



B.R.A.S. Officers
President: Mike Harkey
Vice-President: Dave Lengyel
Treasurer: John Reising
Secretary: Dave Gulyas

http://www.geocities.com/hubal_astro/Guidescope_index.html

Coming UP!!

Black River Meetings

- * **October 28th - Nielson (8-10pm) Halloween Astronomy**
- * **November 2nd - Carlisle Visitor Center (7pm) - Astronomical Show and Tell**
- * **November 4th - Nielson (7-9pm) Mars at Opposition**
- * **November 10th - BRAS Board Meeting**
- * **December 2nd - Nielson (7-9pm) Venus and Mars**
- * **December 7th - (7pm) Holiday Dinner Meeting**
- * **December 15th - BRAS Board Meeting**

Locations

Nielsen Observatory - 13630 Diagonal Road, LaGrange, OH at the Lorain County Metro Parks Carlisle Equestrian Center

Carlisle Visitor Center - The Lorain County Metroparks Visitors Center is on **Nickel Plate-Diagonal Road** in Carlisle Township.

UPCOMING CELESTIAL EVENTS

Mars

During October Mars will brighten from magnitude -1.7 to -2.3, making it brighter than Jupiter. By the end of the month, Mars will be rising about 9pm (NZDT) only a little over half an hour after sunset.

Mars and the Earth will be at their closest on October 30, when the two will be 0.464 Astronomical Units, that is 69.4 million kilometres, apart. Mars will then have an apparent angular diameter of 20" (arc-seconds), little more than 1% of the diameter of the full Moon. A diameter of 20" is quite a bit less than at the opposition in August 2003 when Mars had an angular diameter of just over 25". (The diameter of the full Moon is about 75 times as big as this at just over 30', half a degree.)

Fairly powerful binoculars or a small telescope will be needed to show the disk of Mars. A magnification of about 90x will make Mars look as big as the full Moon as seen without a telescope.

SATURN

SATURN, visible in the morning sky, will rise about 3.30 am (NZST) on October 1 and about 2.30 am (NZDT) on October 31. At the beginning of October Saturn, in Cancer, will be only 22' from the 3.9 magnitude star dCnc and less than 2° from the Beehive Cluster, M44, Praesepe. The planet will remain quite close to the Beehive throughout October as it only moves some 2° during the month.

Orionids Meteor Shower - October 17-25

Comet Halley isn't officially scheduled to visit Earth again until 2061 when it swings through the inner solar system on its 76-year orbit, but fans of Halley can see bits and pieces of the comet each year during the annual Orionids meteor shower. Each time Comet Halley swings by the sun, solar heating evaporates about 6 meters of ice and rock from the nucleus. Comet debris particles are usually no bigger than grains of sand, and much less dense. Although they are very small, these tiny 'meteoroids' make brilliant shooting stars when they strike Earth's atmosphere because they travel at tremendous speeds.

The Orionids meteor shower happens each year when Earth passes through the debris stream of Comet Halley, and meteoroids hit the atmosphere at nearly 90,000 mph.

VENUS

VENUS moves further up into the evening sky during October. The planet will be in Scorpius from October 8 to 21, and passes 30' from d Sco (magnitude 2.3) on October 10 and within 2° of Antares on October 17.

This info was found at "First Lights Celestial Newsletter." The newsletter can be found at http://www.distantstars.dk/october_distant_online_news.html.

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Article of the Month

Why Make Sketches?

There are two basic methods of recording astronomical images seen through the eyepiece of a telescope. Photography (these days, usually digital imaging with a CCD camera) is one, the other is sketching.

Astronomical sketching and drawing has a long history. Many astronomers believe it is still unrivalled for recording and illustrating transient phenomena (such as TLPs) or for taking advantage of the fleeting moments of extreme clarity that result from viewing through the turbulent atmosphere.

The act of producing an astronomical sketch while at the eyepiece of a telescope forces the observer to look more carefully than he (or she) might otherwise look. It takes more time to create a sketch than is needed for a quick look through a telescope's eyepiece; with that added time - and the sketcher's attention to detail - more detail will be seen. It's exceedingly easy to look and not see. It's far more difficult to sketch and not see. Sketching at a telescope's eyepiece will make any astronomical observer a better observer.

Unfortunately, many potential planetary observers say they can't draw, so they never even try. But drawing is not fine art. Instead, it is a careful record of what you saw with your telescope. An ugly drawing is just as useful as a masterpiece.

The primary tools for creating rough sketches can consist of nothing more than ordinary typing paper, a clipboard, #2 pencils, and a (red) light source of variable intensity. An eraser is also handy. Plan ahead. Sketch as much as possible ahead of time. For example, sketch the outline of Jupiter's disk or the outline of Saturn and Saturn's ring system prior to filling in details at the telescope.

For star clusters, try to make a computer printout that matches your eyepiece's field of view as well as the telescope's limiting magnitude. Directly compare the printout with the view in the eyepiece. Each star on the

printout that's verified at the telescope is circled. Put an "X" through those stars on the printout that are not seen with the telescope. For stars seen with the telescope but absent from the printout place a pencil dot on the printout and circled it.

Globular star clusters consist of too many stars to even attempt to show each individual star on a sketch. For these objects it helps to note any general patterns or irregularities visible in the cluster or any stars that are significantly brighter than the other stars, etc. With practice, practice, and more practice one eventually comes up with a way of handling each object. As time progresses and experience grows it's often possible to improve upon earlier methods. Astronomical sketching is an evolutionary process.

Before you start drawing, study the object intently. Try different eyepieces to see the most detail; use various filters to enhance contrast. Use averted vision to pick out the fainter detail, letting the overall impression build up in your mind. Redraw your sketches if they are to be displayed or sent to other observers or observing sections.

If you'd like to use a prepared observation form, see the Association of Lunar and Planetary Observers (ALPO) website at <http://www.lpl.arizona.edu/alpo/>.

REFERENCES

"Bill Greer's Astronomy Site: The Art of Sketching," <<http://www.rangeweb.net/~sketcher/why.html>>

"Sketching the Deep Sky," FortuneCity Wrebsite, <<http://www.fortunecity.com/roswell/borley/49/sketch.htm>>.

"Sketching the Night Sky," Royal Astronomical Society of Canada, <<http://victoria.rasc.ca/articles/1995/art9501.html>>.

"Deep Sky Observer's Companion," <http://www.sao.ac.za/assa/html/doc_sketching.html>.

Club News

Elections

Elections for 3 new Board Members were held in October. Terms were up for 3 Board members: John Reising, Tim Hornbeck and Jim Lengyel. John and Tim were re-elected. Barbara Hubal replaces Jim Lengyel. Club officers remain the same.

Otwell Calanders

It's time to order Otwell Calendars. The cost is \$25.00 each. If you wish to order one the funds must be forwarded to G. Cox prior to December 7th.

Hidden Hollow

Club members Barb & Ken Hubal attended Hidden Hollow 2005, with Barb giving her *Safe Solar Viewing/Venus Transit* presentation on Saturday, October 1st. Other speakers included Nate Cardarelli, Jason Shinn, Terry Mann, Brent Archinal, Stephen James O'Meara (of S&T), and Jay Reynolds. Barb & Ken arrived a day early, on Thursday, and were treated to 3 nights of excellent viewing conditions! They became acquainted not only with the Warren Rupp 31-inch , f/7 telescope, but also with a 30-inch f/4.5 Dobsonian, as

well the scopes owned by almost 100 other avid astronomers. The event was a rousing success, and the Richland Astronomy Society hopes to have another Hidden Hollow event next year.

B.R.A.S. Planning Meeting

A planning meeting was held on Sat. Oct. 18th at Lorenzo's (in Oberlin). Attendees were Dave Lengyel, John Reising, Tam Janus, Barb Hubal & Ken Hubal. The following dates were chosen for Nielsen programs in the first half of 2006.

- Jan. 27, 2006, 7-9pm, *Bees & Rings*
- Feb. 24, 2006, 7-9pm, *Meeting up with Mercury*
- Mar 3, 2006, 7-9pm, *Mars meets the Moon*
- Mar 24, 2006, 8-10pm, *Saturn for Spring*
- Apr 7, 2006, 9-11pm, *Moon Madness*
- Apr 28, 2006, 9-11pm, *Leo leads the way*
- May 5, 2006, 9:30-11:30pm, *Cinco de Mayo*
- May 19, 2006, 9:30-11:30pm, *Eskimo in May*
- Jun 2, 2006, 9:30-11:30pm, *Summer Solstice*

Black River Astronomical Society Monthly Board Meeting

Blue Sky Restaurant in Amherst, Ohio.
October 13, 2005 7:00PM

At 7:04PM Mike Harkey called the meeting to order with J. Cunningham, J. Reising, T. Kreja, M. Plas, G. Cox, T. Janus and D. Gulyas present.

August minutes: The September minutes were approved.

Treasures Report: Information sent to club members via Email.

Instrumentation: Boy Scout camp OK. The roof and hinges at the Nielsen are in working order.

Programming:

- November: Show and Tell
- December: Holiday dinner
- January: Video about the Earth's magnetic field
- February: Video, TBA
- March: Ken Hubal, Solar flare monitoring
- April: Mike Plas, TBA

Public observing dates:

- November 02, 2005: 7:00PM - Regular monthly meeting: Carlisle Visitors Center.
- November 04, 2005: 8:00 - 10:00PM - Nielsen Observatory: Mars opposition.
- November 10, 2005: 7:00PM - Regular monthly board meeting: Blue Sky Restaurant, Amherst.

Old Business:

Eclipse shades may only be ordered without printing, D. Gulyas to purchase 200. Books from the Scout Camp should be brought to the December meeting.

2006 OTAA first choice date: September 23rd, second choice September 16th

New Business:

Our savings CD is up for renewal. J. Reising made the motion to add an additional \$2,000 from the checking account to the CD and renew it. With a 2nd by T. Janus, all were in favor. G. Cox made the motion to purchase wooden replacement tripod legs for the Blue Lady. With a 2nd by T. Kreja, all were in favor. Solar viewing dates and locations will be submitted to the Metro Parks for approval. D. Hellriegel was approved as a new member. Request for 2006 Otwell calendars at \$25.00 each must be forwarded to G. Cox prior to December 7th.

J. Reising made the motion to adjourn with a second by T. Kreja at 8:42PM.

Respectfully submitted,

Dave Gulyas
Secretary, Black River Astronomical Society