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SUMMER PICNIC JUNE 25TH

This year's TCAA Summer potluck picnic will be held Saturday June 25th, the date of the Great American Campout. (The TCAA is scheduled to provide an observing session later in the evening.) The picnic will be held at John and Joyce Werner's residence located at 8652 Cherokee Circle, Prairie Trails Subdivision, in rural Bloomington (southeast of town).

Social time will begin at 5:30 pm with the potluck soon to follow. This should allow plenty of time for folks needing to get to the Great American Campout at Sugar Grove Nature Center to set up telescopes for the promised viewing session – assuming the sky is clear.

A hot grill will be provided. Please plan to bring a dish to pass along with your family's personal entree (to grille or prepare otherwise). Lemonade, iced tea, and dessert will be provided. Please bring your own table setting (cup, plate, utensils, etc.) and lawn chairs. If you have questions, please email John at john.werner9@frontier.com or call John's cell at 309-824-9610.

BOB FINNIGAN DONATES TELESCOPE

Lee Green reports that Bob Finnigan has donated yet another telescope to the club. This time it is a 6" refractor! As Lee noted, "[B]efore you get too excited, the telescope is a homemade model built by Art Grebner. Art was a member of the Peoria Astronomical Society and was instrumental in building the 24" telescope housed at Jubilee State Park. The telescope has a wooden alt-az tripod mount. The tube is in good shape but has spent the last 30 years without a cover, so it needs a good cleaning. I will take a first pass at removing the bugs and dirt and dust before I bring it to SGO."

Bob has made a number of very generous donations to the club during recent months. Thanks, Bob, for your wondrous generosity!

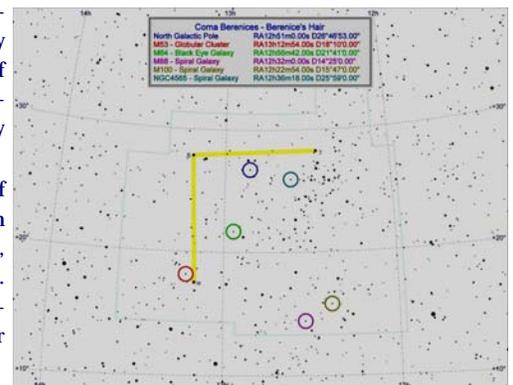
CONSTELLATION OF THE MONTH: COMA BERENICES—BERENICE'S HAIR

Coma Berenices is a moderately sized constellation located between Leo and Boötes above Virgo. Its position is far from the Milky Way at the North Galactic Pole. Coma Berenices has a profusion of galaxies which are part of the Virgo Cluster of galaxies. These galaxies are thought to be the Local Supercluster of which our Milky Way galaxy is a part.

In Mythology, Queen Berenice of Egypt was said to have cut off her long hair and made it an offering to the gods for the safe return from battle of her husband, King Ptolemy II. Meeting with favor, King Ptolemy returned a safely and her hair found a celestial home. Visually, the stars in the northwest area of the constellation resemble her flowing tresses. However, the Greeks considered the cluster of stars to be the bushy end of the tail of Leo.

Astronomically, Coma Berenices is the 42nd largest constellation covering 386 square degrees and is the 58th brightest.

Among the many deep sky objects in Coma Berenices are 8 Messier objects. M53 is a bright globular cluster. M64 is known as the Black-Eye Galaxy. M85, M88, M98, M99 and M100 are all bright spiral galaxies. NGC4548 is thought to be Messier's missing M91. NGC4565 is a beautiful edge-on spiral galaxy with a prominent dust lane.



SETTING THE RECORD STRAIGHT

President Dave Osenga was also present for the Jimmy Simek talk at the CLC on April 28th. His name was inadvertently not included in the report about Jimmy's talk in the last issue of this newsletter.

The *OBSERVER* is a monthly publication of the Twin City Amateur Astronomers, Inc., a registered 501 (c)(3) non-profit educational organization of amateur astronomers interested in studying astronomy and sharing their hobby with the public.

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Submission deadline is the first of each month.

Membership Dues

Individual Adult/Family \$40
Full-time Student/Senior \$25
Electronic Newsletter \$25

To join the TCAA, send your name, contact info and dues payment to
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RECENT AND UPCOMING E/PO EVENTS

On Friday May 5th, we visited Marty Morris' grade school class during their class trip to Weldon Springs State Recreation Area in Clinton. Carl Wenning gave an astronomy presentation to about 15 kids along with their parents. That was followed by telescope observing under a partially cloudy sky. Dan Miller, John Werner, Paul Pouliot, Brian Barling, and Lee Green all set up telescopes for viewing.

Carl and Lee addressed a group of 21 elementary students and several parents at the Challenger Learning Center on Saturday May 6th, as part of Space Day events. Carl gave a 20-minute introduction to constellations and Lee presented a 30-minute talk about astrophotography.

At that evening's Public Observing Session, we had about 30 people present including 8 club members. Lee (substituting for Carl) talked about Saturn, its moons and rings, how the moons helped to shepherd the rings into the intricate shapes we observe, and provided some results from the recent Cassini mission. Lee also gave the laser-guided sky tour and was able to show the major constellations in spite of a partly cloudy sky. Five telescopes were set up to share the variety of celestial objects for viewing. The clouds continued to clear throughout the evening. The attendance count might have been higher were it not for a blocked railroad crossing at Funks Grove and a poorly marked detour a mile or two to the north. The tracks were in the process of being replaced for new high-speed rail service.

On May 20th, Lee hosted a session for Olympia School at SGNC. Lee noted, "This private event for Olympia South Elementary student body featured students travelling to different locations at the Nature Center to learn about a variety of topics; the TCAA hosted one of the stations. I had the two 2nd grade classes and looked at "how big" and "how far" using the planets of the solar system as our guide. I also let the students look through a telescope to see the distant trees."

The MOOS slated for May 28th – along with its keyholder orientation – was cancelled not only due to an overcast sky but because of the inability of members to make the session due to a wide variety of reasons. On May 30th, Lee reported about events the night before including efforts to provide a keyholder orientation, "May 29th saw a moderately clear evening as Larry Leetzow, Josh Lindsey and Paul Pouliot spent time working to get familiar with the club's CGEM telescope. Lee assisted as each went through the process of setting up, balancing and aligning the scope. Except for the inaccurate finder scope, the process went well and each came away with more confidence in finding objects to view. Tony, William and Bob were also on site working on imaging tasks." Thanks, Lee, for these detailed reports.

Here is a listing of education/public outreach events scheduled from June through early July:

- ☆ June 4 (Sat., 8:30 p.m.): Death of stars: Planetary nebulae (4 day old moon) Coordinator: Lee - To be held in SGNC's corn crib due to schedule conflict with the picnic shelter.
- ☆ June 25 – Great American Campout, Coordinator: Lee – SGNC, Dusk
- ☆ July 2 – Members-Only Observing Session, no coordinator – SGNC, Dusk

MAY OBSERVERS' LOG

With continuing cloudy skies for much of the first half of May, TCAAers were limited to a very few astronomical observations.

On Wednesday, May 11th, Tony Cellini reported sighting a bright star-like object several degrees from the first quarter moon. The time was approximately sunset. He noted via listserv, "Around 8pm tonight, I stepped outside and while glancing up at the moon I saw what appeared to be something as bright as Venus about 2 degrees north of the moon. Right away I figured it was ISS, but it appeared to be stationary or moving much too slowly to be the station. After watching for about 5 minutes, I went inside to get my 20X80 binoculars and my phone. I called Carl [Wenning], who verified that I was indeed not crazy or having some sort of embolism. The object had then moved to maybe 20 degrees NE of the moon and through the binoculars appeared to have something hanging from a tether and swinging wildly. While I was on the phone with Carl, it suddenly dropped dramatically in brightness and while Carl could no longer see it, I could now see two bright objects. When I trained the binoculars on it, I now saw what I could only describe as a debris cloud. There were 5 or 6 brighter specks with what looked like grains of salt interspersed around them. Shortly after that I lost sight of it completely because of both a cloud and the setting sun was probably no longer illuminating it. Did anyone else observe this? Opinions? Weather balloon?" Within about 24 hours the mystery might have been solved when Tom Wieland noted via listserv, "Just saw a news piece on NBC regarding a balloon launch in Edwardsville, IL, by a fifth grade class that was purchased on eBay and reached a height of 76,000 ft.....hmmm."

On Monday, May 16th, Timke's Law ("When the sky is clear, the moon is full.") was in full force. Despite this fact, several intrepid TCAAers went out to SGNC to conduct a bit of astrophotography. In attendance were Bob Finnigan,

(Continued on page 3)

TCAA Treasurer's Report – May 2011

OPERATING FUND BALANCE – April 30, 2011 -	\$ 1,705.82
<u>Income</u>	
None -	\$ 0.00
<u>Expenses</u>	
LYB Inc. (Observer copies & postage) -	\$ 21.76
OPERATING FUND BALANCE – May 31, 2011 -	\$ 1,684.06

OBSERVATORY FUND BALANCE – April 30, 2011 -	\$ 2,253.33
<u>Income</u>	
Donation (State Farm Foundation) -	\$ 500.00
<u>Expenses</u>	
None! -	\$ 0.00
OBSERVATORY FUND BALANCE – May 31, 2011 -	\$ 2,753.33

TOTAL TCAA FUNDS – May 31, 2011 -	\$ 4,437.39

** Note that the April 2011 Treasurer's Report listed dues income from Randy Gleason. This should have been listed from James Ryan.

Respectfully submitted, L. Duane Yockey, Treasurer

MAY OBSERVERS' LOG (CONT.)

(Continued from page 2)

Carl Wenning, Lee Green, Tony Cellini, and Josh Lindsey. Bob and Lee spent time imaging M81 (spectacular RAWs!) and M97 using the 11-inch telescope under the dome of SGO. Tony spent his time doing astronomical imaging with a recently purchased 5-inch apochromatic refractor. Carl spent a couple of hours figuring out how to make his CPC 11-inch – now mounted on an equatorial edge – work. (It turns out that he was under powering his telescope motors using an inadequate off spec 12-volt adapter. As soon as he realized this, he returned to his traditional battery power pack and the problems appear to have cleared up.) Josh spent his time using binoculars and watching others to learn more about how to conduct astronomical imaging. With the beautifully clear sky, photography by Tony and Carl continued until about midnight. Bob and Lee continued working for another hour or so. The next evening, May 17th, Tony reported, "I got some really bad unguided exposures of M-13. :-("

Tony, Carl, William, Lee, and Bob took advantage of a dark if not terribly transparent sky on Saturday, May 21st. Tony and Carl were the first to arrive and they both observed a -4 magnitude Iridium flare satellite. William joined them shortly thereafter, having just returned from a trip to Ohio. Bob and Lee arrived at dusk and began imaging M82 in SGO while the others worked just outside the front door. (A large group of Boy Scouts was camping at SGNC that evening and we wanted to keep our distance.) William and Tony attempted to spend their time imaging, but both encountered equipment problems. William left by around 11 p.m. and Tony by around 12:15 a.m. Carl continued observing unabated, having observed 35 galaxies in Crater, Leo, Leo Minor, and Ursa Major that are part of the AL's Herschel II observing program. He left around 12:45 a.m. Bob and Lee, having obtained a number of H- exposures of M82, called it a night around 1 a.m.

On Sunday, May 29th, despite the low transparency sky, Tony went to SGNC to try out his new Losmandy G-11 equatorial GoTo telescope mount.

JUNE SKY GUIDE

01	Partial solar eclipse, 4 P.M.	
10	The Moon passes 8° south of Saturn, 4 P.M.	
12	Mercury is in superior conjunction, 7 P.M.	
15	Total lunar eclipse, 3 P.M.	
18	Venus passes 5° north of Aldebaran, 3 A.M.	
20	The Moon passes 6° north of Neptune, 9 P.M.	
21	Solstice (northern summer/southern winter begins), Noon	
23	The Moon passes 6° north of Uranus, 6 P.M.	
26	The Moon passes 5° north of Jupiter, 4 A.M.	
28	Pluto is at opposition, midnight	
	The Moon passes 1.7° north of Mars,	
	Mercury passes 5° south of Pollux, 5 P.M.	

TELESCOPE TRAINING SESSION FOR CLUB MEMBERS POSTPONED

The one-session, telescope short course for TCAA members slated for Saturday, April 30, was postponed due to an overcast sky. Watch the TCAA listserv for announcements about the future availability of this course.

The two 10.1-inch telescopes on indefinite loan from the ISU Planetarium have been repaired, cleaned, painted, and laser collimated. Two of the club's Telrad finders, taken from dysfunctional club telescopes and provided by property manager William Carney, have been used to replace the wobbly 6x30 finders currently mounted on these telescopes.



2011 POS SCHEDULE & COORDINATORS

The 2011 POS schedule is as follows:

- ☆ July 9: Galactic Travelers: Globular Clusters (7 day old moon) Coordinator: *Carl Wenning*
- ☆ August 6: Small Bodies – Large Impacts (9 day old moon) Coordinator: *Dave Osenga*
- ☆ September 3: Phases of the Moon (7 day old moon) Coordinator: *Carl Wenning*
- ☆ October 1: Jupiter's Moons (4 day old moon) Coordinator: *Tom Weiland*

MISSING OUT ON TCAA ACTIVITIES & EVENTS?

If you are missing out on club activities or celestial events, be certain to join the TCAA listserv. Many activities are planned at the last minute, and announced only hours in advance through the club's listserv. Reminders about celestial events are also broadcast to the membership through the club's listserv. To join this free service by Yahoo, send a blank email to TCAA-subscribe@yahoogroups.com. Unsubscribing is just as easy. To unsubscribe, just send a blank email to TCAA-unsubscribe@yahoogroups.com.

To keep up to date on celestial events not described in *The OBSERVER* or addressed in the listserv, visit Carl Wenning's observing page at www.phy.ilstu.edu/~wenning/observing_page.htm. It has been recently updated to include an extended sky calendar of events as well as additional space weather and satellite viewing links.

The OBSERVER

Newsletter of the TCAA, Inc.

Erin Estabrook, Editor
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Are your dues due?



The Dues Blues?

If you see a check in the box above, it means your dues are due. To retain membership, please send your dues renewal to our esteemed Treasurer:

**Duane Yockey
508 Normal Avenue
Normal, IL 61761**