



September 2006

10:00 p.m. on September 1
 9:00 p.m. on September 15
 8:00 p.m. on October 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.

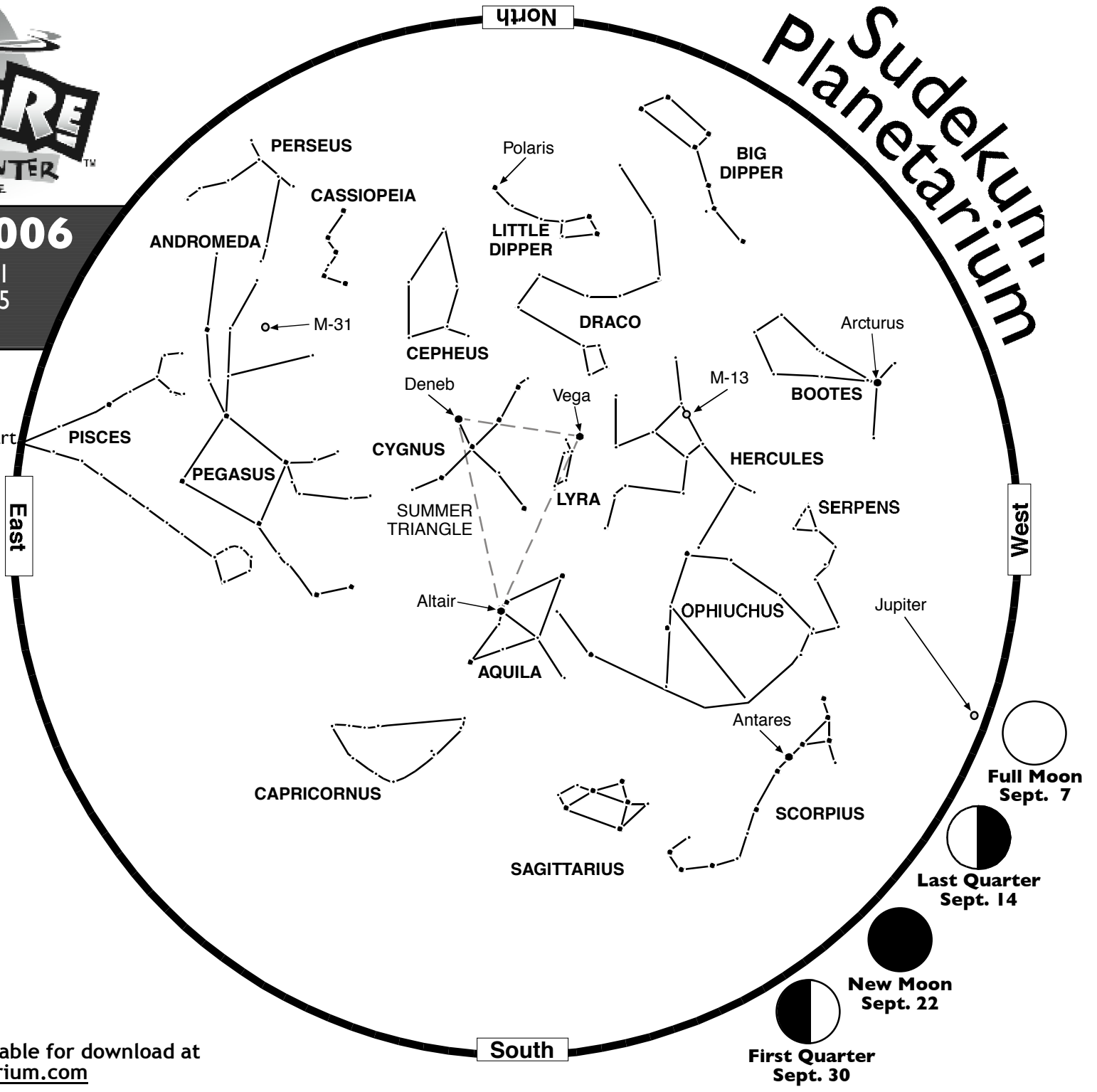
- **Globular Star Cluster:**
M-13 in Hercules
- **A Spiral Galaxy:**
M-31 in Andromeda

Jupiter sets at about 10:00 pm at the beginning of the month, but is nearly lost in the glow of the Sun by the end of the month, setting about 8:30 pm. Look for it low in the southwest.

From Nashville:

	Sunrise	Sunset
September 1	6:19 AM	7:15 PM
September 15	6:29 AM	6:54 PM
October 1	6:42 AM	6:31 PM

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





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8 Planets and Nothing to See?

So there are now eight planets in the Solar System. At least according to the International Astronomical Union, which last month voted to demote the tiny sphere from the big list. However we suspect that people will continue to debate the definition of the word "planet" for years to come.

In the meantime, if you're wondering what all the fuss is about, visit us for our new original show **Nine Planets And Counting**, offered daily in the Sudekum Planetarium. Check our web site for a complete schedule. (We're still trying to decide whether to change the name of the show!)

Unfortunately, you'll have to work hard to see *any* planets in the sky this month. Despite the emails being forwarded around last month, **Mars** was *not* nearly "as big as the Full Moon" - in fact, it's barely visible at all, being on the far side of the Sun from Earth right now.

Jupiter appears as a really bright 'star' low in the west-southwest after sunset. **Venus** rises in the east-southeast just before sunrise, and even then, does not get very high above the tress before dawn. The best planet this month is **Saturn** which clears the eastern horizon about three hours before sunrise, so you have get up really early - or stay out really late - to see it. Saturn shines brightly just west of the hook that marks the head of the constellation **Leo the lion**.

With so few planets in the sky, pictures will have to do. Recently a local amateur astronomer decided to run a solar system marathon,

photographing all of the planets in one long night. The results of his efforts can be seen on his website, which you can reach by visiting <http://tinyurl.com/p783x>. For images taken on nights of better seeing when the atmosphere was clearer, visit <http://tinyurl.com/rrdjl>.

Moonwatch

With no planets conveniently placed for observation, this is a good time to take a few minutes and enjoy the **Moon**. After the Sun, the Moon is the second brightest object visible in the sky, day or night. It has been the inspiration for countless works of art, literature, and music. Today, alien landscapes from the rovers on Mars and stunning images from the farthest reaches of the universe provided by the Hubble Space Telescope may cause us to forget the stark beauty of the Moon - but our nearest neighbor is always worth another look.

Starting on the 1st of the month, the Moon will be high overhead at sunset, shining at First Quarter. Looking with your eyes is one thing, but even a pair of binoculars begins to reveal the largest craters and mountain chains that pockmark the surface. You should pay special attention to the 'terminator', the line where bright sunlight and dark shadow meet. There you will see the most detail because the Sun angle is low and the shadows are long. Every night, the terminator highlights a different part of the Moon, unveiling a new landscape.

When the Moon is full, on the 7th, it will rise just as the Sun sets. There is no terminator, so the Moon appears flat. However, Full Moon is the best time to look for patterns in the Moon's face: the man in the Moon, the woman, a rabbit, and many others.

After Full Moon, the Moon will rise later and later each night, but the terminator continues to present dramatic contrasts of light and shadow. On the evening of the 24th, you will want to scan along the western horizon just at sundown to catch a slim crescent Moon hanging in the haze. Binoculars make the hunt easier, but you still need a low, clear horizon to find it. Over the next several days, the crescent will grow fatter and higher in the evening sky until it reaches First Quarter on the 30th. You have now observed all the phases during one 'moonth'.

Moonwitch

Why does the Moon look larger when it's near the horizon that it does overhead? Why does the Moon seem to follow you? And what causes the changing phases of the Moon's appearance? Billy and Diana discover the answers to these and other bewitching questions one Halloween night in our planetarium program **Moonwitch**. See the schedule on our web site for show times.

Star Parties

Several star parties are scheduled through the end of the year. Visit our web site for more details.

- **September 20-24, 2006**, Tennessee Star Party at the TAG Youth Camp in Lynchburg, TN. Go to <http://home.comcast.net/~tnsp06/> for details.
- **Saturday, September 30, 2006**, 8:00 to 10:00 PM at the Visitors Center at Longhunter State Park; to see Jupiter and a pretty crescent Moon
- **Friday, November 17, 2006**, 8:00 to 10:00 PM at the Visitors Center at Longhunter State Park; watch for Leonid meteors with no Moon
- **Friday, December 15, 2006**, 8:00 to 10:00 PM at the Special Events Field at Edwin Warner Park; observe Saturn and Geminid meteors

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.