TWIN CITY AMATEUR ASTRONOMERS, INC.

# The OBSERVER

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OCTOBER 2012

## A NOTE FROM PRESIDENT TOM WEILAND

My wife and I had the opportunity to do some traveling out west a few weeks ago. We visited Kings Canyon National Park, Sequoia National Park and Sequoia National Forest as well as Yosemite National Park. These protected areas of our country provide some of the most beautiful vistas and experiences; waterfalls, majestic granite rock faces, towering trees that dwarf their surroundings and winding trails that take you away from the sounds of civilization.

To someone who is interested in astronomy however the real vistas become available after the sun has set over those beautiful rocky crags. Spending the night in one of the exceptionally dark areas of the national parks is a breathtaking experience. Carolyn and I had just such an opportunity the one night we were able to spend in a park. It was incredibly clear and crisp the evening we had scheduled in a park lodge. Earlier in the day we had scoped out the location where we would do our star gazing....a clear view of the sky was provided to us at the edge of a small lake surrounded by a beautiful pine forest. As dusk overcame the day the stars began to appear...first the bright stars of the Summer Triangle and then the neighboring constellations. We spent several hours enjoying the vast expanse of the Milky Way under a moonless sky. We watched numerous satellites and caught sight of a few quick meteors.

It was a great night of viewing. If you ever have the chance to stay in a national park and see a truly clear night sky I would certainly encourage you to take advantage of the opportunity. The real shame is that most Americans don't have the occasion to enjoy such pristine conditions for star gazing. We are truly lucky that we have a reasonably dark viewing area at SGNC. Our Public Observations Sessions provide our guests with views of the night sky that don't exist in our urban areas, and perhaps may make them aware of the issues of light pollution that rob them of the great sights that exist in the night skies. We're doing things right when we provide these opportunities......let's keep up the good work. Clear Skies!!

#### **OCTOBER TCAA EVENTS**

The TCAA has been invited back to East Bay Camp for another year with Metcalf Grade School on Tuesday, October 2nd. We'll do the *Introduction to Astronomy* presentation and have telescopes set up for observing afterwards for about 40 students. Lee Green will be coordinating this event. Lee will travel to Dixon Mounds on October 5th for a viewing session with the Master Naturalists group he first met with on August 31st. In addition, and according to Lee G., "Our third annual event with Penny [and the ladies of Vale Church, Bloomington] will be at the SGNC on October 12th. This has traditionally been an observing-only event."

The seventh and final public observing session of 2012 will take place on October 13th at Sugar Grove Nature Center. The program will start at 7:00 p.m. with Lee Green giving a talk titled, "Uranus and Neptune." Lee's talk will be followed by a brief laser-mediated constellation tour. Subsequent to the sky lecture, members of the general public will be invited to view through a variety of telescopes set up for their viewing pleasure.

The Youth Temperance Council has arranged with Lee for another observing session. This event will be held on Friday, October 19th. Details for this event and others will be announced as the scheduled dates draw nearer.

The Sugar Grove Nature Center will hold its Autumn Celebration on October 20<sup>th</sup>. This is the SGNC's largest public event of the year. We will be present with an SGO open house, and will train telescopes on the sun (using H-alpha and visual filters) and prominent planets visible during the daytime. Also on Saturday, October 20<sup>th</sup>, Carl W. will host an observing session for Roanoke-Benson High School just west of Roanoke, IL.

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

# MINUTES OF THE SEPTEMBER 4, 2012, BOARD MEETING

The TCAA Board meeting was held at the office of Duane Yockey on September 4, 2012. President Tom Weiland called the meeting to order at 6:32pm. In attendance were Board members Tom Weiland, Tony Cellini, Dave Osenga and Paul Pouliot, and members Bob Finnigan, Lee Green, Carl Wenning and Duane Yockey. The minutes of the previous meeting were unanimously approved.

Duane presented the Treasurer's report which included a payment received from Illinois Wesleyan University for the purchase of equipment. As ALCOR, he reminded us that the Illinois Dark Sky Star Party would run from October 11-14, 2012.

Lee had nothing to report as Secretary or as Webmaster. As Property Manager, he reported that volunteers for SGNC had applied stain to all the buildings, including our observatory.

Addressing old business, Tom thanked all who attended the Summer Picnic held at his home on August 25. The upcoming POS schedule was reviewed and we were all excited about having Eve Pouliot present the Stories of the Constellations for our September gathering. It was noted that she is the youngest presenter in club history. The Board was pleased that while the weather for the last four public sessions was cloudy, we still had 30-40 attendees for each of the events. It was agreed that we would continue holding events despite cloudy conditions and only cancel our events when it was raining; Carl will look at updating our schedule of events to make this clear and Lee agreed to keep the web site and social media accounts updated to reflect developments. The next meeting of the Board was scheduled for November 6.

Lee reported that the electrical work on our storage area was complete and that the Nature Center was pleased with the results. He thanked Tom Weiland, Dan Miller, Brian Barling, John Werner and his brother Lex Green for their guidance and assistance. Expenses incurred in completing the project were reported, but Lee declined to submit these. It was agreed that the materials that were left over would be retained for use with the new observatory.

The status of the new observatory is currently pending approval from county and state boards with September 12 slated as the date we may have more information. It was anticipated that construction on the facility would likely be delayed until the spring of 2013.

As previously mentioned, we received the check from IWU for the purchase of the club's CGE-Pro, 11" Celestron OTA, QSI 583c camera and Lodestar guider. Bob agreed to collect and segregate the equipment in preparation for transfer to them. Since they need to prepare their pier before the equipment is set up, delivery will be delayed until they are ready. Carl will coordinate the transaction with Dr. Linda French. Tony purchased and donated a power supply for the CGE-Pro to replace the power supply being used with the club's CGEM telescope.

Turning to new business, Tom suggested we host an open house at the observatory for the Nature Center's Autumn Celebration on October 20. Bob agreed to assist in cleaning and preparing the observatory for the event. It was suggested that Venus, Jupiter and the Sun would be good daylight targets for the event.

Tom noted that the listing in the Pantagraph had incorrect starting times listed. Dave agreed to contact Dan Craft to alert him.

Tony and Lee agreed to look at how we can improve use of our resources. They will review the equipment on hand and evaluate its viability, look at our storage facilities and suggest improvements, and help to reorganize the club's assets and inventory. They will report back to the Board. Paul indicated that he has some storage units available that may be useful.

The question of installing a motorized control on the SGO dome was raised. Bob reported that the \$3500 estimated cost would be for rotation only, not for actuating the slot door. Carl suggested this was the proper approach since a failure of the slot control could be problematic if a storm was approaching. Tom questioned the maintenance requirements of such a system and Carl questioned the installation costs. Lee suggested that Dan Miller had experience with similar systems and should be consulted. By consensus, it was decided to investigate the feasibility of motorizing the dome. Bob agreed to spearhead this effort.

The February 16 and February 23 are possible dates for the 2013 annual meeting. The 23<sup>rd</sup> was the date preferred by the Board. Dave will check the availability of the Normal Township Hall for those dates. A speaker has not been arranged, although at the last meeting Dan said he would check on the availability of Chris Powell. Carl suggested an alternative speaker from U of I may be available.

Lee announced dates of several upcoming events including a Cub Scout pack on September 29 and a church group on October 12.

Discussion turned to a series of observing and safety concerns raised by a member. The Board appreciated the

(Continued on page 7)

Below is a listing of the status of active TCAA observers pursuing AL observing programs reported to Carl Wenning as of September 30th. Here is a summary of some of the recent observing successes:

- ☆ William Carney continued working on the <u>Telescope</u> Double Star Club and reported its completion on the night of July 4-5. He is now nearly complete with his <u>Binocular</u> Double Star Club, having completed 116/120 observations. He also added several more observations to his Lunar II Club observing program bringing that total to 85/100. He was able to add more NEO asteroids as well bringing up that total to 60. He is now working on the Southern Sky Binocular observing program as well with 9 observations completed recently.
- ☼ During August Carl Wenning was able to glimpse one more of his 7 remaining "highly difficult" planetary nebulas, giving him 104/110 such objects. He has been working on this program for four years now. On the night of September 8th, he observed 13 additional Herschel II objects and now has 397/400 objects (corrected count) since starting the program on November 8, 2010.
- ☆ Brian Barling continues to make good progress observing all Herschel 400 objects. His count is now 360, which is 72 objects ahead of where he was at the time of the last quarterly report.
- □ Dave Osenga has completed the honorary level of the Telescope Messier Award, and has reached 59 objects in the Binocular Messier Award exceeding the 50 observations required to earn that award.
- ☆ The table below has been updated to reflect the fact that Duane Yockey earned his Binocular Messier certificate with 54 observations in August 2010. He has completed 71 observations for the Telescope Messier observing program.

If you would like to have your information included in next January's listing, be certain to forward your observing totals to Carl by the end of December. Be certain to get your completed observing records to our ALCor, Duane Yockey, as soon as an observing program is complete so that you might be appropriately recognized on a timely basis. Our next award presentation will be at the Annual Meeting in February.

Astronomical League Observing Club	Brian Barling	Jonah Berg	Logan Berg	Troy Berg	William Carney	Mark Honzell	Lee Green	Dave Osenga	Carl Wenning	Duane Yockey
Asteroid Club Reg25/Gold100					(60)					
Binocular Double Star 120					116					
Binocular Messier 50		25	9	9	(100)		(72)	59*	(78)	54*
Caldwell 70/109									34	
Comet Club Silver12/Gold30					(31)				4	
Dark Nebula Imaging 70							63			
Deep Sky Binocular 60					(60)		60*		(60)	
Double Star Club 100	29				100*	47	(100)		(100)	
Galileo Club 13					2					
Globular Cluster Club 50							(55)		(65)	
Herschel Club 400	360				(400)		(400)		(400)	
Herschel II Club 400									397	
Lunar Club 100	(100)				(100)		(100)	(100)	(100)	
Lunar II Club 100					85					
Open Cluster Club B100/25// A125/50							100*		2	
Planetary Nebula Club B60/ A110					1				(104)*	
S. Skies Binocular 50					9			25	(50)	(50)
S. Sky Telescope 50									(52)	(50)
Telescope Messier Pro70/ Hon110	(110)				(110)	76	(110)	110**	(110)	71
Master Observer (10 clubs)	2				8		9	2	(10)	3
Urban Club 100					(100)		(100)		(100)	
Outreach Award B10/S60/M160							(*, **), ***		(*, **, ***)	

<sup>\*</sup> Program *or* first award level now complete. \*\* Second award level now complete. \*\*\* Third award level now complete. AL recognition (certificate and/or pin) will be given at the next general membership meeting if available. Numbers in parentheses (#) indicate that the associated pin and/or certificate has been conferred on the recipient. Awards are conferred during the summer picnic and the February Annual Meeting.

#### SEPTEMBER'S EDUCATION AND PUBLIC OUTREACH

The September 15<sup>th</sup> Public Sky Viewing Session was a resounding success. Between 90 and 100 members and guests attended to watch as 13-year-old Eve Pouliot gave her talk "Stories of the Constellations." This was her first public talk and the youngest speaker that the TCAA has ever had present at a public observing session. She did a great job telling everyone of the differences between constellations and asterisms, and told stories of the Big Dipper, Perseus, Orion, and more. Each star pattern has different stories depending upon the culture as Eve pointed out, and she related these with great enthusiasm much to the delight of the audience. Congratulations Eve on a job remarkably well done!

Not only did Eve do the TCAA proud, she also made her extended family very proud. In at-

tendance were Eve's sister and friends, parents, Grandfather Paul, and great grand parents as well. TCAAers in attendance assisting with telescopes (despite the mostly overcast sky) and observatory tour were Paul, Eve, and Amber Pouliot, Dave Osenga, Tony Cellini, Carl Wenn



Pouliot, Dave Osenga, Tony Cellini, Carl Wenning, Robert Finnigan, William Carney, John Werner, Duane Yockey, Lee Green, and perhaps others. Soon-to-be member Bryce (last name unknown, 9-years old) and his father were also present. Bryce, as you might recall from last month's newsletter, rarely misses a public observing session and hopes to become a regular member of the TCAA. Now that school is back in session, we have been getting more requests for edu-

cation and public outreach (E/PO) activities. Dave Osenga held an observing program for members of his church group on Saturday, September 8<sup>th</sup>. The September 14<sup>th</sup> Roanoke High School astronomy course event was clouded out but has been rescheduled for October 20<sup>th</sup>.

On September 22<sup>nd</sup>, the Sugar Grove Nature Center hosted a Boy Scout Merit Badge Day. Lee G. assisted 26 scouts who are working on this badge — one of the most difficult. In the week before, Lee had his telescope set up for viewing at White Oak Park, and while the Scouts didn't get the message, over 30 people stopped by for views of Mars, Saturn, the Moon and other objects.

Carl W. and Lee G. hosted an observing session for twelve families of Cub Scouts on Saturday, September  $29^{th}$ , at Moraine View State Park. A group of approximately 30 scouts and parents – Troop 38 of Trinity Lutheran in Bloomington – viewed the night sky with eye and telescope despite the presence of the full moon. They viewed from Timber Ridge group camp. This was the first viewing session the TCAA has held there in nearly 30 years as this site was closed in the early 1980s (according to Carl's recollection) and only recently reopened.



Not reported in time for the August E/PO review, it should be note that on August 31st, Lee held a lunchtime session with the U of I Extension's Mater Naturalist course. Twenty class members participated in an *Introduction to Astronomy* discussion.

## SGCN ANNUAL APPEAL By Carl J. Wenning

Sugar Grove Nature Center is something the club uses to great advantage. We have our observatory there, we observe regular from its parking lot, we warm up in the nature center on the long cold nights, and the site provides us with an ideal location from where we promote amateur astronomy through our public observing programs. We also get an opportunity for outreach during the Autumn Celebration each October. Seriously, the TCAA as a whole is greatly indebted to the Nature Center.

Several months back the TCAA Board considered an annual donation to the SGNC in recognition of its support for the things we do. At that time the Board felt that the club could not afford to support SGNC with a regular gift. Be that as it may, I honestly feel that we as individuals should support the Nature Center with our donations to the extent possible given our various means. That's why today (9/30) I'm writing my annual check. Won't you join me in supporting OUR nature center by becoming a dues paying member?

Please make your check payable to *Sugar Grove Foundation* and send it to Sugar Grove Nature Center, 4532 N 725 East Road, McLean, IL 61754. Your gift is tax deductible to the full extent allowed by law.

#### **2013 POS BROCHURE PUBLISHED**

The 2013 Public Sky Viewing Program brochure has been completed. This coming year's dates, times, themes, and titles have been worked out by Lee Green and Carl Wenning. They are as follows:

- March 9 Jupiter and the Galilean Moons Large planet, large moons. The King of our Solar System keeps many secrets and holds many surprises in His lofty realm.
- April 20 Our Marvelous Moon The Moon is our closest neighbor and constant companion and affects us in many surprising ways.
- May 11 The Expanding Universe We take a cosmological journey to discover "island universes" (galaxies), red shift, deep fields, curved space, dark matter and dark energy.
- June 8 Astronomical Curiosities of Saturn Can you imagine what surprises we'll find as we investigate the mysteries of the ringed planet?
- July 6 The World's Great Telescopes We take a look at some of the famous telescope around the world and review their
  contributions to the science of astronomy.
- August 10 Meteors, Space Rocks, and Comets You never know who you'll run into around here. Join us as we meet some of our celestial neighbors.
- September 7 Births and Deaths of Stars The study of the life cycles of stars helps us understand the unexpected formation and violent ends of these distant worlds.
- October 5 Our Galaxy, the Milky Way Our view from inside of our home galaxy provides many unexpected perspectives.

Speakers have not yet been determined for all topics, so if you would like to volunteer to present one or more topics (assuming they are still available), please let President Tom Weiland know of your availability to do so. The 2013 POS brochure will soon be posted to the TCAA web site. In order to download your copy, visit the following URL: <a href="http://www.tcaa.us/Download/POS">http://www.tcaa.us/Download/POS</a> 2013.pdf Tom will be printing copies for initial distribution at some of our October public events.

#### **PSO AND MEO UPDATES**

The Illinois Nature Preserves Commission (a unit of IDNR) approved SGNC's request for placement of the Prairie Sky Observatory (PSO) at their meeting on September 11th. On September 12th, and following a communication from Angela Funk, President Tom Weiland wrote via email, "Just to let you know... I have received confirmation from Angela this morning that the Illinois Nature Preserve Commission has approved our request to build the RORO at SGNC. Angela has also indicated that she will be working on the SGNC site-planning project that will contribute details/decisions regarding the observatory. As soon as they know more information and are ready to proceed with observatory planning, they will let us know. Her board meets on Sept 24 at which time they will continue discussions related to this project."

Tom W. reported on September 28th that things are moving along at SGNC with respect to the RORO. He noted, "The September 24 board meeting was Angela's first opportunity to update her board on the Illinois Nature Preserves Commission approval to proceed. It was also her board's first chance to sign off on two projects directly related to carrying the RORO and sap/honey house projects forward. One of those is the site planning which is perhaps the most important in relationship to the RORO. They will be working on this in November and the next Sugar Grove [board] meeting is scheduled for November 26. After that time she hopefully will know more."

Carl W. is working on updating the Memorandum of Agreement between the TCAA and SGNC. He will soon provide to the Board, officers, and key observers recommendations for changes, some of which were suggested by Eric Funk at the recent meeting between the TCAA and Eric and Angela Funk. Eric, it should be known, is a member of the SGNC Foundation as well as the Funk's Grove Cemetery Association.

Carl was able to speak with ISU Physics Department's Jim Dunham about working on the telescope pier at IWU's Mark Evans Observatory (MEO) – the purpose being to mate the new pier to the existing pier and to affix the CGE Pro mount to the new pier. Once these tasks are completed, Bob F. and Carl will move ahead with installing observing and photographic equipment at the observatory. On Friday, September 28th, Carl and Bob F. transferred the steel mounting plate, the 11" Celestron telescope, the 583 astrocamera, and the autoguider to Linda French at IWU. On Monday, October 1st, they will transport the CGE Pro mount to MEO and begin installation with the help of Jim Dunham.

# FUNDRAISING CAMPAIGH UNDER WAY TO REPAIR U OF I OBSERVATORY

By Carl J. Wenning



While I have never had any formal affiliation with the University of Illinois, I have from time to time gone over the UIUC to view through the 12-inch refractor at the U of I Observatory at the invitation of colleagues. Over the years I have felt a growing sense of endearment for that historic place. Part of this comes from my experiences with Mike Svec, an undergraduate astronomy major at UIUC in the 1980s, who managed to get the observatory federally recognized as a National Historic Site and protected for all time. I'm interested in astronomical history generally (see my history of Ohio State University's 1896 Emerson McMillin Observatory at <a href="http://www.phy.ilstu.edu/~wenning/mcmillin/mcmillin.html">http://www.phy.ilstu.edu/~wenning/mcmillin/mcmillin.html</a>) and strongly support efforts to preserve the U of I Observatory. It is a significant historic landmark recognized for pioneering efforts taking place in the area of astronomical photometry.

Friends of the University of Illinois Observatory (FUIO) — a group formed to renovate the aging campus landmark and of which I am part — has just started soliciting donations from alumni and friends by reminding them of their connection with the 1896 building that is still used for lab work in introductory astronomy courses. The brick-and-mortar building surrounding the original 15-foot-tall, 12-inch refracting telescope is starting to crumble as a result of time and water damage. Many of our TCAA members have been students at UIUC. If you are one of these (and even if not),

you should consider supporting the work of the Friends of the U of I Observatory by making a donation. Consistent with the mission of the Friends, donations will be used to preserve the building and instruments and to enhance its educational, cultural, and economic value for the people of Illinois. If you go to <a href="http://observatory.astro.illinois.edu/friends/donate/">http://observatory.astro.illinois.edu/friends/donate/</a>, you can either make a donation online, or find a form and directions for donating by snail mail. You also can make your donation by visiting <a href="http://www.astro.illinois.edu/giving/makeagift/">http://www.astro.illinois.edu/giving/makeagift/</a> and selecting the Friends of the University of Illinois Observatory fund from the drop down menu.

FUIO has raised over \$2,000 since July, and considerably more than that since the group's inception. Please consider making

#### **HOW TIME FLIES**

TCAA Historian Carl Wenning provides monthly updates about the history of the club going back to intervals of 50, 25, and 10 years. Details about all mentioned events will be found in either the club history (<a href="http://www.tcaa.us/History.aspx">http://www.tcaa.us/History.aspx</a>) or in *The OBSERVER* archive found on the club's web site (<a href="http://www.tcaa.us/Observer.aspx">http://www.tcaa.us/Observer.aspx</a>).

#### **50 Years Ago**

October 1962 – Club secretary David B. Williams has proven his qualifications to safely and effectively operate Peoria Astronomical Society's North Moor Observatory and is now able to use the 9" refractor. Club members are preparing to watch the Orionid meteor shower on October 20th.

#### 25 Years Ago

October 1987 – The club hosted its first *Astronomy Rendezvous and Conference* at ISU. There were 40 registered participants. The club is moving ahead to build an observatory at Comlara Park if permission can be obtained.

#### 10 Years Ago

October 2002 – The 12" LX200 telescope in SGO has finally been paid off. The TCAA Board of Directors agrees to a dues increase. The *increases* were \$15 for family membership (from \$25 to \$40), and \$10 for seniors & students (from \$15 to \$25).

#### THE NIGHT SHIFT

#### By Carl J. Wenning

On Tuesday, September 4th, I had the pleasure of spending time with Bob F. as he imaged the Propeller nebula in Cygnus. Having watched him and Tony C. work with the new 17-inch telescope, I have finally acquiesced and decided to purchase an(other) PC on which to run the appropriate software. As my goals for visual observing have been mostly realized, I'm now starting to move ahead with work that will allow me to become more of a "professional" astronomer. Rather than creating pleasing astronomical pictures, I now want to conduct photographic photometry and astronetry. Because I'm now moving on from being an "amateur" astronomer, my nighttime activities will be more akin to what professional astronomers have as their night work. Hence, I have the changed name of this monthly column. It will not long be called *Monthly Reflections;* this column will now bear the name *The Night Shift.* It will be used to characterize my shifting emphasis from casual observations to more serious astronomical work using the new and growing resources of the TCAA. This will allow all those armchair amateur astronomers to see what it is that they are missing.

Follow-up discussions over the course of September with Bob helped me to realize more than just astroimaging for the sake of taking pretty pictures; I want to get into repeating classical scientific work such as observing variable stars and making H-R diagrams using photometric techniques that are part of the MaxIm DL program, and for searching for and tracking asteroids using the Astrometrica program. Of course, I'll never give up entirely on visual observing projects, but my new Toshiba computer is ready and I have purchased all the necessary software to run the 17" under the SGO's dome.

On Saturday, September 8th, at a minute before midnight, I thought that I had completed the 400th observation required to finish the Herschel II program. Alas, I was wrong. In the following days I catalogued all my observations in a single place using an Excel spreadsheet only to find out that I was 3 objects short of the goal. Somehow I had missed 2 objects in Orion and one in Hydra! I now must wait to finished these observations as these objects are currently in the early morning sky. Bummer!

On the following evening, September  $9^{th}$ , I was joined by Jeff Benway and Brian Barling as we took out the Obsession 18" telescope. Not impressed by sky transparency or darkness, we stopped observing after about an hour later and headed off to the Dixie Truck Stop to enjoy some pie.

Throughout much of the rest of September, dominated as it was by the waxing moon, I spent time with Bob F. and Tony C. astroimaging and working with the new 24" Flat-Man screen that was recently purchased so that astronomical images can be refined. Taking "flats" will compensate for vignetting that results from photographing the sky with a wide-field camera chip (giving about ¾ of one degree) such as we are using to image such objects as Stephan's Quintet and nearby NCG 7331.

# MINUTES OF THE SEPTEMBER 4, 2012, BOARD MEETING (CONT.)

(Continued from page 2)

concerns raised and discussed each of them. He noted that the observatory had changed and is primarily used for photography and that observing there was no longer possible; the Board agreed with the assessment but stated that observing facilities will be established in the new observatory. He noted that the 6" refractor built by Art Grebner is not configurable and is of limited usefulness; the Board agreed that the instrument was designed as a medium power device and its original configuration should be maintained and that the CGEM serves well as our high power device. He noted that equipment is not being stored well and is susceptible to damage; the Board agreed and will look into obtaining a storage cabinet to improve organization of equipment inside the facilities. He noted that on two occasions he had found the door unsecured; everyone promised to be more diligent. On safety issues, he noted that rocks build up on the sidewalks and the observing area and that this was a potential safety hazard; Lee agreed and admitted that he had not been diligent on this point. The member noted that the use of extension cords during public session was a potential safety hazard; we agreed with the concern and members will strive to minimize the number of cords in use. He noted that allowing dogs at the public sessions is a potential safety hazard; the Board could remember few cases where pets were present but agreed to suggest in the brochure "Please, no pets." Lee will distribute our written operating procedures to the Board members for their review to see if these can be expanded to address some of the stated concerns.

A motion to purchase a mount for visual observing in the new observatory was considered. Bob recommended that an Astro-Physics mount would be the best instrument for this purpose and indicated that a down payment had been made to secure the option to purchase one. Lee expressed his frustration that communication with the Board often trailed action by individual members. Dave noted that the new equipment would provide wonderful new opportunities for engaging the public at our events. The motion was unanimously approved. Duane indicated that the list of club equipment needed to be updated to reflect recent donations and transactions. Lee agreed to assist him.

The meeting adjourned at 9:07pm.

Respectfully submitted,

Lee Green, Secretary

#### **ASTROBITS**

- ★ The Illinois Dark Skies Star Party, hosted annually by the Sangamon Astronomical Society of Springfield, will take place October 11-14 at Jim Edgar Panther Creek State Fish & Wildlife Area. You may register online or pay upon arrival. Check out the star party website for details at <a href="http://sas-sky.org/">http://sas-sky.org/</a>
- \* It's great to hear that former TCAA member Tim Stone, a very active and capable observer from the late 1970s and early 1980s, visited the SGO during late September where he was delighted to run into Bob Finnigan. He has been speaking recently with Carl Wenning as well. We look forward to Tim's return to the club.
- \* The ISÜ Physics Department's 4-inch 1882 Alvan Clark refractor might soon be put back into service. Famed telescope refurbishers Chris Ray (Antique Telescope Society) and Fred Orthlieb (Swarthmore College Mechanical Engineering) will be consulting with Carl Wenning during November to determine the best route to take for restoring this historic instrument.
- \* The ISU Planetarium's Del N. Ray hydrogen-alpha solar filter has returned from refurbishment during early September. Carl is now anxiously awaiting a new ERF for his CPC 11" and for clear skies to return so he can view the sun in narrowband once again.
- \* Carl continues to work with Audrey Fischer (Chicago Astronomical Society) and Carroll Iorg (Astronomical League President) to prepare contributions for the online book *Celebrate Starlight*. The work a series of contributed astronomy club histories will be featured in an article by Carroll to appear in an upcoming issue of *AL Reflector*.
- \* Thirty-three additional email addresses were obtained through the door prize drawing at the September 15th observing session. The number of email addresses so obtained has now reached 58.
- \* Mark Honzell has rejoined the TCAA listserv. Does this mean that we will be seeing him soon? We hope so, as he has been gone far too long as a result of health problems. We wish him well and look forward to his return to active observing.
   \* whiteboardsUSA.com has donated five 24"x32" whiteboards for the TCAA's use during educational programs. Lee made
- \* whiteboardsUSA.com has donated five 24"x32" whiteboards for the TCAA's use during educational programs. Lee made use of them on September 22<sup>nd</sup> while working with Boy Scouts on the astronomy merit badge. The whiteboards will be stored in the club's room in the SGCN storage barn.
- \* Lee's name appeared in the September issue *The REFLECTOR* indicating that he was formally completed all observations needed and will soon receive his certificate and pin for the Deep Sky Binocular Award. Lee has also completed the Open Cluster club, but has not yet been recognized by the AL for doing so. He will soon qualify for the Master Observer award as well
- \* The Illinois Section of the American Association of Physics Teachers will be meeting at Heartland Community College during October 2013. The theme of the conference will be "Physics and Astronomy Education." There is hope that the TCAA can take part in this event by providing a talk and holding an open house at our observatories Sugar Grove and Prairie Sky.

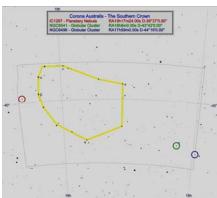
## CONSTELLATION OF THE MONTH: CORONA AUSTRALIS—THE SOUTHERN CROWN

Corona Australis is a small constellation that lies south of Sagittarius and east of Scorpius. Its distinctive semi-circle of stars is seen as a laurel wreath at the foot of Sagittarius. Corona Australis is best visible during the summer months.

Corona Australis is remembered as the wreath placed in the stars by Bacchus in honor of his mother Semele.

Corona Australis is the 80<sup>th</sup> largest constellation which covers only 128 square degrees and is the 65<sup>th</sup> brightest. Corona Australis reaches opposition on July 4.

Located at the edge of the Milky Way, it contains a number of interesting objects. NGC 6496 and NGC6541 are two globular clusters. NGC6496 is a much looser grouping than the stars of NGC6541 and these nearby targets provide an interesting comparison. Planetary Nebula IC1297 is quite small. Between the eta and gamma stars in the northern part of the constellation lies a large dark nebula called Bernes 157 and globular cluster NGC6723.



# TCAA Treasurer's Report – September 2012

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OPERATING FUND BALANCE - August 31, 2012 -	\$ 1,089.44
<u>Income</u>	
Bryce Heiniger (Student Dues) -	\$ 25.00
Tom Weiland (Dues) -	\$ 40.00
<u>Expenses</u>	
LYB Inc. (Observer copies & postage) -	\$ 26.70
OPERATING FUND BALANCE – September 30, 2012 -	\$ 1,127.74
OBSERVATORY FUND BALANCE – August 31, 2012 -	\$12,562.18
<u>Income</u>	
None -	\$ 0.00
Expenses	
None -	\$ 0.00
OBSERVATORY FUND BALANCE - September 30, 2012 -	\$12,562.18
TOTAL TCAA FUNDS – September 30, 2012 -	\$13,689.92

Respectfully submitted,

L. Duane Yockey, Treasurer



#### 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 <a href="https://docs.org/rcaa.com/TCAA-subscribe@yahoogroups.com">TCAA-subscribe@yahoogroups.com</a>. Unsubscribing is just as easy. To unsubscribe, just send a blank email to <a href="https://dcaa.com/TCAA-unsubscribe@yahoogroups.com">TCAA-unsubscribe@yahoogroups.com</a>.

To keep up to date on celestial events not described in *The OBSERVER* or addressed in the listsery, visit Carl Wenning's observing page at <a href="www.phy.ilstu.edu/~wenning/observing">www.phy.ilstu.edu/~wenning/observing</a> 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.

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Newsletter of the TCAA, Inc.

Erin Estabrook, Editor 314 Covey Court Normal, IL 61761

Are <u>your</u> 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