



July 2006

11:00 p.m. on July 1
 10:00 p.m. on July 15
 9:00 p.m. on August 1

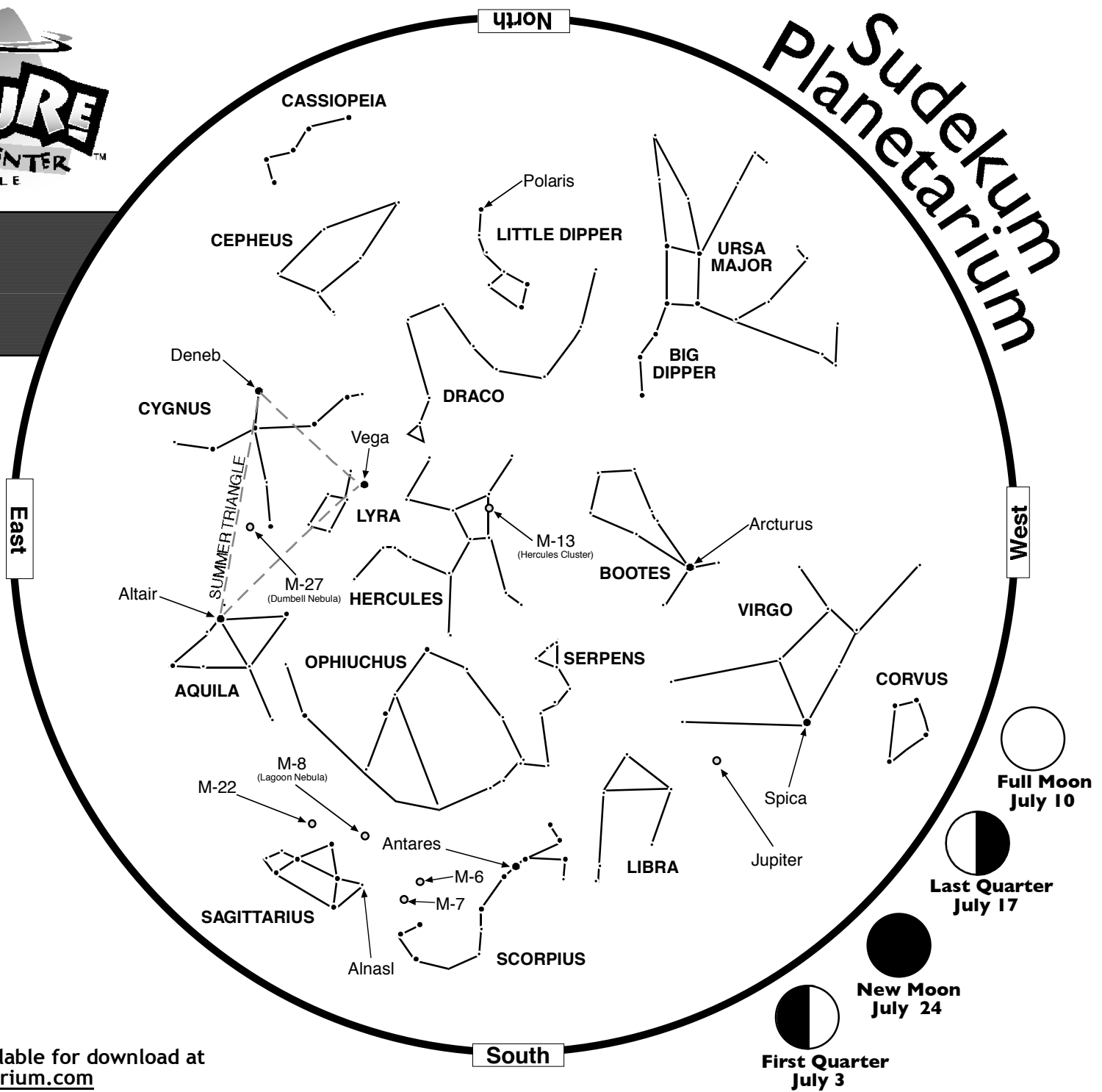
To use this chart: hold the chart in front of you and turn it so the direction you are facing is at the bottom of the chart.

- **Bright Stars**
- **Medium Bright Stars**
- **Faint Stars**

Scan the sky with binoculars: the darker the sky, the better.

- M-4: Globular star cluster in Scorpius
- M-6 and M-7: Open star clusters in Scorpius
- M-8: The Lagoon Nebula
- M-13: The Hercules open star cluster
- M-22: Globular star cluster in Sagittarius

From Nashville:	Sunset	Sunrise
July 1	8:06 PM	5:35 AM
July 15	8:03 PM	5:42 AM
August 1	7:51 PM	5:55 AM



FREE monthly star charts are available for download at www.SudekumPlanetarium.com



July 2006

Of Ice Cream Cones and Teapots

It's summer. School's out, but it sure is hot. Fear not, for there is a big, cool ice cream cone in the sky. No, really! You can watch it rising in the east soon after sunset - and as it rises, you might even feel those blazing temperatures cool down.

OK, so it's not a real ice cream cone. But it is shaped like one. Most people know it better as the **Summer Triangle**. This trio of stars - **Vega**, **Deneb**, and **Altair** - passes overhead on summer nights. Each star is bright enough to see from even moderately light-polluted suburbs.

Once you have located the triangle, you are well on your way to seeing three different constellations. Vega, the brightest of three, is in the relatively faint constellation of **Lyra the harp**. Altair marks the shining eye of **Aquila the eagle**, while Deneb represents the tail of **Cygnus the swan**.

While the figures of Lyra and Aquila may be difficult to find, Cygnus is a much easier pattern to imagine among the stars. Cygnus is supposed to be a swan. A swan is a big, beautiful bird with a long, slender neck and wide, graceful wings. Of course, you won't see every little detail when you look at the sky - not even see a single feather. Cygnus looks a lot like a lowercase 't'. Some observers refer to it simply as the **Northern Cross**.

If you imagine that there really is a swan and follow the direction it is flying, Cygnus points the way toward the southern horizon where you will find two more prominent constellations.

Hovering just above the trees is a giant 'J' shape. It's a good bet that many people see a fish hook in this part of the sky - and not just in Tennessee.

Native Hawai'ians still call it *Manaiakalani*, the magical "Hook from the Heavens", which Maui used to create the beautiful islands in the middle of the vast Pacific Ocean. This group of stars is officially known as **Scorpius the scorpion**. The long hook represents the scorpion's fearsome tail, complete with a dangerous stinger at the end.

Higher up on the hook and to the west of the stinger is a bright red star identified as **Antares**. Antares is a red supergiant star - appropriate since it marks the heart of the scorpion.

East of Scorpius lies **Sagittarius the archer**. According to mythology, this particular archer is supposed to be a centaur, a creature with the lower body of a horse, and the upper body, from the waist up, of a human. Those observers from long ago had much darker skies than we do today and very strange imaginations. So don't expect to find an actual centaur prancing around on the southern horizon.

Looking at the line drawing on the star chart, you might just see an arrow strung in a bow, pointed at the heart of the scorpion. Instead, most people today just see a **teapot**. There is a rectangle for the pot itself with a handle on the left. It has a pointy lid, and the spout is a little triangle on the right. The star at the tip of the spout is called **Alnasl**. Try saying it out loud because it sounds a little bit like it's 'a nozzle' of the teapot. The word is actually Arabic in origin and means 'the point,' referring to the tip of the archer's arrow.

If you find yourself out at night at a location some distance from the bright lights of civilization, take some time to let your eyes become fully accustomed to the darkness. The longer you do, the more you will see. Of special note is a hazy band of light that stretches clear across the top of the sky, from the northern to the southern horizon. At first, it looks like a cloud. Before the invention of the telescope, some people thought it was the

path to the afterlife or a river of light. Ancient Egyptians said it was a stream of milk from a heavenly cow. Today, we know that it is actually composed of hundreds of thousands of stars and is just our local part of the Milky Way galaxy.

Still, it's fun to let your imagination loose in the sky. Look where the Milky Way passes between Sagittarius and Scorpius, and it sure looks like steam rising from the celestial teapot. Or find the Summer Triangle again, and know that it must be a hot summer because the Milky Way now looks like melting ice cream. Ice cream... mmm... that sounds good right about now.

Planets to See

There's only really one good planet to see in the evening skies this month - the planet **Jupiter** - just west of Scorpius the Scorpion. Right now it's the brightest point of light in the sky - you can't miss it! Early risers might also catch brilliant **Venus** rising in the east an hour or two before sunrise.

Planets to Count

How many planets are there in our solar system? Nine, right? Or is it eight? Maybe it's ten, or twelve, or more. And just what IS a planet, anyway? We explore that question in our new original show **Nine Planets And Counting**, offered daily in the Sudekum Planetarium. Check our web site for a complete schedule.

Summer Star Party

The next FREE public star party is scheduled for **Saturday, August 12, 2006 from 8:30 - 10:30 pm** at the **Special Events Field at Edwin Warner Park**. Members of the Barnard-Seyfert Astronomical Society (BSAS) will provide telescopes and commentary on the Moon, planets, and other objects that may be visible. Mark your calendar, and hope for clear skies! For more about BSAS, visit <http://www.bsasnashville.com>.

For information about programs and events at the Sudekum Planetarium and Adventure Science Center, visit www.SudekumPlanetarium.com

For current night sky information, call AstroLine at 615-401-5092.