

Summer Library Telescope Astro Guide

Get the most out of your time with your telescope by reading this page and using attached maps. Note dark sky needed for some of the deep sky objects. Plan a summer dark sky outing.

Summer Triangle

Visible May to December in the evenings. A right triangle of bright stars and three fine constellations with the Summer Milky Way running through it.

Lyra the Lyre marked by the 5th brightest star **Vega**. **Vega**, a blue white main sequence star about 25 light years away. Look for the Smoke Ring M57 between β & ζ .

Cygnus the Swan flying down the Milky Way. Bright star **Deneb** is a Blue White Supergiant 2600 light years away. Note **Albireo** through your scope, one of the most famous of all double stars.

Cygnus also contains the asterism known as Northern Cross.

Aquila the Eagle. Like a plane flying down the Milky Way. **Altair** a Blue White star is only 16 light years away. In front of Aquila's beak is M11 the Wild Duck Cluster, a beautiful open cluster.

Hercules the Hero. Note especially the Keystone and **M13** the Great Hercules Globular Cluster along the western side of the Keystone.

Circumpolar (Northern Sky)

Ursa Major We'll start with the Big Dipper. This is actually an asterism that is part of Ursa Major the great Bear. First to look at with your scope is Mizar and Alcor. A naked eye double and Mizar is also a beautiful close double in the telescope.

Ursa Minor Note the two stars at the front of the big dipper point directly to Polaris the north star. Find north with a compass or your phone. Polaris should be star closest to north about 35 degrees above the horizon. It never moves from that spot with all other stars rotating around it. In dark skies you can trace out all 7 stars of the little dipper.

Summer Ecliptic

Continue down the Milky Way and find two beautiful Constellations on the Ecliptic.

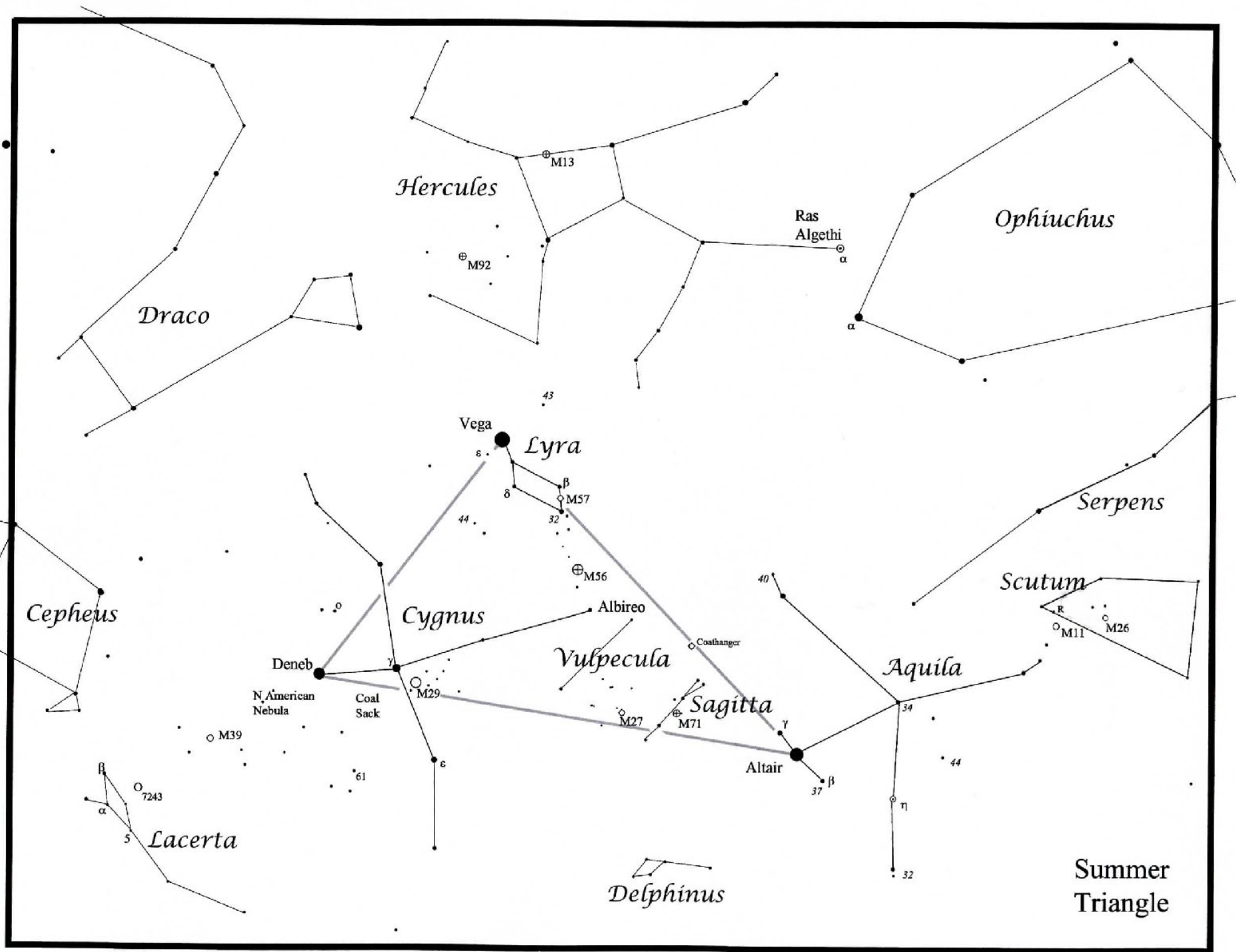
Scorpius the Scorpion. Marked by the bright red star **Antares**. 1st magnitude Red Supergiant 470 light years away. Also look at **M4** an easy to find Globular Cluster and the bright open Clusters M6 and M7. Note **Shaula**, the Stinger, a blue star 570 light years away is only a tick away from also being 1st magnitude. **Saturn** is in Scorpius 2017 Summer.

Sagittarius Trace out the Teapot shape and imagine it pouring out the Milky Way. Many gorgeous objects but best are M8 the Lagoon Nebulae, M20 the Trifid just above it, and M22 a spectacular Globular Cluster. Sweep around M24 the Small Sagittarius Star Cloud.

Summer Check List	* telescope	Scorpius & Antares *
Big Dipper (Ursa Major)		M4 * Globular Cluster
Mizar & Alcor * Dbl Star		M6 * Open Cluster
Little Dipper (Ursa Minor)		M7 * Open Cluster
Lyra & Vega *		Sagittarius
M57 * Planetary Nebula		M8 * Open Cluster & Nebulae
Cygnus & Deneb		M20 * Open Cluster & Nebulae
Albireo * Dbl Star		M22 * Globular cluster
Aquilae & Altair		M24 * Star Cloud
M11 * Open Cluster		Saturn in Scorpius 2017 *
		Jupiter in the West (Leo) Summer 2017 *

Attend star parties, lectures, join a club. www.caasastro.org

You can print off a complete sky guide and find a lot more information on the Library Telescope site at www.ltp.caasastro.org



Hercules

Ophiuchus

Draco

Ras Algethi
α

Lyra

Serpens

Vega

β

M57

Scutum

Cepheus

Cygnus

Albireo

Vulpecula

Sagitta

Aquila

Deneb

N.American
Nebula

Coal
Sack

M29

M71

Altair

β

β
α
5

Lacerta

Delphinus

Summer
Triangle

43

44

40

44

32

η

ε

61

δ

32

M56

Coathanger

M27

34

γ

γ

R

M11

M26

M39

7243

43

44

40

44

32

η

ε

61

δ

32

M56

Coathanger

M27

34

γ

γ

R

M11

M26

M39

7243

Summer
Ecliptic

Hercules

*Serpens
Caput*

Aquilae

*Poniatowski's
Bull*

Ophiuchus

*Serpens
Cauda*

Scutum

Antares

Scorpius

Sagittarius

*Corona
Australis*

Shaula

