catalog them as [Your Name Here]-1.



**Note:** all sky images are screenshots from Aladin unless otherwise noted.

## Resources:

A great source for the history of obsolete and forgotten Western constellations and asterisms is the set of two books by John Barentine listed in the references below. These groups were inserted by early uranographers to fill the “gaps” between the major constellations, and many have colorful histories and stories, as Barentine presents in an informative and entertaining way:

The Lost Constellations, John C. Barentine ISBN 978-3-319-22794-8  
 Uncharted Constellations, John C. Barentine ISBN 978-3-319-27618-2

<http://www.rocketmime.com/astronomy/fig/UrsaMajor.gif>  
<https://en.wikipedia.org/wiki/Constellation>  
[https://en.wikipedia.org/wiki/AE\\_Aurigae](https://en.wikipedia.org/wiki/AE_Aurigae)  
<https://www.astrosop.eu/magazine/practical-tips/observation/tours-with-binoculars/non-identical-triplets-and-a-flying-fish/i,1250>

Pattern Asterisms, John A. Chiravalle ISBN 978-1-84628-327-7, p.53

[https://en.wikipedia.org/wiki/Omega\\_Sagittarii](https://en.wikipedia.org/wiki/Omega_Sagittarii)  
<http://www.orrastrodrawing.com/NGC6871-6883-Biurakan1-Biurakan2.html>  
<https://www.astroleague.org/al/obsclubs/AlphabeticObservingClubs.html>  
<https://hafsnt.com/index.php/alternate-constellations/>  
<https://astronomy.com/magazine/phil-harrington/2020/09/a-dolphins-tale>  
[https://en.wikipedia.org/wiki/Dipper\\_\(Chinese\\_constellation\)](https://en.wikipedia.org/wiki/Dipper_(Chinese_constellation))  
<https://twitter.com/astrogeo/status/1297682343939858432>  
<https://www.darkflats.com/Deep-Sky/Cocoon/Cocoon%20OSC.L3.60x240s.Solved.DBE.BN.CC.NR.HSVR.ArcSin.MS.LHE.DeconStars.LSLHE.MMTNR.MTStars.NR.Draft2.png>