

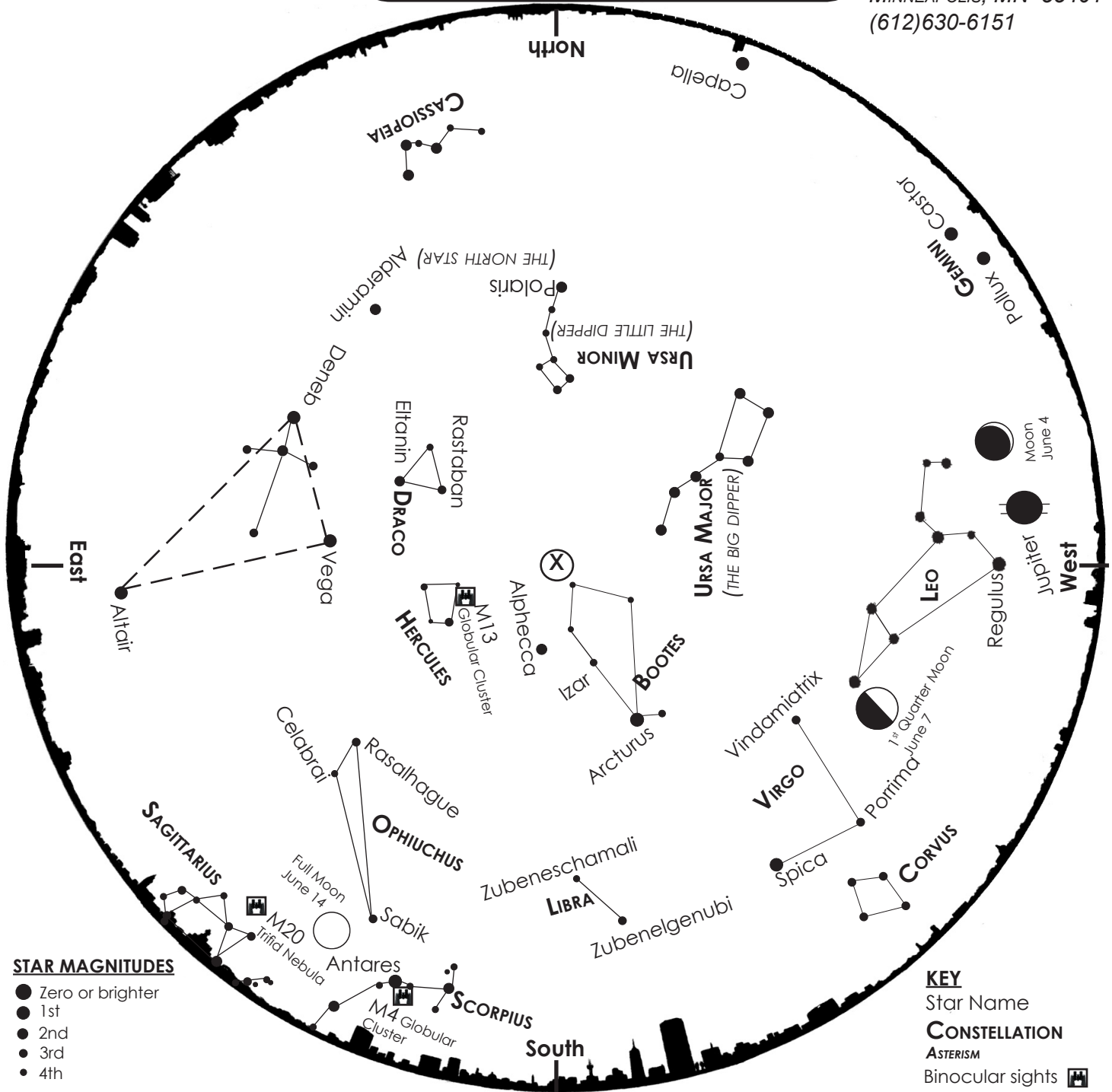
JUNE STARRY NIGHTS 2003



Minnesota is currently one of three states without a major planetarium. The new proposed Minnesota Planetarium & Space Discovery Center will be one of state's most advanced educational facilities. Combining stimulating visual technology and hands-on learning, the new Planetarium will inspire millions on the wonders of our universe. It will help satisfy our longing to connect to larger worlds than



250 MARQUETTE AVE, #400
MINNEAPOLIS, MN 55401
(612)630-6151



STAR MAGNITUDES

- Zero or brighter
- 1st
- 2nd
- 3rd
- 4th

HOW TO USE THIS MAP

Go outside, note the direction you are facing and then turn the map so that direction is facing down (so you can read the type). The outer edge of the circle is the horizon and the X marks the top of the sky. Now you are ready, Enjoy!

KEY

- Star Name
- CONSTELLATION
- ASTERISM
- Binocular sights

WHEN & WHERE

June 1 at 12midnight, June 15 at 11pm, June 30 at 10pm. Best to use the chart within an hour of the times listed. This chart is drawn for 45 degrees latitude but may be applied throughout the continental USA.

DID YOU KNOW?

EARLIEST SUNRISE:

June 14th at 5:26am

SUMMER SOLSTICE (Longest Day of the Year):

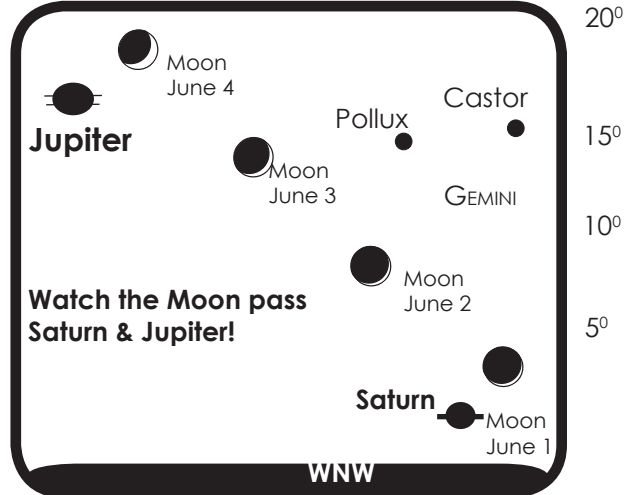
June 21st at 15 hrs 37 min

LATEST SUNSET of the YEAR:

June 28th at 9:04pm

The summer solstice is still the day the Sun is above the horizon for the longest time. However, sunrises start getting later on June 14th and sunset times do not get earlier until June 28th. This discrepancy is caused by the Earth's elliptical orbit and its orbital tilt. If the Earth literally "circled" the Sun, and if our globe stood straight up, there wouldn't be a summer solstice because there would be **no seasons!** All Minnesota days would be 12 hours long and the Sun would always rise due east and set due west without much change in temperature!

If you are not on the Planetarium e-mail list and would like to receive these free monthly star maps and Planetarium news, please call **612.630.6151**, or e-mail us @ rjbonadurer@mplib.org. Also contact us if you would like to be taken off our list.



June 1 - 4 around 10:00pm
one hour after sunset

OUR SOLAR SYSTEM

- MOON:** Near Saturn on the 1st, Jupiter on the 4th, and Mars on the 19th! Full Moon on the 14th!
- MERCURY:** Little Mercury is lost in the bright light of the Sun. If you have a telescope you can spot near Venus in the pre-dawn skies on the 21st.
- VENUS:** Need a keen eye to spot brilliant Venus as it fights the sun's glare very low in the ENE morning sky.
- MARS:** At month's end Mars will be brighter than any nighttime star! And it's going to get even brighter!! Rising earlier each night, but still best seen in the morning sky when it's higher up! Remember on August 28th, Mars will be closer than it's been to Earth in the last 73,000 years!
- JUPITER:** Still brilliant in the west at 10pm on a warm clear summer night!
- SATURN:** Hanging on in the western sky in early June, barely! Near a sliver moon on June 1st. Out of sight by month's end!

Highest Noon!
(ok, 1pm with daylight savings time)



The Sun reaches its highest point possible in the Twin Cities--68.5 degrees. The very top of the sky--the zenith--is 90 degrees.

South

June 21 Happy Summer Solstice!

Stargazers don't miss this FREE class!

The People's University @ the MPL is free and open to everyone, but class size is limited. To register, call 612-630-6174, e-mail friends@mplib.org, and visit our website at www.friendsofmplib.org for other class listings.

Mars: A Closer Look at the Red Planet

Thursdays, June 5, 12, 19: 6:30pm- 8pm Washburn Library, 5244 Lyndale Ave S
Martian lore past and present. Is there life on Mars? How do you find "the red planet?" What have we learned about its polar caps, textured surface and arid plains? When will we walk on Mars? Instructor: Bob Bonadurer, director of the Minneapolis Planetarium.