



October 2006

10:00 p.m. on October 1
 9:00 p.m. on October 15
 7:00 p.m. on November 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.

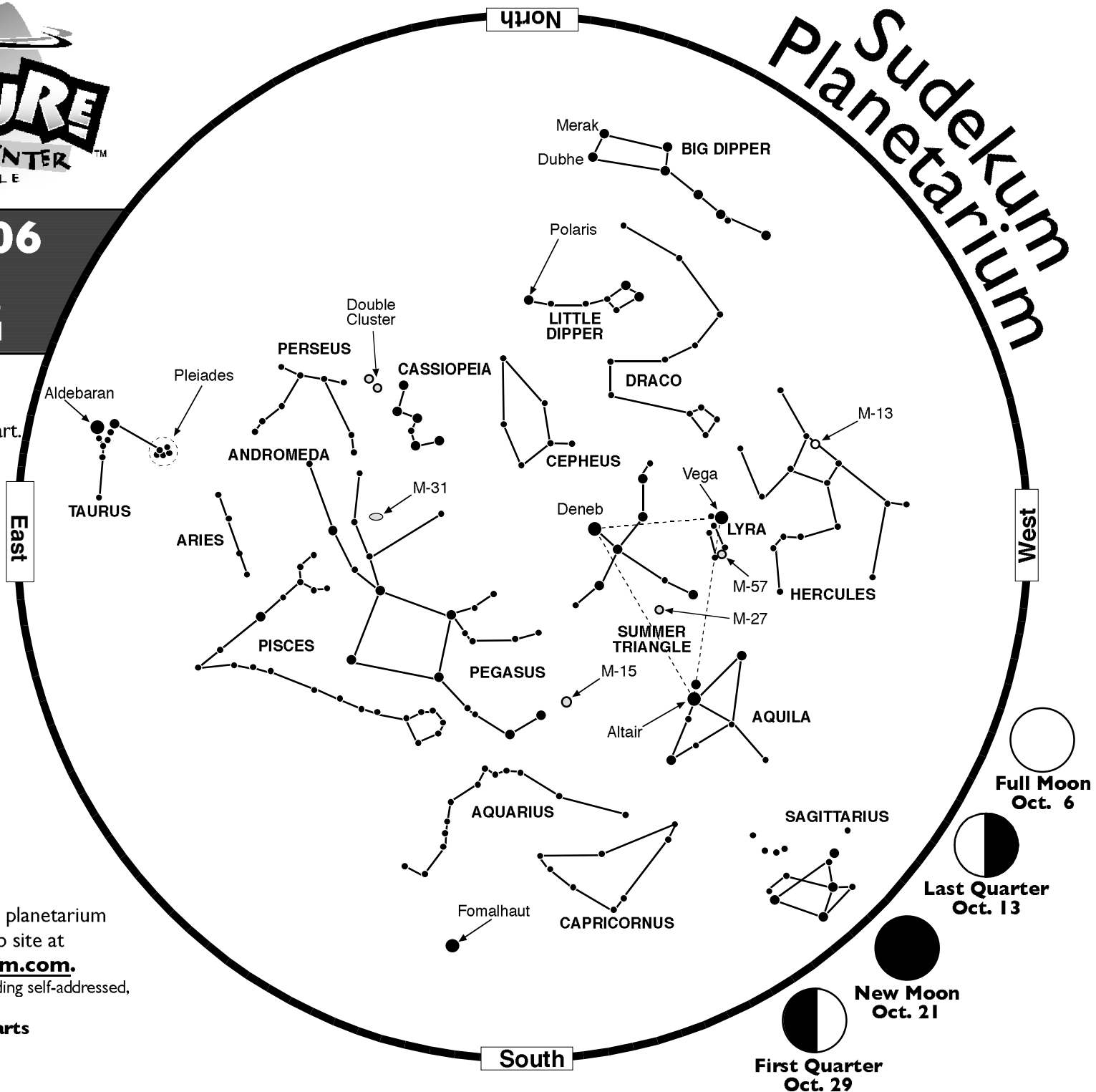
- **Globular Star Clusters:**
 M-13 in Hercules
 M-15 in Pegasus
- **'Double Cluster'**
 Between Perseus and Cassiopeia
- **Planetary Nebulae in the Summer Triangle:**
 M-57 The Ring Nebula
 M-27 The Dumbbell Nebula
- **A Spiral Galaxy:**
 M-31 in Andromeda

Monthly star charts, feature articles, and planetarium show schedules are available on our web site at

www.SudekumPlanetarium.com.

You may also receive monthly star charts by sending self-addressed, stamped envelopes (one per flyer) to:

Sudekum Planetarium Star Charts
 800 Fort Negley Blvd.
 Nashville, TN 37203-4899





October 2006

Good Things Come To Those Who Wait

Want to see planets? Your options are rather limited this month. There aren't any bright planets in the October evening sky, but if you wait until after 3 in the morning, you'll be able to get a good look at **Saturn** rising in the east.

Each day Saturn rises a little earlier, and by the end of the month it will appear high in the sky just before sunrise. Look for it near the prominent constellation **Leo the Lion**. During November Saturn will rise before midnight, and it will be the middle of December before Saturn appears in early evening skies.

But mark your calendars for **next month**. On **November 8** the planet **Mercury** will pass directly in front of, or "transit", the Sun. With the proper, protective equipment, you'll be able to view Mercury, safely, as a small, round, dark dot on the face of the Sun.

Here comes the standard and essential warning: **NEVER look directly at the Sun. NEVER EVER look at the Sun through a telescope or binoculars, even for a moment.**

If you remember the Transit of Venus in 2004, this year's Transit of Mercury will be much harder to observe, because Mercury is both smaller than Venus, and further away than Venus was during its transit. The dot Mercury makes on the Sun will be very small, only 1/194th of the Sun's apparent diameter. The best way to view the transit is with a **properly filtered** telescope with a magnification between 50x and 100x.

There is a possibility we will observe the transit of Mercury from the Science Center, but we are waiting for several confirmations before making a promise. Check our web site for the latest news.

Turning Our Attention to the Stars

With no planets to distract our attention, we can focus on the stars of the season. Temperatures are more pleasant. The bug population is greatly reduced, and earlier sunsets make it more convenient to get in a little astronomy, even on school nights.

If you go out after the sky has gotten dark, look halfway up the western sky for three bright stars which, when connected with imaginary lines, form the **Summer Triangle**. Each star of this very basic shape is part of a different constellation.

The easiest of the three constellations to spot begins with the star **Deneb**. Deneb marks the tail of **Cygnus the swan**. As the night wears on, Cygnus seems to take a nose dive into the northwestern horizon. The two other constellations of the Triangle, **Aquila the eagle** and **Lyra the harp**, are somewhat harder to identify, but worth a look.

Another basic shape in the sky is nearby - the **Great Square of Pegasus**. These stars are not as bright as the stars of the triangle, but overall, the autumn sky lacks the number of bright stars visible in summer and winter. This is because we are looking out away from the disk of our own Milky Way galaxy. During winter and summer, we see many more bright stars because we are looking directly along the disk of the galaxy.

The mythological Pegasus was supposed to be a flying horse. Since most people today have never seen a flying horse, it might be challenging to imagine one in the stars. Try something more

familiar: find the great square again, and instead imagine the four corners of a baseball diamond!

Look high in the northern sky to find a pretty little grouping of stars that looks like a 'W'. Officially, this is **Cassiopeia the queen** sitting on her throne, but it's much easier to see a 'W' in the fall or an 'M' in the spring.

As always, for the best view of the night sky, find a nice dark location away from city lights on a night without a bright moon in the sky.

A heavenly sight to watch for from dark skies are meteors. The next meteor shower is the Orionid shower, which will peak on October 21, one day before new Moon. Prepare to be patient: the peak rate of Orionid meteors under the best conditions is about 3 per minute. Light pollution and hazy weather can reduce the number of meteors you'll see. These "shooting stars" aren't really stars at all, but tiny particles of space dust burning up in our atmosphere. Orionid meteors are debris left behind by the most famous comet of all, Halley's Comet!

Suffering Planet Withdrawal?

We have the cure. Visit the Sudekum Planetarium to see our newest, completely original production of **Nine Planets and Counting**. How many planets do *you* are there in the Solar System? Take a tour of our solar system, and see for yourself. The answer may surprise you.

Star Parties

The next star party is Friday, **November 17, 2006, 8:00 to 10:00 PM** at the Visitors Center at Longhunter State Park. We'll be watching for the Leonid meteor shower on a good, dark, moonless night. Several star parties are scheduled through the end of the year. Visit our web site for more details and future events.

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.