

# **The Shoreline** **Observer**

**June 1995**

President - Phil Sherman

Vice President - Arlin Ten Kley

Secretary/Treasurer/Editor - Mike Henry

## **June Meeting**

The June meeting of SAAA will be held on Thursday June 15th at 7:00 PM in the West Ottawa Middle School Planetarium. Bring an accomplice.

- ♦ Business Meeting.
- ♦ Sandy will give a tour of the June night sky and hopefully a 4th of July show.
- ♦ Someone is bringing refreshments.

# **QUIZ TIME**

**It's Definition Day!!**

- 1) The shifting of the Earth with respect to its axis.
- 2) The highest tide of the month.
- 3) What do you call the large gaseous planets of the solar system as a group?
- 4) The astronomer's historical term for a measure of the flux received from a star or other object.
- 5) The science dealing with the size and shape of the earth.
- 6) The origin for longitude by common usage and agreement.
- 7) An independent assemblage of billions of stars, an island universe.
- 8) The central part of a galaxy, comet, or an atom.

# **Constellation of the Month**

**Scorpius** is a large and sprawling constellation which lies near the Milky Way, and thus holds many bright open and globular star clusters: a welcome change after hunting down the faint and distant galaxies of the Virgo-Coma galaxy cluster. Both faint reflection nebulae and opaque dark nebulae also abound in this region, particularly in the region between Antares and Rho Ophiuchi. This is due to the fact that we are looking in the direction close to the center of our galaxy. There are many gems in this area, and it is unfortunate for us that the observing season for this constellation is cut short both by the brief summer evenings, and by the constellation's southerly declination.

## **M-4**

Lying about 1.5 degrees due west of Antares, this large globular cluster is both easily found, and a treat to observe. It is large, about 15' in diameter and is rather loosely concentrated, letting us resolve its individual stars rather easily. About 8-10 of its brightest members appear to form a bar right through its center, and gives the impression that the cluster is slightly elongated.

## **M-6**

This is a fine open cluster just visible to the naked eye. It is sometimes called the Butterfly Cluster, as some observers see the shape of a flying insectoid amongst

*(Continued on page 4)*

*(Continued from page 3)*

its stars. The cluster is large, about 25' in diameter, so use low powers to observe it. Over one hundred stars, many bright or relatively bright can be counted in this area.

#### **M-7**

One of the finest open clusters visible in the northern hemisphere, this object is best seen using binoculars or a finderscope. It is large, about 50' in diameter and contains many bright stars loosely concentrated at the center. Telescopic observers are awarded an added treat; at the western edge, but still within the cluster's boundaries, the faint globular cluster NGC 6453 can be seen. How many times have YOU observed M-7 without seeing this ghostly globular?

#### **M-80**

This is a small, tightly concentrated globular cluster which is difficult to resolve into its constituent stars, and then only around the edges. It is seen in binoculars as a fuzzy star.

#### **NGC 6231**

A fine open cluster, composed of over one hundred stars in a compact 15' area. It actually lies on another spiral arm of our galaxy, closer to the galactic center. According to Burnham's *Celestial Handbook*, if this cluster was at the same distance from us as the Pleiades, it would appear about the same size as that cluster, but would be about fifty times brighter, with its brightest members shining as bright as Sirius!