

***Cheat Sheets***

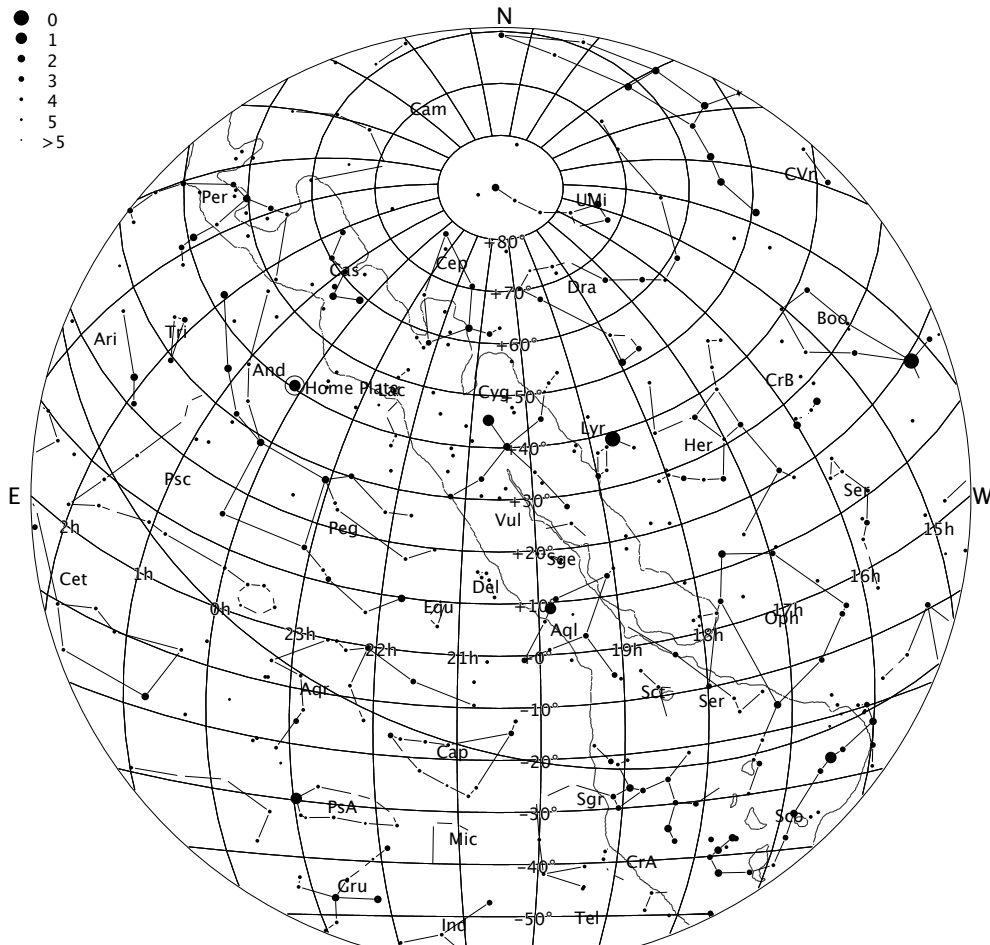
**for the**

**Binocular Asterisms**

**ESP 2011**

(Charts from *AstroPlanner*; descriptions from *Mr.Demelza Ramakers*.  
Assembled by Blackie Bolduc)

# #1 Home Plate



Andromeda

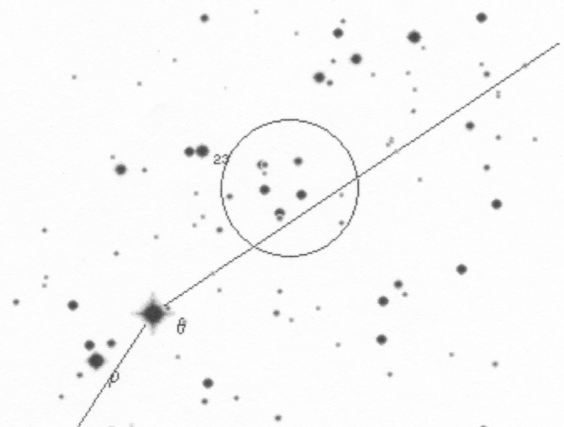
Home Plate

RA: 00h 07.5m

DEC: 40d 35m

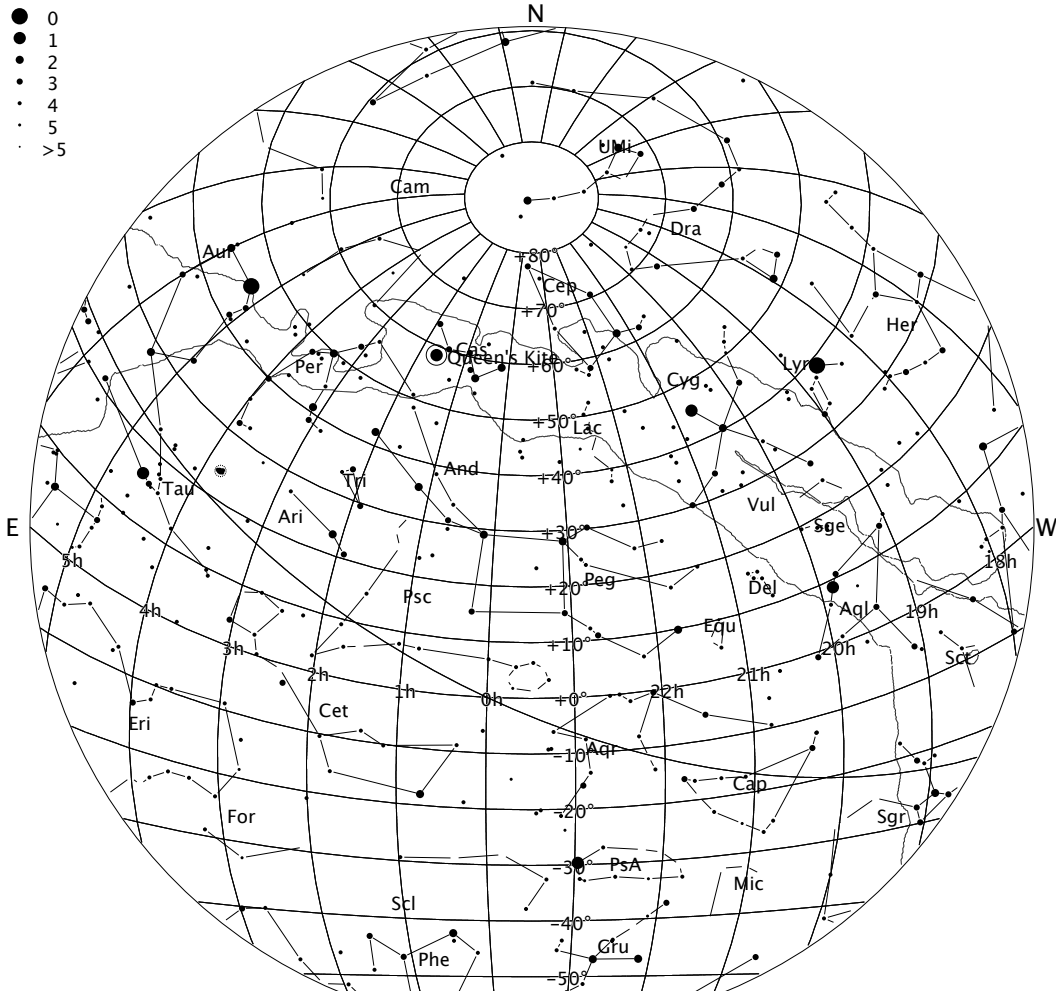
44' x 31'

The Home Plate is a beautiful target for binoculars. There are 5 stars of magnitude 6.7 to 6.9 visible in the shape of a pentagon. You can find this asterism 1.2° WSW of 23 Andromedae.



Circle is 2 degrees

## #2 Queen's Kite



Cassiopeia

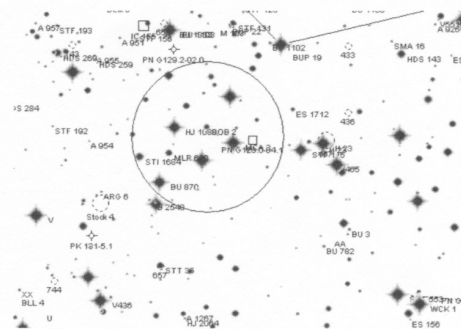
Star 13  
*Queens Kite*

RA: 01h 38m

DEC: 58d 30m

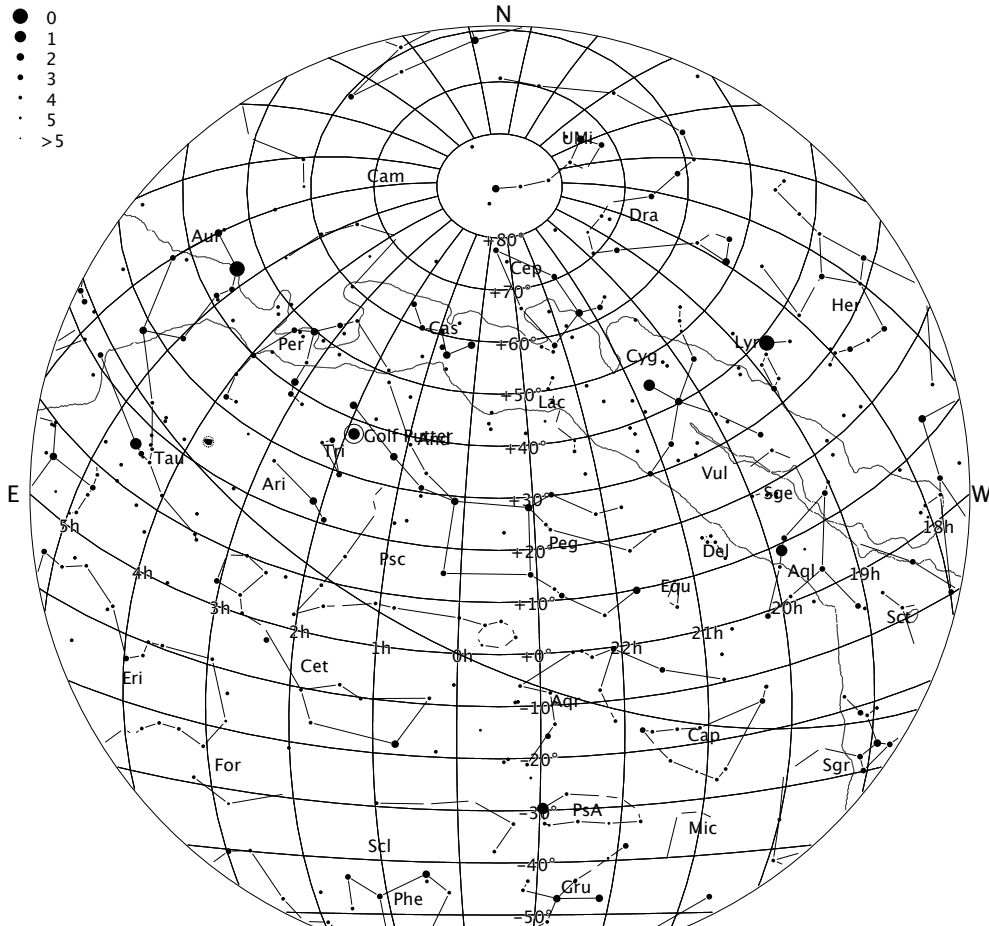
2°x1.5°

The stars in Queen's Kite, including Chi Cas, forms a rough pentagon shape. The stars are of magnitude 6 and 7. Because of the size of Queen's Kite, it is a nice target for binoculars.



Circle is 3 degrees

### #3 Golf Putter



Andromeda

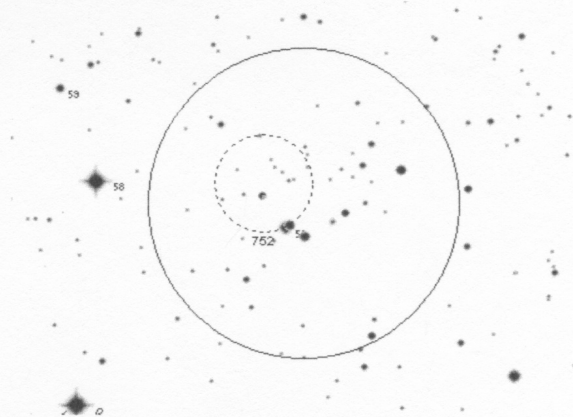
Star 14  
*Golf Putter*

RA: 01h 52m

DEC: 37d 30m

95' x 25'

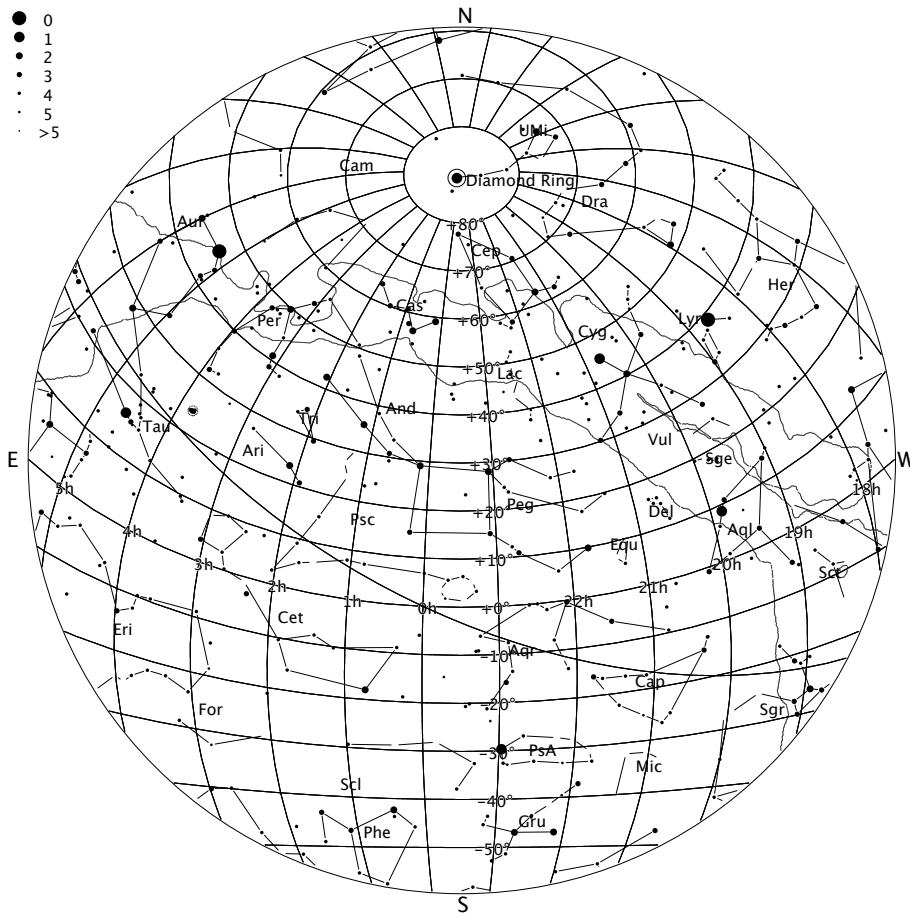
The Golf Putter looks a bit like Kemble's Cascade. There's a long line of stars visible with an open star cluster on the end of it. The row ends with a bow. The open cluster NGC 752 forms the golf ball. Use a binocular for this asterism, because it is comparative large. Draw a line between the stars  $\alpha$  in Triangulum and Almach ( $\gamma$ ) in Andromeda. You will find NGC 752 (that forms the golf ball) within 1/3e distance from this line (count from Almach).



Circle is 4 degrees



## #4 Diamond Ring



Ursa Minor

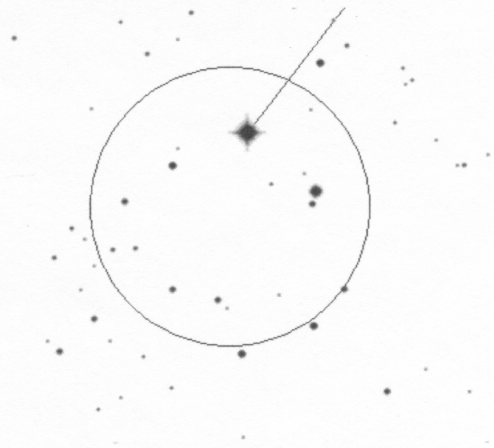
STAR 1  
Engagement  
Ring

RA: 02h 32m

DEC: 89d 00m

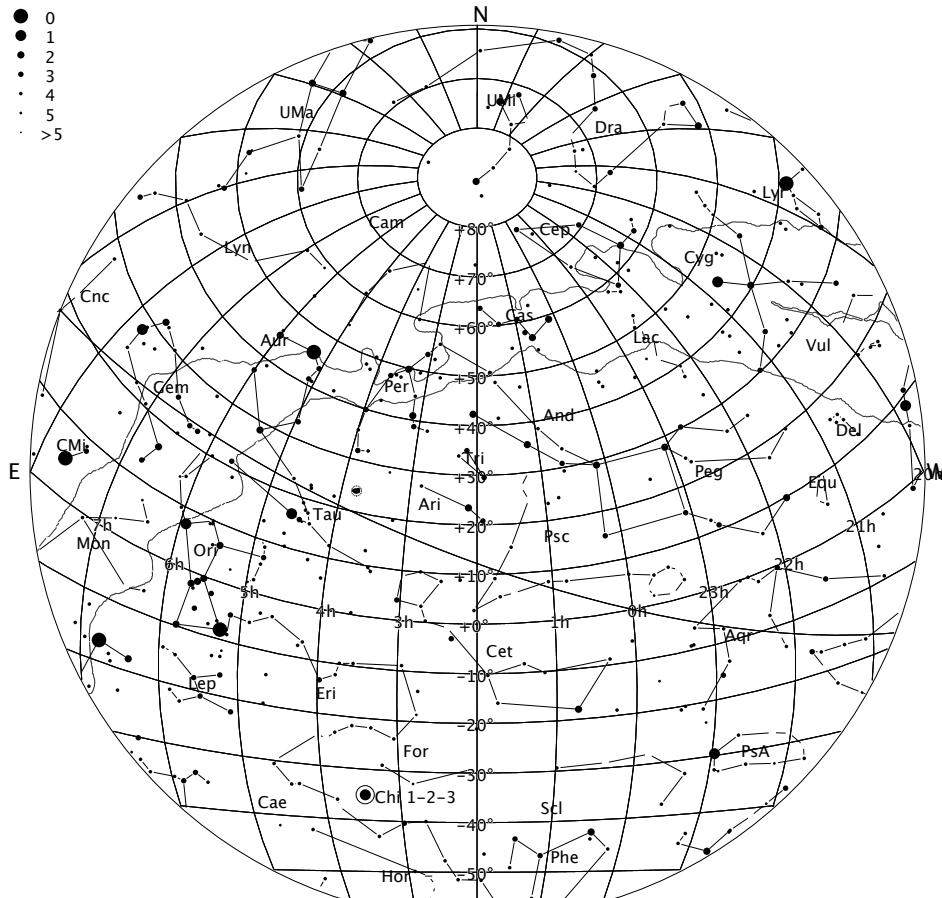
45'

The Engagement Ring (or Diamond Ring) is a pretty asterism in Ursa Minor. Approximately 10 bright stars and a few fainter ones (of magnitude 7 and 8), form an obvious circle, the ring, with Polaris as a diamond. This really is a beautiful asterism to observe with small telescopes with a low magnification! Because Polaris is part of this asterism, The Engagement isn't hard to find.



Circle is 1 degree

## #5 Chi 1-2-3



Fornax

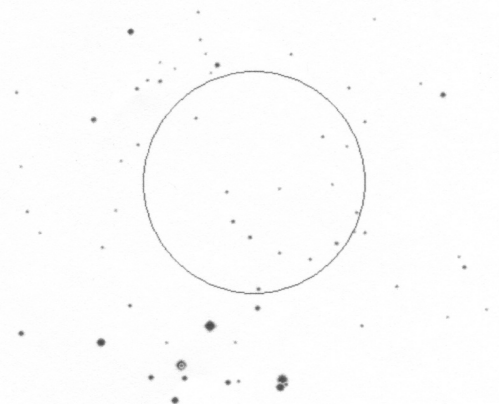
STAR 2  
Chi 1, 2, 3

RA: 03h 27m

DEC: -35d 00m

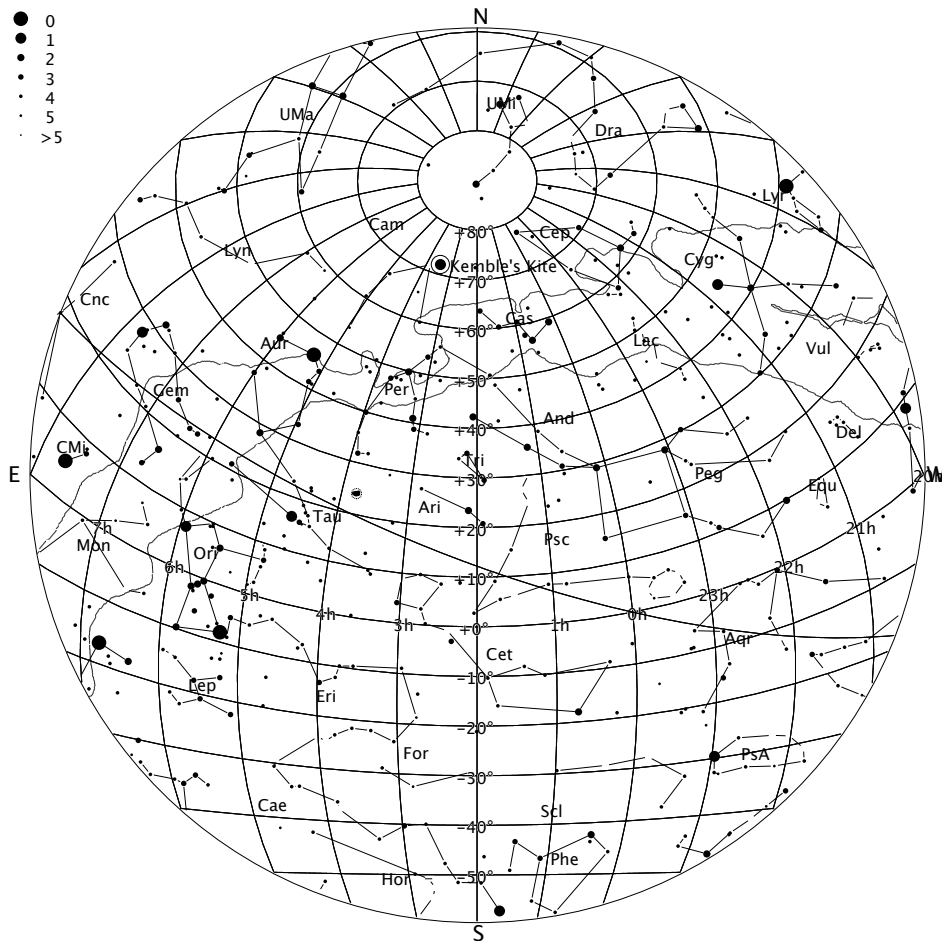
30' x 30'

The asterism Chi 1, 2, 3 contains the stars Chi 1, 2 and 3 Fornacis. The stars are all of magnitude 6 and form an arrow. You can find the asterism 1 degree west of the galaxy NGC 1365.



Circle is 1 degree

## #6 Kemble's Kite



Cassiopeia

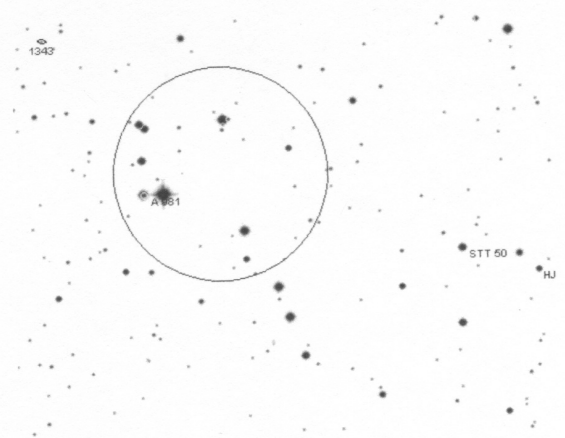
Star 15  
*Kemble's Kite*

RA: 03h 28m

DEC: 72d 00m

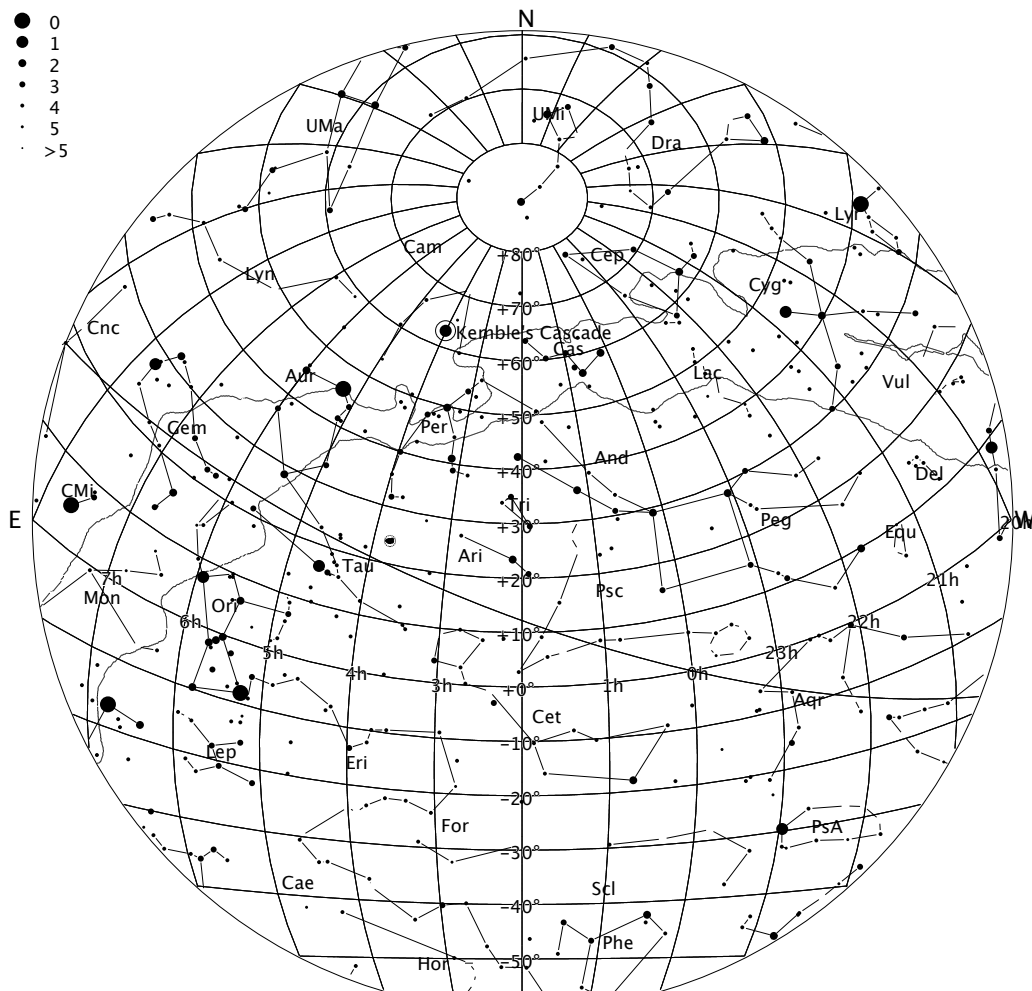
90'x30'

Another asterism Kemble named: Kemble's Kite. The 2° asterism looks like a diamond shaped kite with a tail. There are 7 stars that shape this object. You can find Kemble's Kite near the border with Camelopardalis, north of the constellation Cassiopeia.



Circle is 1 degree

## #7 Kemble's Cascade



Camelopardalis

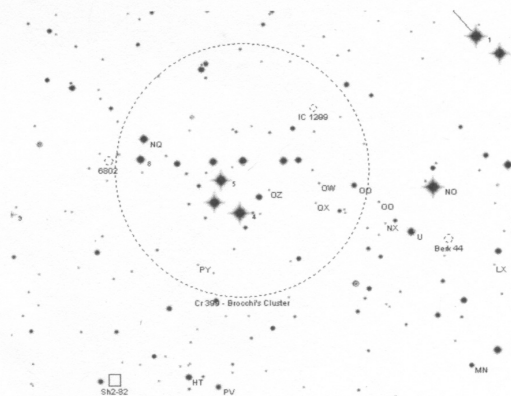
STAR 3  
Kemble's  
Cascade

RA: 19h 26m

DEC: 20d 04m

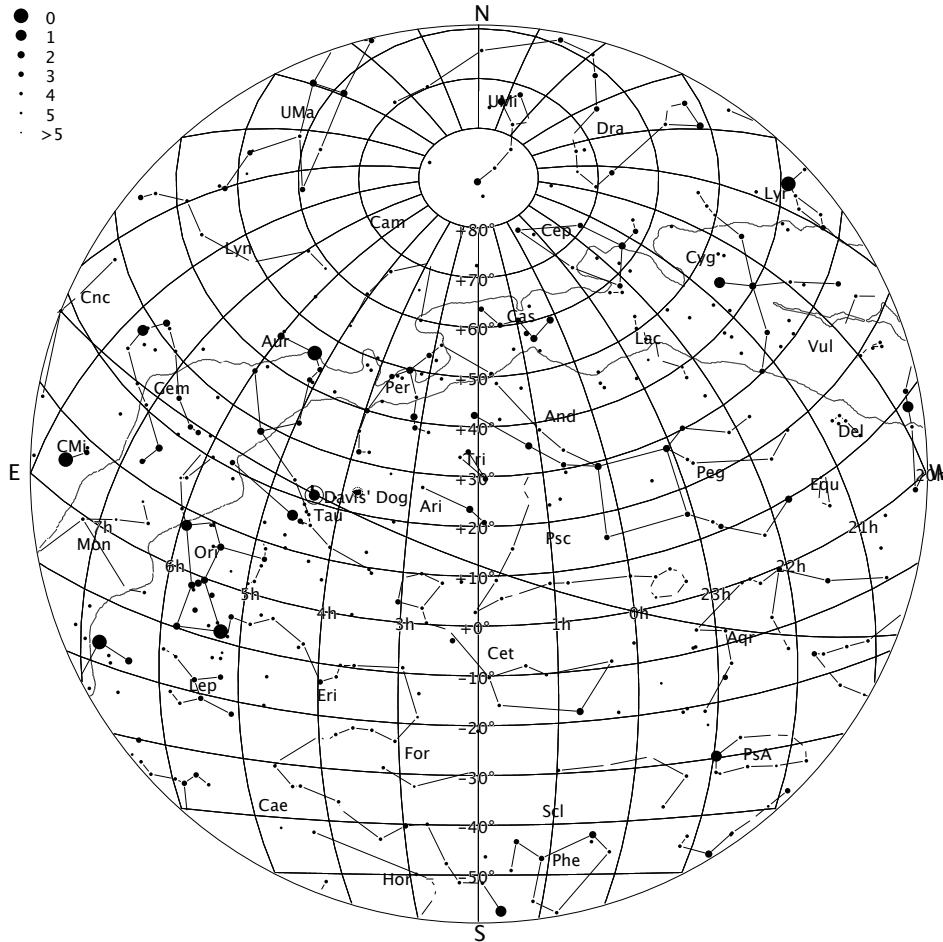
90' x 60x

This asterism Kemble's Cascade (also Kemble 1 or STAR 3) is a straight line of about 20 stars that vary in magnitude from 7 to 9. In the middle is a bright star of magnitude 5 visible. The chain of stars lead to the open star cluster NGC 1502. Kemble's Cascade is best viewed through binoculars because of its size. Take the first and last star from constellation Cassiopeia, the two ends of the 'W'. Draw a line between these stars and extend it 1 time in the direction of Camelopardalis. You'll find Kemble 1 here.



Circle is about 3 degrees

## #8 Davis' Dog



Taurus

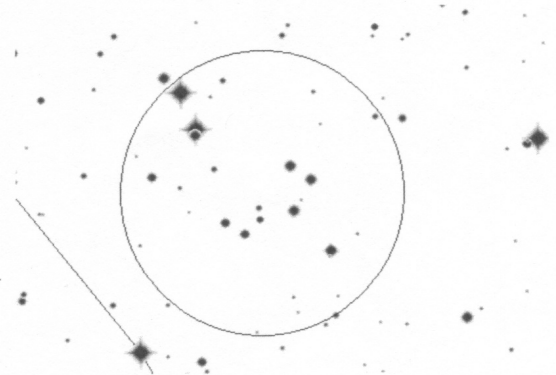
Davis' Dog

RA: 04h 22m

DEC: 21d 25m

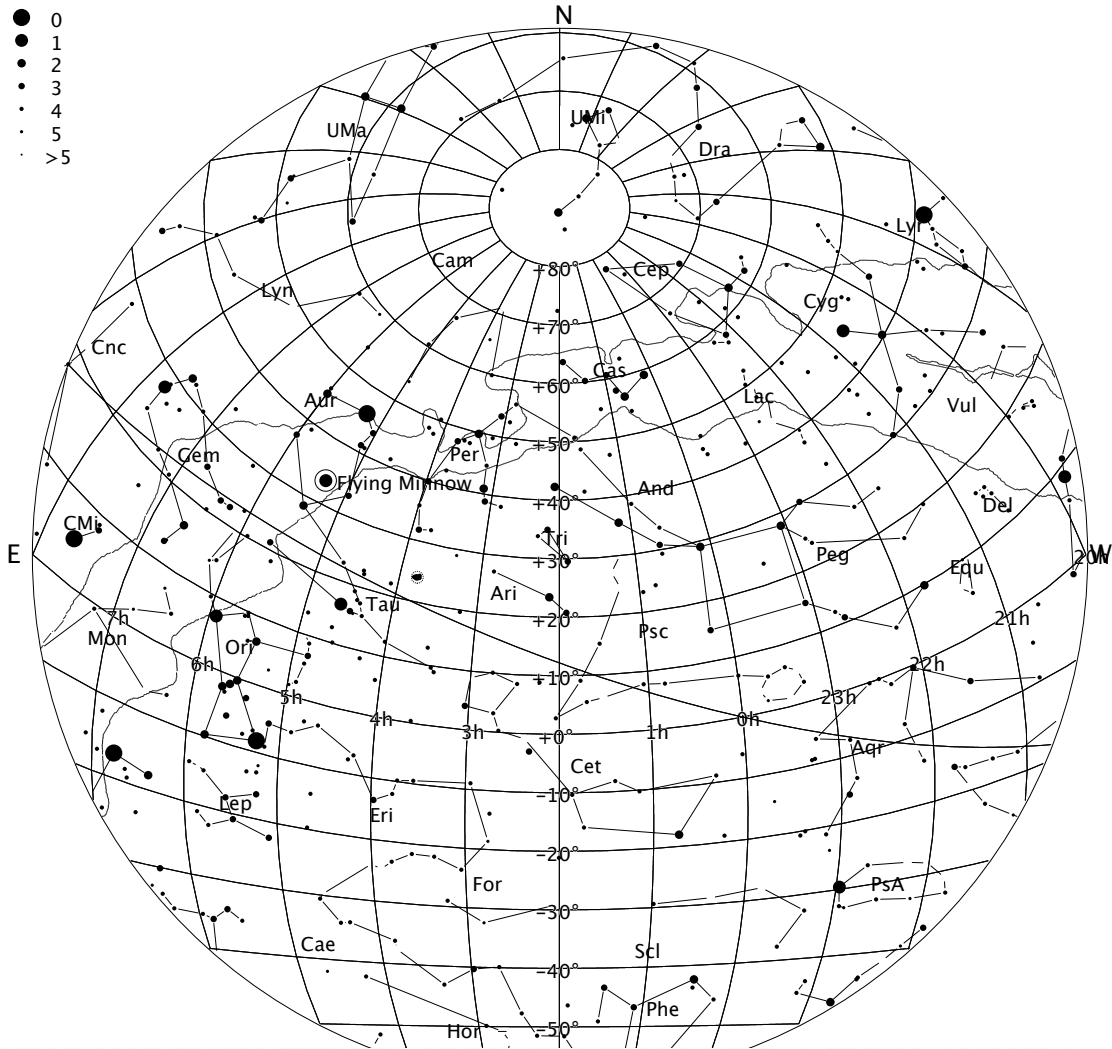
3.5° x 1.5°

Between the Hyads and Plejads there lies a stargroup, just visible with the unaided eye. Because Davis' Dog is pretty large, you could observe this asterism best with binoculars. Look for a 'Canis Major' shape. Davis' Dog lies just north of the northern eye of constellation Taurus, the bull. Contains the stars Upsilon, 51 and 53 Tauri.



Circle is 4 degrees

## #9 Flying Minnow



Auriga

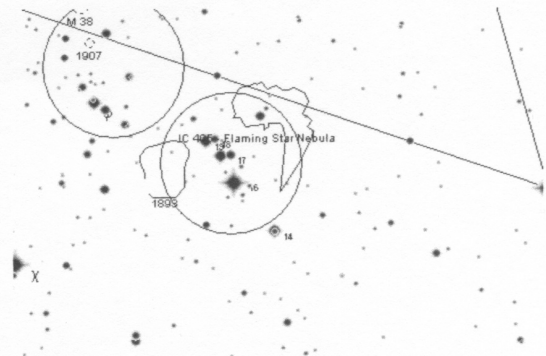
STAR 4  
Flying Minnow

RA: 05h 19m

DEC: 33d 40m

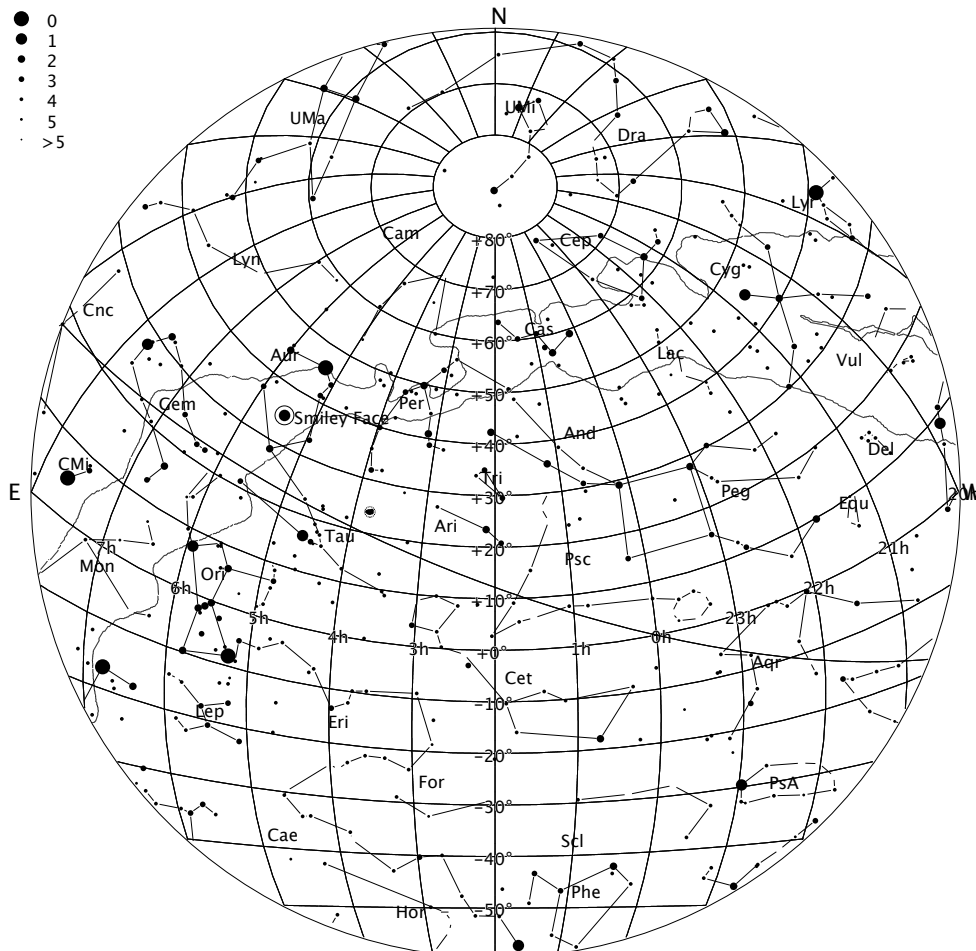
75'

The Flying Minnow looks like a torch or a mini Delphinus. The asterism contains 5 bright stars that vary in magnitude from 4.5 to 6.5 and it contains the stars 16, 18 and 19 Aurigae. In and around the asterism there are a lot of faint stars visible. You can find the Flying Minnow between NGC 1893 and (SE of) The Flaming Star Nebula.



Circle is 2 degrees

## #10 Smiley Face



## Auriga

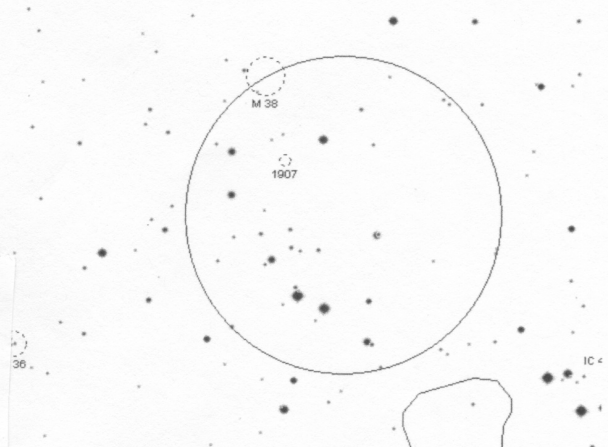
Smiley Face

RA: 05h 27m

DEC: 35d 00m

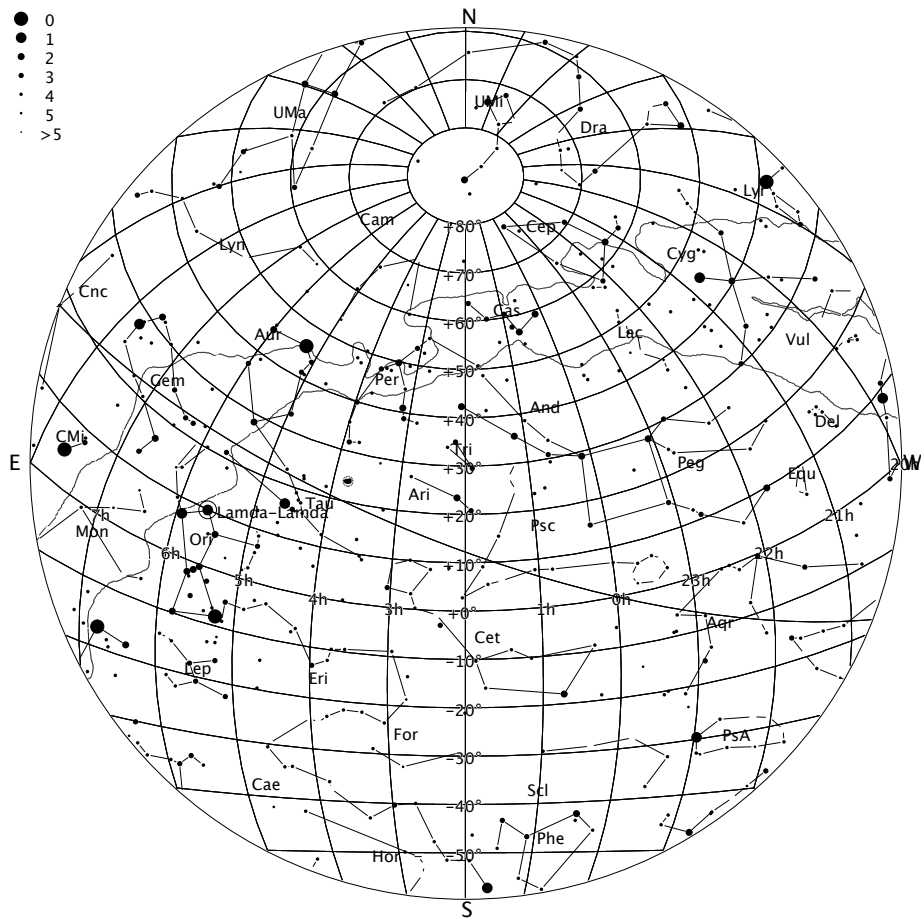
 $1^{\circ} \times 0.5^{\circ}$ 

Thirty arc minutes south of the open star cluster Messier 38 you can find a group of 8 stars that forms a smiley face. Six stars shapes the face, two the eyes. The little cluster Stock 8 is part of this asterism.



Circle is 2 degrees

# #11 Lamda-Lamda



Orion

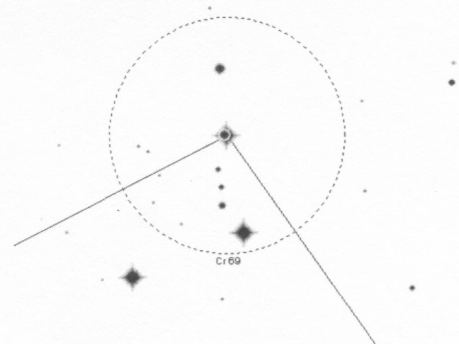
Lambda-Lambda

RA: 05h 36m

DEC: 10d 00m

50'x20'

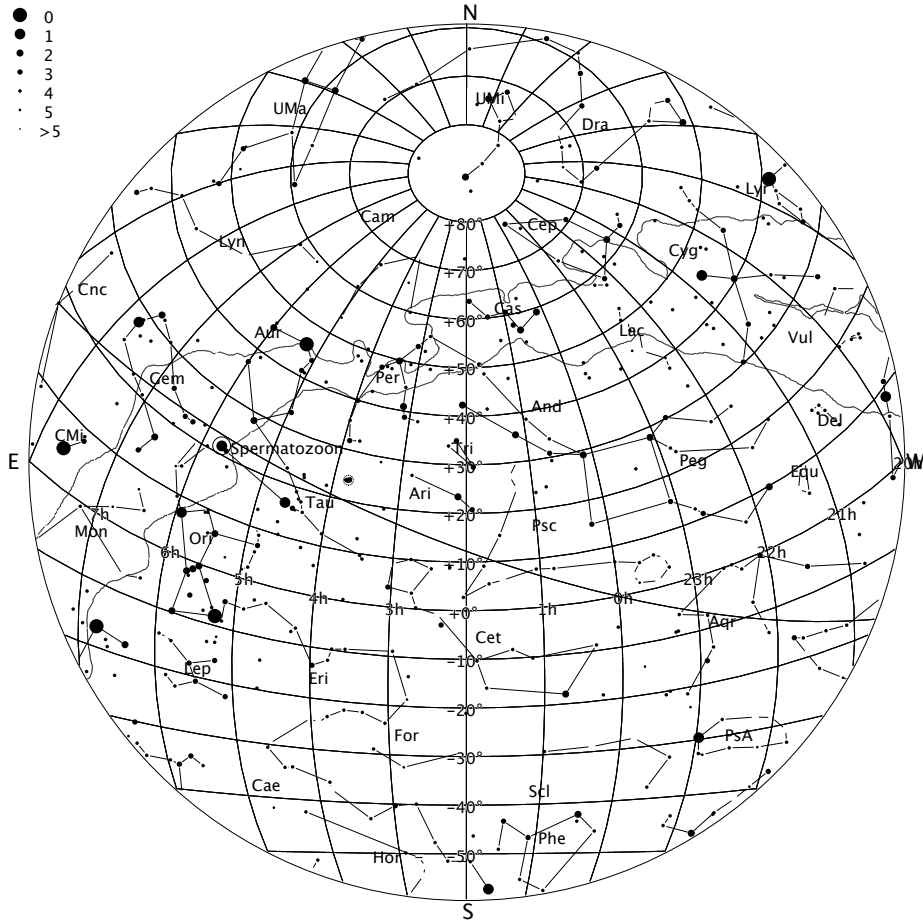
This figure has the shape of the Greek letter Lambda ( $\lambda$ ). The star Lambda Orionis is part of this asterism, which explains its suitable name.



Circle is 1 degree



## #12 Spermatozoon



## Taurus

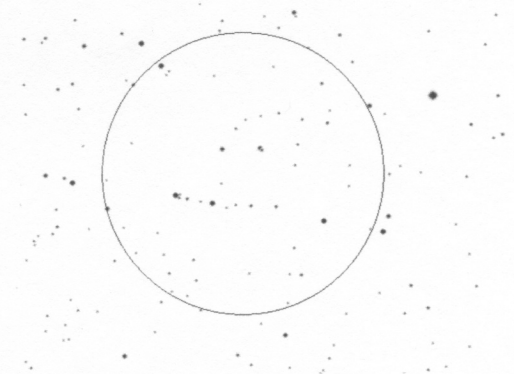
## Spermatozoon

RA: 05h 43m

DEC: 21d 30m

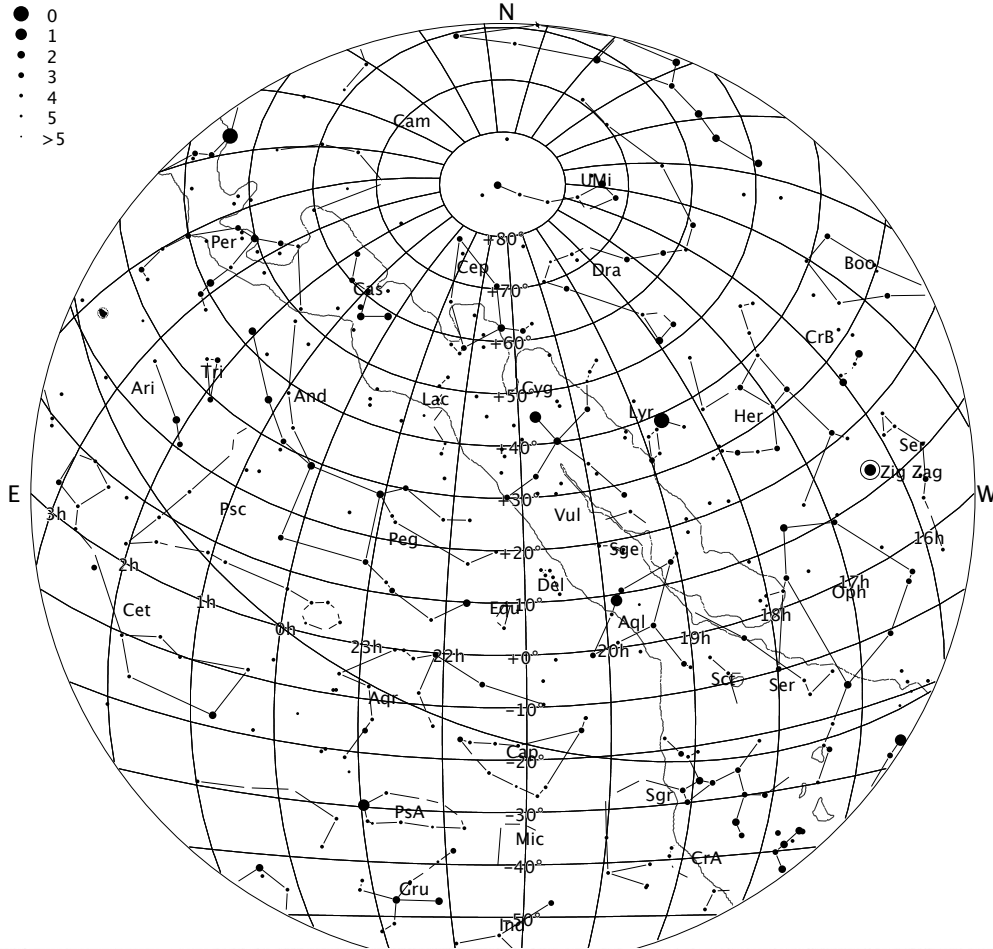
30'

35 Arc minutes East of the star Zeta Tau we find a row of stars of about the same magnitude. We can find the brightest star at the tip of a triangular area.



Circle is 1 degree

## #13 Zig Zag



## Hercules

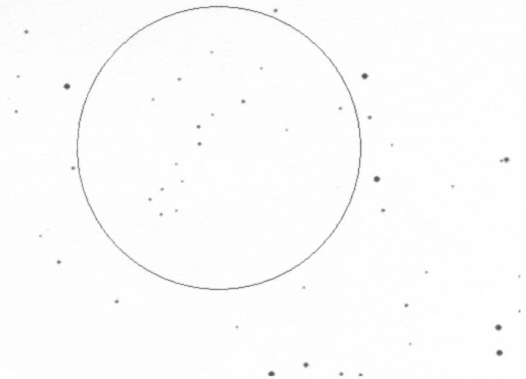
STAR 7  
Zig Zag

RA: 16h 18m

DEC: 13d 00m

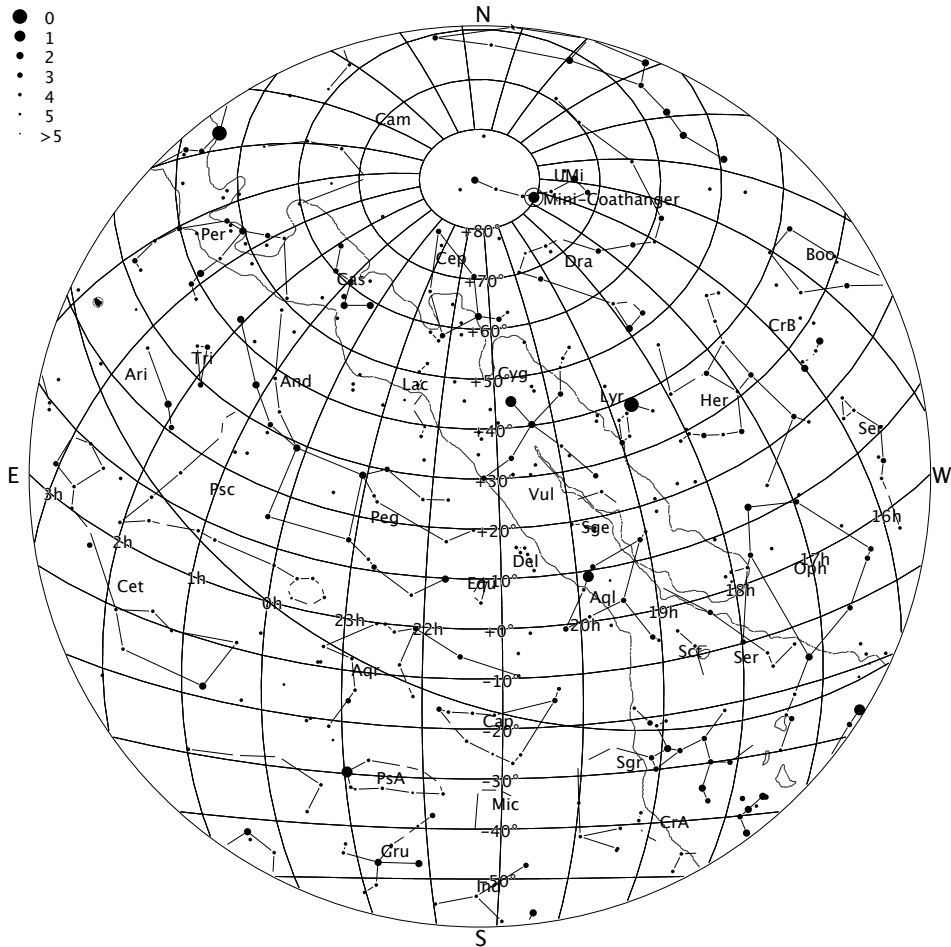
100'x15'

Zig Zag is an asterism which is made up of about 12 stars with magnitude 8 to 9. The asterism goes up and down, which explains its name. You find Zig Zag 2° west of  $\omega$  (Omega) Herculis.



Circle is 2 degrees

## #14 Mini-Coathanger



Ursa Minor

STAR 22  
Mini-  
Coathanger

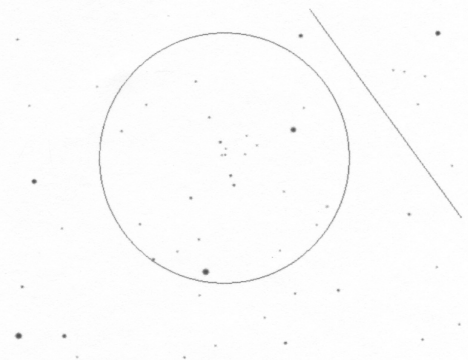
RA: 16h 29m

DEC: 80d 13m

15'

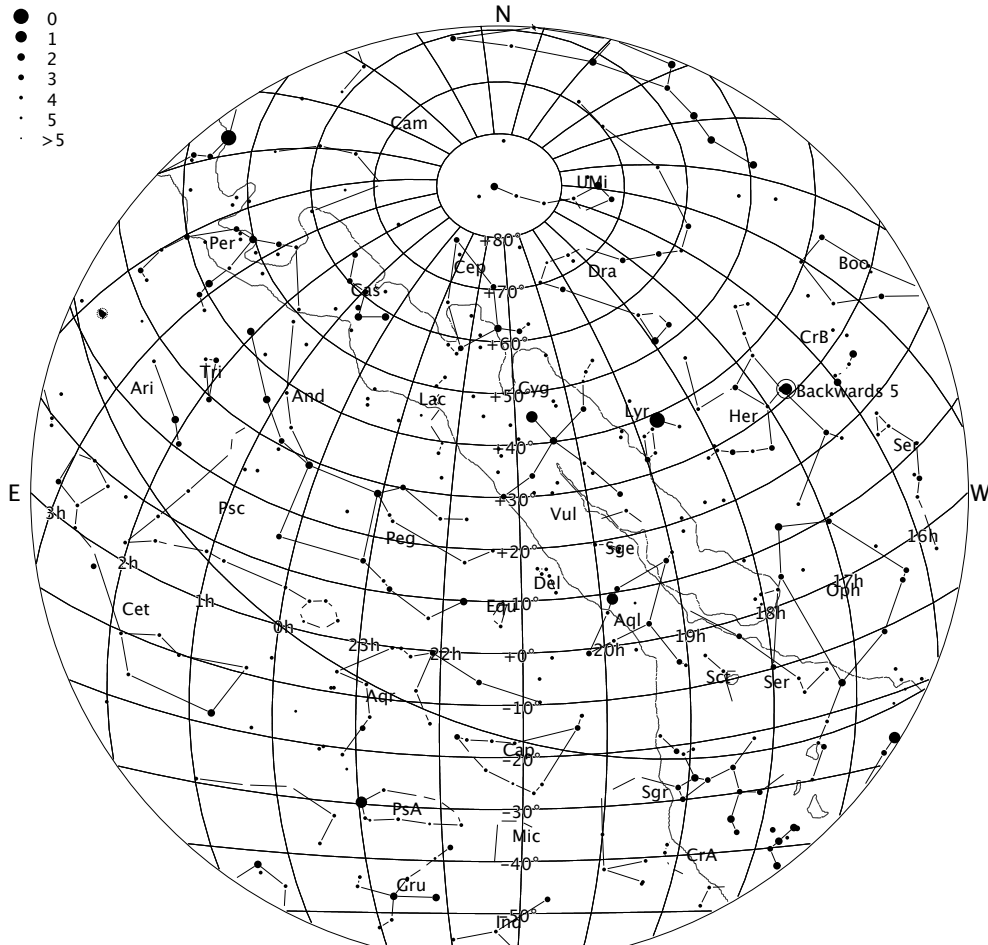
The Mini-Coathanger in Ursa Major looks like the coathanger in Vulpecula. The straight line of 8 blue/white stars is easy to find and recognize, the 3 blue/white stars that form the hook are harder to find, because these stars are fainter than the rest of this asterism.

Draw a line between the stars  $\epsilon$  and  $\eta$  in Ursa Major (the first star in the handle and the star up left of the pan itself). Halfway this diagonal line you will find the Mini-Coathanger (just above the galaxy NGC 6217).



Circle is 1 degree

## #15 Backwards 5



Hercules

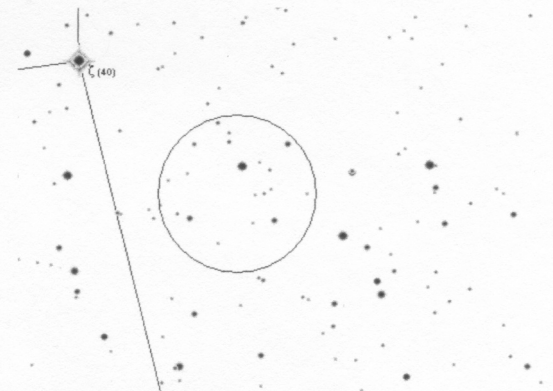
STAR 23  
Backwards 5

RA: 16h 37m

DEC: 30d 45m

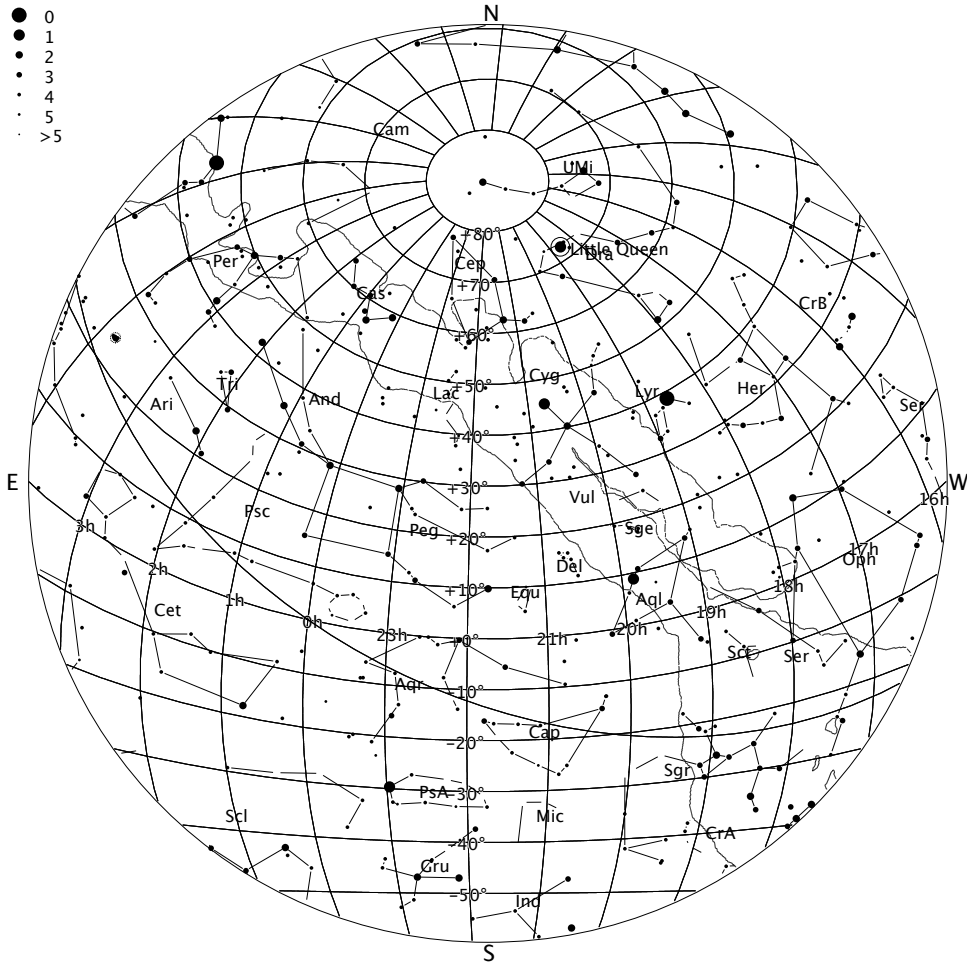
20'

The asterism Backwards 5 looks like a, as you maybe have guessed, a backwards 5 of letter S. The stars that shape this asterism have a magnitude of about 11. The first and last stars of the 5 are brighter, of magnitude 7 and 9 and are therefore better to see. You find this shape 1° SW of  $\zeta$  Herculis. *Observe it with a small scope.*



Circle is 1 degree

## #16 Little Queen



Draco

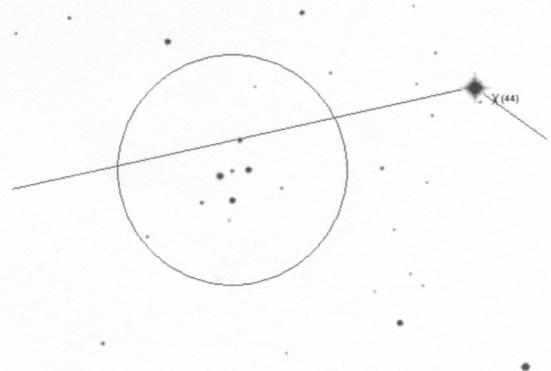
STAR 25  
*Mini-Cassiopeia*

RA: 18h 35m

DEC: 72d 25m

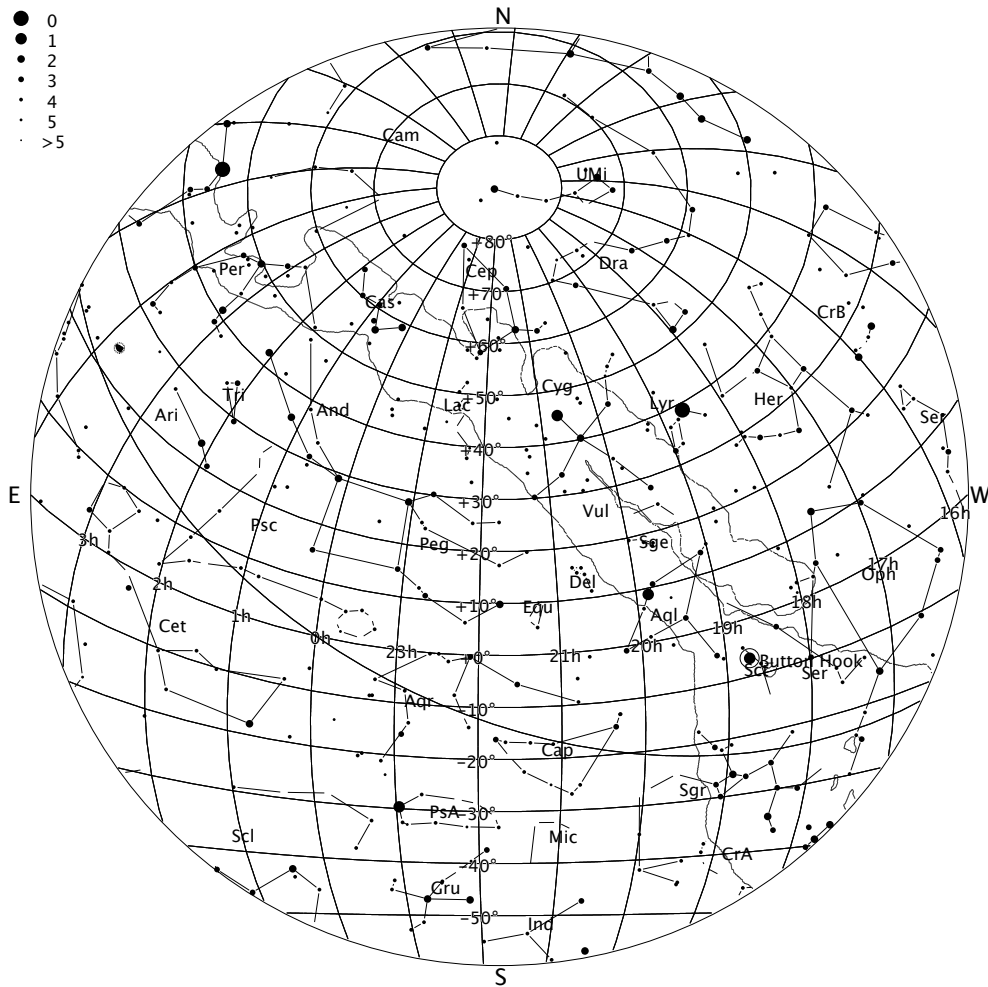
20'x10'

It's obvious why asterism Kemble 2 carries the name 'Mini-Cassiopeia'. Its shape looks just like the 'W' of his bigger brother. The stars that shape this figure are all of magnitude 7 and 8. Kemble 2 is best seen through large binoculars or small telescopes with a low magnification. You can find Mini-Cassiopeia between u en x Draconis.



Circle is 1 degree

## #17 Button Hook



Scutum

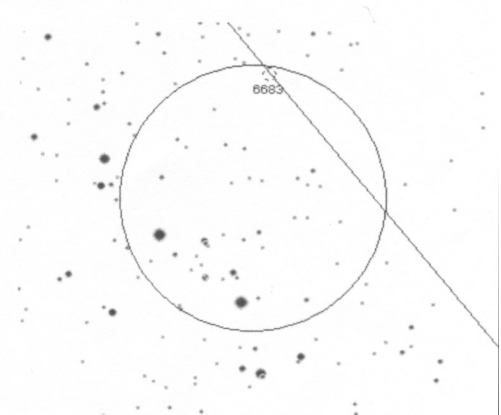
Button Hook

RA: 18h 43m

DEC: -6d 50m

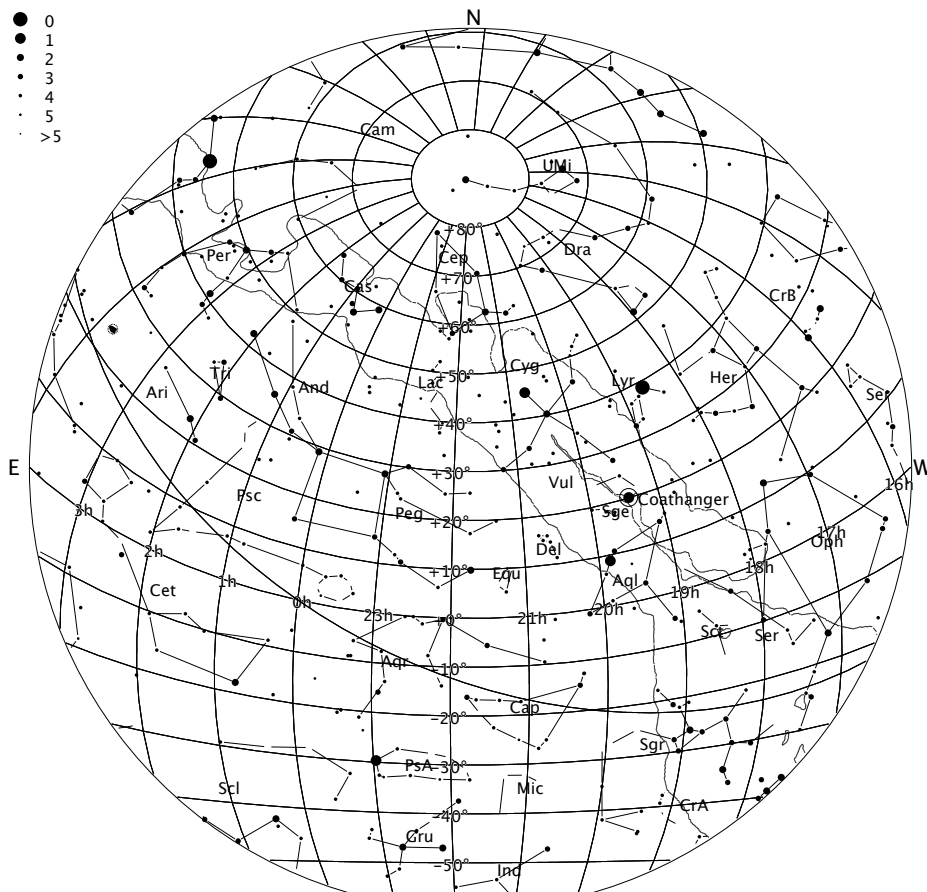
75'x45'

The Button Hook is an asterism in the shape of a wavy line of bright stars that runs through the Scutum Star Cloud.



Circle is 1 degree

# #18 Coathanger



Vulpecula

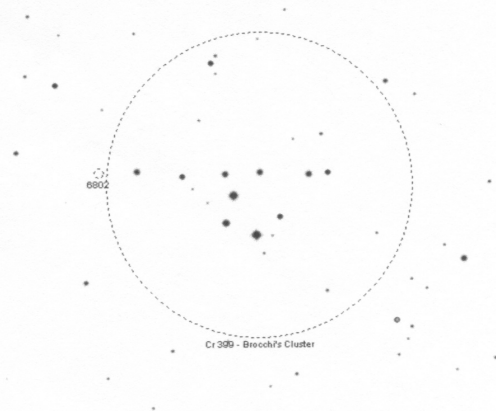
Collinder 399  
The  
Coathanger

RA: 19h 25m

DEC: 20d 11m

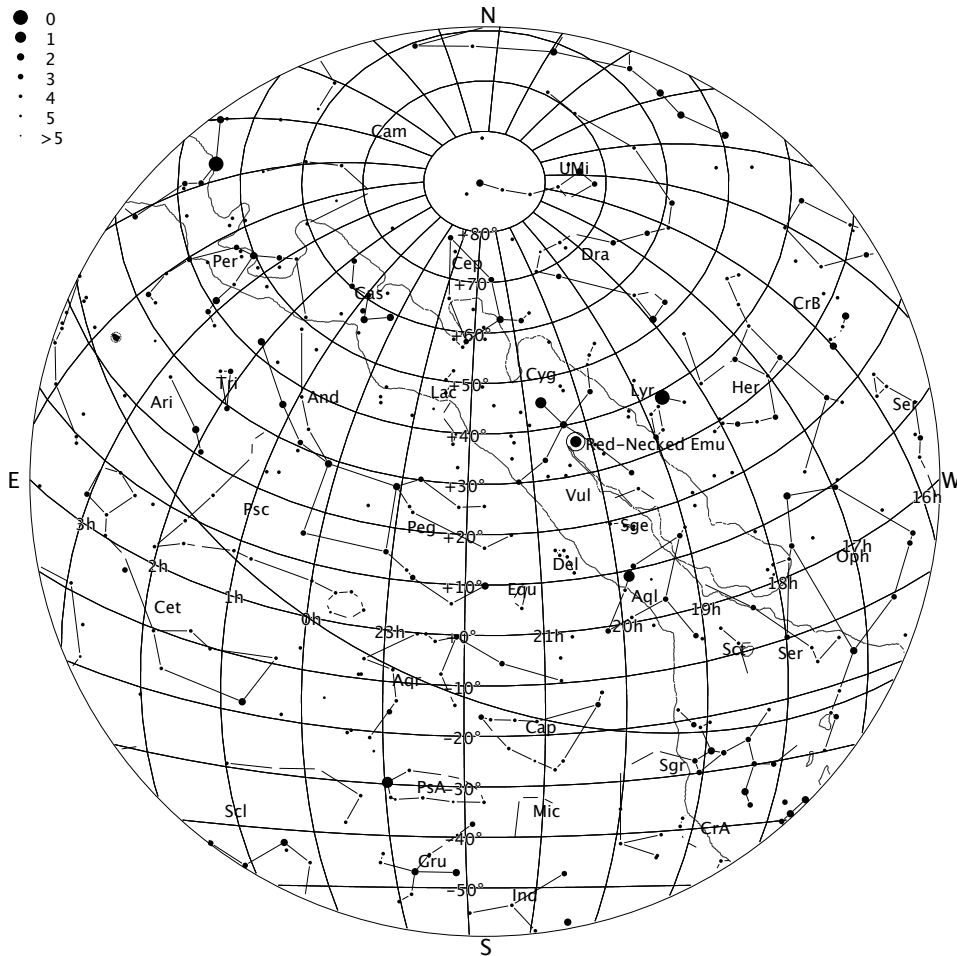
90'x60'

The Coathanger is a beautiful object for binoculars. Its shape is obvious a coathanger. In the hook is an obvious orange star visible. The constellation Vulpecula forms a triangle. Go a little bit down from the right star and you should be able to find this asterism. This really is an object for binoculars. Because of its size it is too big for most telescopes.



Circle is ca 2 degrees

## #19 Red-Necked Emu



Cygnus

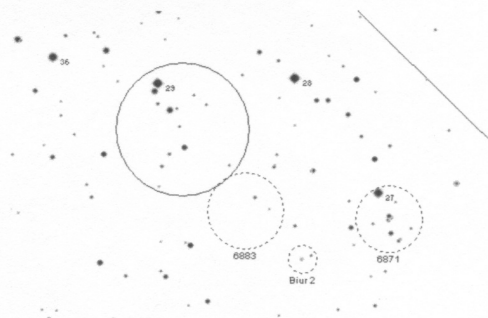
STAR 26  
Red Necked  
Emu

RA: 20h 14m

DEC: 36d 30m

45'

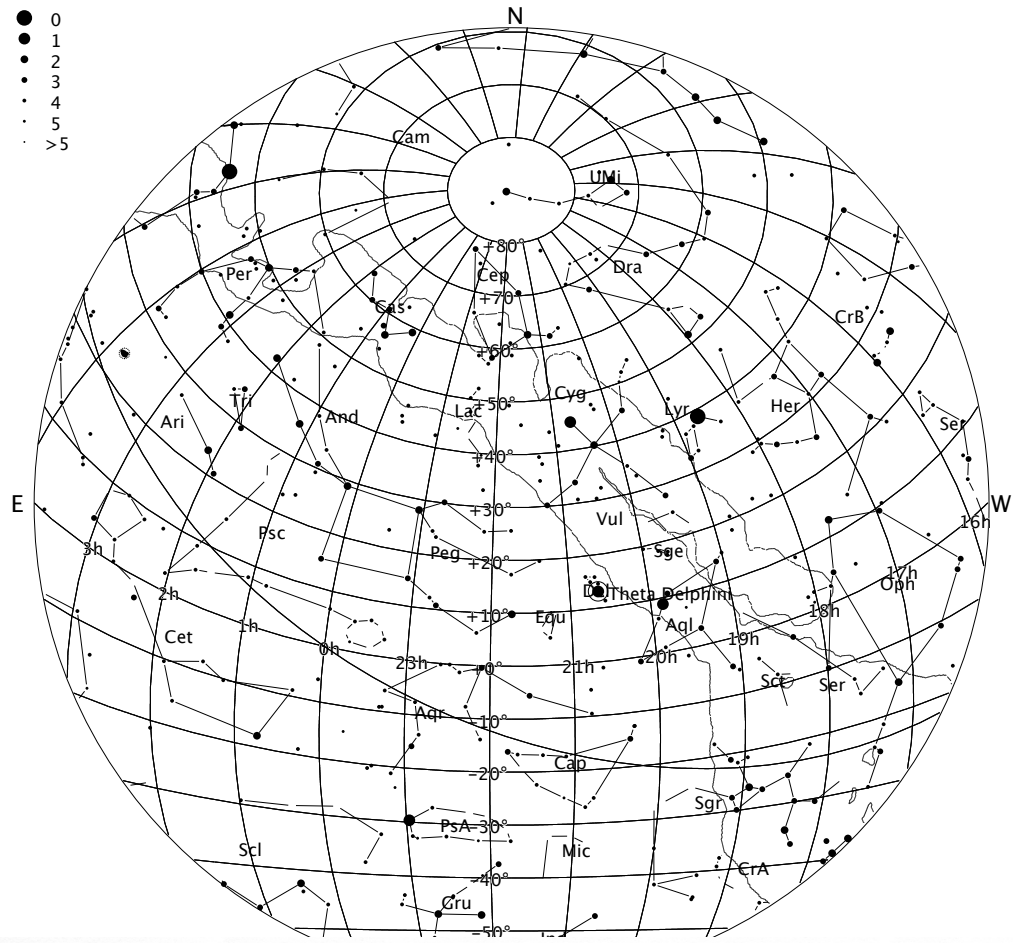
You can find the Red Necked Emu just below the open cluster Dolidze 3. The stars in this asterism have a magnitude of 9. All stars are blue/white, except 1 star in the neck: this one is red. Observe the Red Necked Emu with telescopes and a low magnification. Starting at the orange star Gamma Cygni that forms the hart of constellation Cygnus. Move 2.5° towards Albireo to the star 34 Cygnus. Next you go 1.5° in the same direction to 29 Cygnus. This star marks the tail of the Red Necked Emu.



Circle is 1 degree



## #20 Theta Delphini



Delphinus

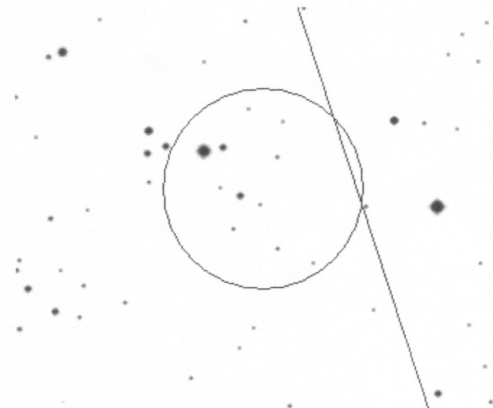
STAR 9  
Theta  
Delphinus  
Group

RA: 20h 38m

DEC: 13d 10m

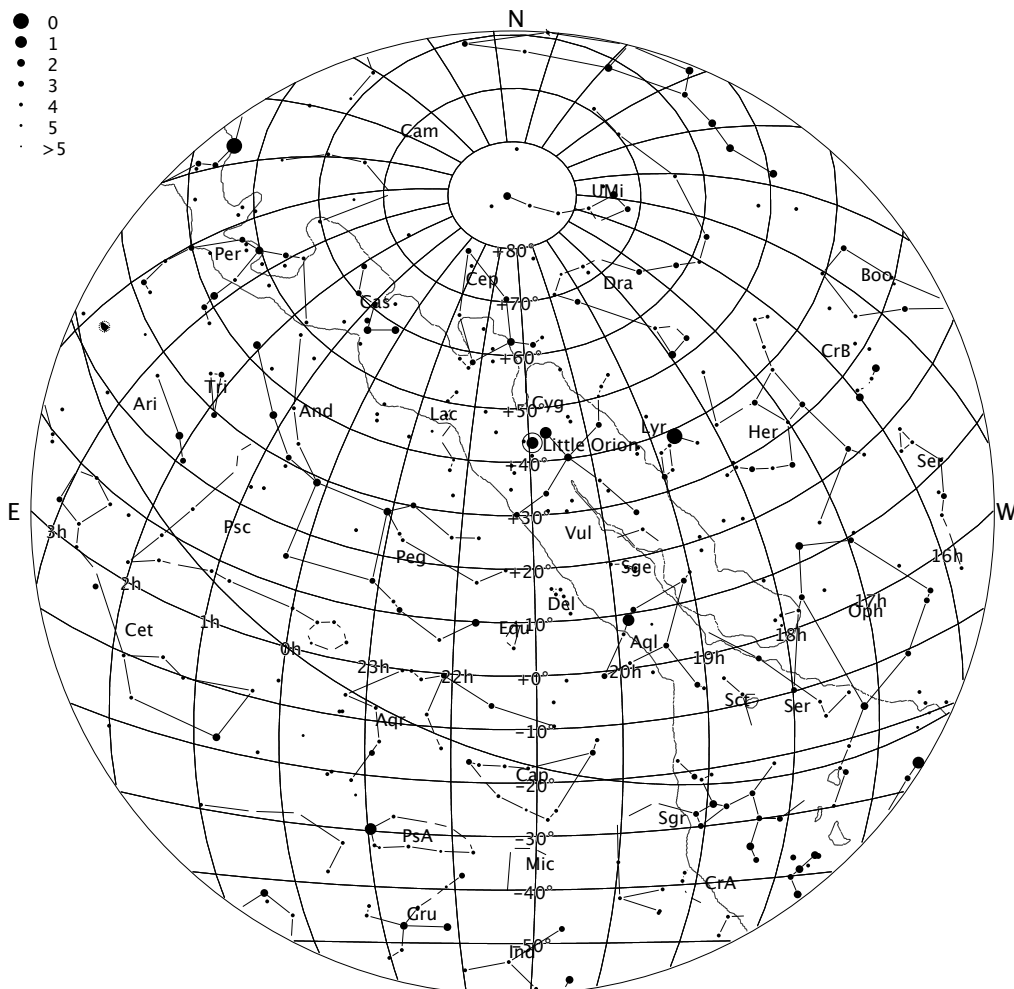
60' x 30'

This group of stars should look like a bucking horse with a cowboy on his back. And indeed. With some imagination you can find the figure in the group stars. I had some trouble finding the horse and cowboy between the large number of stars. Maybe a lack of fantasy? You can find this asterism left of the imaginary line that can be drawn between the stars  $\beta$  and  $\epsilon$  Delphini and it contains the star  $\theta$  Delphini.



Circle is 2 degrees

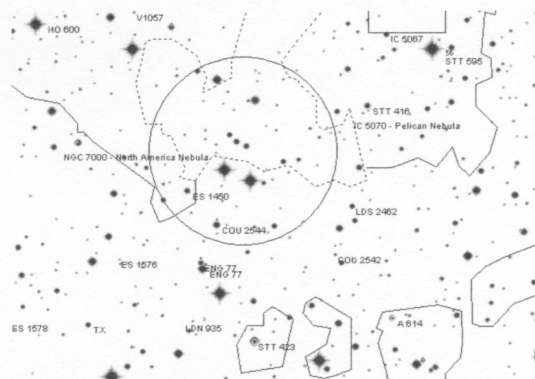
●	0
●	1
●	2
●	3
●	4
●	5
●	>5



Leiter 9  
*Little Orion*

DEC: 43d 34m

This asterism is made of 7 stars and looks like the constellation Orion. Because of its size, Little Orion is at its prettiest through binoculars or small telescopes. Put the four stars that form the Swans body horizontal with Deneb on the left. You find this asterism a little below Deneb, in the Mexican Gulf of the North America Nebula (NGC 7000).



Circle is 1 degree

**Delphinus**

**STAR 27**  
*Toadstool*

RA: 21h 07m      DEC: 16d 20m      15'

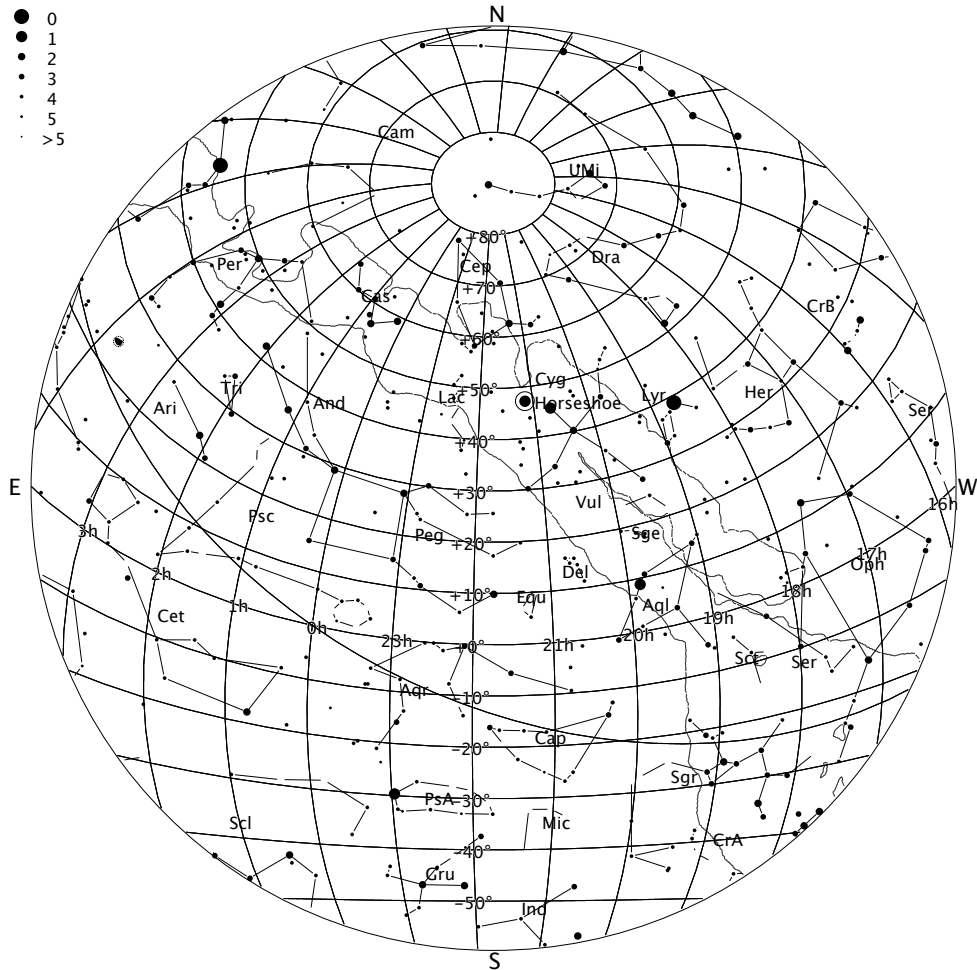
The Toadstool, or Dolphin's Diamonds, is a beautiful small asterism with a toadstool shape. There are approximately 13 stars in this asterism. You can find this asterism near NGC 7025 at the bottom of the toadstool. Use a wide field telescope to observe the Toadstool.

Circle is 1 degree

15'

Circle is 1 degree

## #23 Horseshoe



Cygnus

STAR 28  
Horseshoe

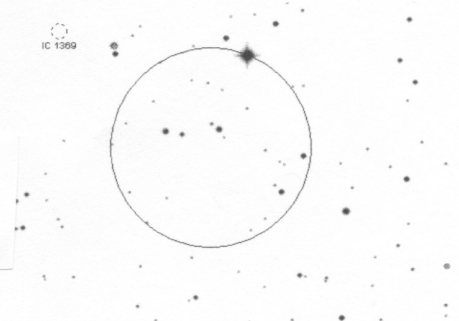
RA: 21h 08m

DEC: 47d 14m

25'

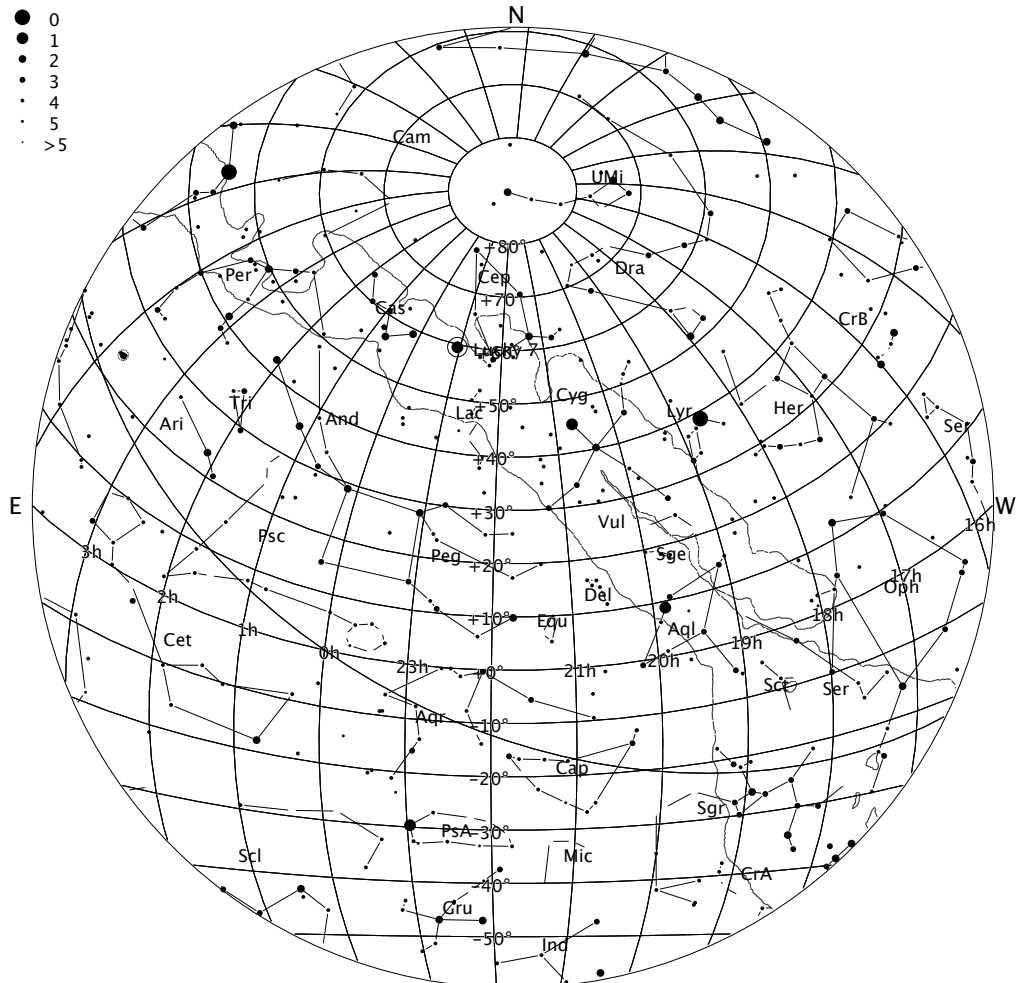
The Horseshoe in Cygnus is a U-shape asterism and about 20' long. There are a few double stars in the Horseshoe, under which two of magnitude 7 and 8.

Observe this asterism with small telescopes



Circle is 1 degree

## #24 Lucky 7



Cassiopeia

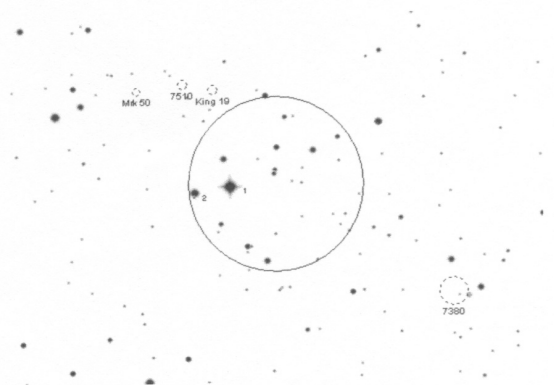
Star 29  
*Lucky 7*

RA: 23h 03m

DEC: 59d 30m

125'x70'

Lucky 7 is a large and bright asterism in the shape of the number '7'. It is located at the border of Cassiopeia and Perseus. In total the figure counts 13 stars of magnitude 5 to 7, including the stars 1 and 2 Cas.



Circle is 2 degrees

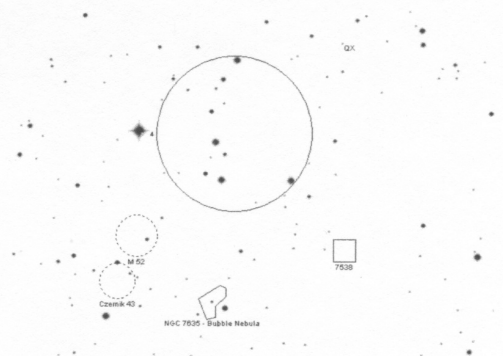
Cassiopeia      Star 12  
*Airplane*

RA: 23h 20m      DEC: 62d 20m      60'

8 Stars of magnitude 7 and 8 shapes The Airplane within 40 arc minutes NW of M52. The figure looks like an airplane. The front of the plane is shaped by 5 stars, its tail by 9 stars.

Circle is 1 degree

60'



Circle is 1 degree