Astronomy Club Starts Public Viewing Season
by Dale Hachtel, Popular Astronomy Club

Niabi Zoo is home to more than 200 animal species, but Niabi’s parking lot is used for an activity not related to animals. On the third Saturday of each month from March through November, the Popular Astronomy Club (PAC) hosts free viewing of the night skies. PAC will kick off its 2020 season on March 21 at sundown with opportunity to observe many interesting objects, depending on weather conditions. Guests may check the Popular Astronomy Club Facebook page to see if viewing will occur. Guests are invited to look through the Popular Astronomy Club Mobile Observatory (PACMO) telescope and member’s telescopes. PAC members will be available to answer questions.

During March, the visible planets are above the horizon only for a brief time before sunrise, except for Venus. Venus is visible after sunset for a couple hours. Mercury, Mars, Jupiter, and Saturn aren’t visible until shortly before sunrise. This year, from about March 13 to March 25, the moon is not interfering with viewing. It is a great time to look for the dimmer objects in the sky.

Brighter items are visible with the naked eye or binoculars. The dimmer items will be best viewed with a small telescope, or a larger telescope to observe their shape or resolve multiple stars in a cluster.

First, let’s review some of the brighter items for orientation.

The planet Venus is in the west and following the sun to the horizon and is the brightest object in the night sky. To the left of Venus, in the southwest direction, is the constellation Orion, noted by the three stars in Orion’s belt, and the bright star Betelgeuse above the belt. Looking to the left of Orion, is Sirius, the brightest star in the night sky. To the left of Betelgeuse and above and left of Sirius, is Procyon. These three stars (Betelgeuse, Sirius, and Procyon) are called the winter triangle and can be used to help locate other objects.

Looking high above the winter triangle, you will notice the two brightest stars in the constellation Gemini, Castor and Pollux, also known as the twins.

Now for the dimmer but very interesting objects in this area of the sky.

Below Orion’s belt, you can see three stars, and a fuzzy object, which is the Great Orion Nebula, a region where new stars and planets are forming.

Also in Orion, is the ghostly object M78, known as Casper the Friendly Ghost, looking down at us from the sky.

To the right of Orion, between Venus and Orion, a cluster of 6 or 7 visible stars forms the Pleiades in the constellation Taurus. These are new stars recently formed, and with larger telescopes, several more stars can be seen in this cluster.

Also in Taurus, is the Crab Nebula (see picture), the remains of a supernova explosion. Other distant objects such as the Black Eye Galaxy also can be seen using the larger telescopes.

The best way to see these is to come to the March 21 public observing night with the PAC at the Niabi Zoo parking lot.
Each month will offer new and interesting deep sky objects, starting after the June observing date, the planets will move into the evening sky viewing time.