TWIN CITY AMATEUR ASTRONOMERS, INC.

IN THIS ISSUE:

PRESIDENT'S

MESSAGE	·
ANNUAL POTLUCK SLATED FOR JUNE 9	1
TCAA BOARD MEETING MINUTES MAY 16, 2007	2
POS/MOOS SCHEDULE	3
CHASING SATURN	3
JUNE SKY GUIDE	4
TCAAers ATTEND 2007 NCRAL CONVENTION	4
NCRAL REGIONAL AWARD PRESENTED TO CARL J. WENNING	5
HISTORY OF THE TCAA: PART 2	5
PROFILES IN AMATEUR ASTRONOMY: DUANE YOCKEY	6
MAY OBSERVING LOG	6
TREASURER'S REPORT	7

The OBSERVER

VOLUME 32, NUMBER 6

JUNE 2007

PRESIDENT'S MESSAGE—OBSERVING CLUBS

By Lee Green

One problem beginning astronomers often encounter is knowing where to point their telescope. There are many thousands of objects in the sky including the Sun, Moon, planets, star clusters, nebulae and galaxies. Where do I begin? Which ones can I see and which are the best ones?

The TCAA is a proud member of the Astronomical League which is composed of over two hundred and forty local amateur astronomical societies from all across the United States. Their mission is to foster astronomical education, to provide incentives for astronomical observation and research and to assist communication among amateur astronomical societies.

One way the Astronomical League promotes observing is through their Observing Clubs. These clubs are programs to help member improve their skills by observing a variety of objects. Each program has rules and requirements and includes a specific list of objects to be observed. The beauty of these clubs is that the objects in the viewing lists were selected because they are prime examples for each class. In addition to seeing all these beautiful objects, you will gain valuable experience with your equipment in celestial navigation and

observing.

There are over 25 different clubs for different categories of objects and instruments. For example, there are three binocular clubs for members who don't own a telescope. One club, the Urban Observing Club, would be a great way to start observing with a telescope because it contains a wide variety of objects like double stars, clusters and galaxies. These are all relatively bright and exceptionally beautiful objects that can be seen from light-polluted areas, so every item can be seen from your own back yard.

When you have completed the required observations, your observing log is presented to an officer of the TCAA for certification and your application is submitted to the Astronomical League. You receive a beautiful Certificate of Achievement and a classy lapel pin and you will be listed on the Astronomical League's web site.

Whether you're a new observer or an old-timer, consider using these clubs as a guide to the wonders of the cosmos. For more information please visit http://www.astroleague.org/observing.html.

ANNUAL POTLUCK SLATED FOR JUNE 9

Each year since the late 1970s and starting at the home of Bob and Antoinette Finnegan at Downs, the TCAA has usually held a club picnic during the month of June - sometimes July. This has become an annual tradition. This year the tradition will continue on Saturday, June 9th. A potluck picnic for members and their guests only will be linked to the members-only observing session that is scheduled for that evening. Reservations have been made for the SGNC picnic shelter. The picnic will begin with arrival around 6:30 p.m. The club will provide a lighted grill that will be ready by 6:45 p.m. and dinner will be served at 7 p.m. As also has been the tradition, the TCAA will provide the charcoal and lighter fluid for the grill, as well as a variety of refreshments in 2-liter bottles.

As this is a potluck dinner, please bring a dish to share. Be creative, and avoid the urge to bring that bag of potato chips! ② Also bring your own entrée (fish, steaks, burgers, hotdogs) and table service (cups, plates, utensils, napkins, condiments). We have plenty of tablecloths, so no need to bring those. Bring along some games to play as we wait for sunset (8:25 p.m.) and

the beginning of civil twilight.

The picnic and follow-up events will be held cloudy or clear. A travelogue program will be held beginning at 8:30 p.m., and viewing will begin at 9:00 p.m. if the sky is clear. If the sky is overcast, we'll end the picnic with the travelogue, the making of "s'mores" and the telling of star stories around a campfire. This picnic will be a great time for the whole family, and TCAAers will not want to miss it. Should you have any questions, don't hesitate to contact the event's organizer, Carl Wenning, at (309) 830-4085 (cell).

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.

TCAA OFFICERS

President Lee Green lee@starlightsoftware.com

Vice-President Michael Rogers 309-825-6454 mprogers@mac.com

Secretary/Historian Carl Wenning 309-454-4164 cjwennin@ilstu.edu

Treasurer Duane Yockey 309-452-3936 duane@lybinc.com

Publicity/Web Michael Rogers 309-825-6454 mprogers@mac.com

4th Director Dave Osenga DaveOsenga@msn.com

5th Director John Werner res1mpc9@verizon.net

Property Manager

William Carney 309-829-7748 willcarney@aol.com

Observer Editor

Erin Estabrook 314 Covey Court Normal, IL 61761 309-454-6894 erin@lybinc.com

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

Duane Yockey 508 Normal Avenue Normal, IL 61761

TCAA BOARD MEETING MINUTES MAY 16, 2007

President Lee Green called the meeting to order in the offices of Lewis, Yockey & Brown, Inc. at 6:35 p.m. Also in attendance were Duane Yockey, William Carney, Michael Rogers, Dave Osenga, Carl Wenning, Dan Miller, and John Werner.

The following items of old business were addressed and decisions made:

- It was announced that Duane and Carl would be attending the NCRAL meeting in Moorhead, MN, this coming weekend to confirm that the TCAA has offered to host the 2010 regional meeting.
- The POS schedule was reviewed, and Mike agreed to assist Carl with the August 18 POS. No additional volunteers were found for the remaining POS and MOOS events.
- Currently schedulded outreach events were listed: Pontiac, July 9; Bloomington Public Library, July 17.
- Other outreach events were tentatively planned for BPL: "Thinking about buying a telescope?" (October) and "How to use your telescope." (January). A late December observing session for the opposition of Mars, between Christmas and New Years, might be held at the Chalenger Learning Center. Carl will check on the best date for this latter event and will talk with the CLC about hosting the event; Mike will look into scheduling the former events at BPL.
- It was noted that the club might consider additional summertime observing sessions at Ewing Park III or other in-town locations as has been done before. Carl will check with the Bloomington Parks and Recreation Department or others about scheduling some events. (It was further noted that the TCAA information contained in the current Normal Parks & Recreation booklet needs to be updated before February.)
- Lee noted it was nice to see the wide variety of authors in the most recent issue of *The OB-SERVER*. Carl noted that he would also like to start writing profiles of leading club members; this was warmly agreed upon.
- Dan noted that he has not yet completed the TCAA membership card design, but that he had purchased the printing stock. He will give the stock to Mike for the production run. Mike will work out the design. Mike needs to send the TCAA logo to Lee for his production activities.
- Dave noted that he regularly works with databases, and should the TCAA need a database for membership information, he would gladly assist.

The following new business items were addressed and decisions made:

- Lee, Dave, and John all agreed to cooperate to present a September event at BPL dealing with "Planetary Imaging." The event will be held in the days before the September public observing session, ostensibly on a Thursday.
- Carl brought up the fact that nothing has been heard from Rich Tennis about the TCAA/PAS observing session at the Mackinaw Valley Winery as in years past. Because our members will be tied up with a POS on the date announced at the An-

nual Meeting in February, Lee will send our regrets.

- Dan will contact Angela at SGNC about donating the "monstrous" video projector now housed in the SGO. He will also ask Angela about putting in a video feed cable using the conduit now running between SGNC and SGO. Dan and John both noted the availability of low-cost, high-quality video eyepieces than can be fed directly to a video project or computer.
- Duane noted that the paperwork for filing the new "Official Registered Agent" for the corporation has been taken care of. He also noted that the club's liability insurance costs are down by half thanks to the help of Funk Insurance.
- Mike indicated that he had talked with Angela at SGNC about installing a "POD" at SGNC for storage of member telescopes. It was noted that the SGNC Board undoubtedly would need a written proposal before considering and acting on this request of their next meeting near the end of May. Either Lee or Mike will draft the proposal for distribution to the TCAA board and then the SGNC board.
- Carl will investigate funding from the V. M. Slipher Committee for money to support the purchase of the POD. Dave suggested that local union members might help with installation of the POD in an aesthetically pleasing manner.
- Carl further noted that the TCAA needs some long-term planning, perhaps a 5-year plan, to help with development efforts of the group. Lee will solicit some ideas and send a draft to the Board for further discussion. This will be an action item at the next meeting of the TCAA Board in July.
- Observatory improvements were then addressed. Dan motioned and William seconded to appropriate \$400 for installing shelves in the storage room of the SGO with the work to be completed in June by carpenter Danny Rhodes as specified on drawings. Lee will coordinate the work. Dave noted that he has some treated wood and hardware that he would give to the effort. The motion carried unanimously. It was informally agreed that in the longer term that Polyfil would be used to insulate the walls of the SGO storage room (with another yet-to-be-determined insulation for the ceiling) in order to create a "warming room"
- Carl suggested that the TCAA consider purchasing a 20-mw green laser, the 5-mw being insufficient for sky lectures when the moon is bright or sky especially transparent. Dave will bring his 20-mw to the next POS and it will be compared with the club's 5-mw laser. Concern was expressed about eye damage resulting from inappropriate use of a 20-mw unit, to say nothing of "interfering" with planes in flight.
- It was agreed that sometime in August the service contract for the SGO 12-inch LX200 telescope would be renewed. The Board previously appropriated money for this. Lee will pursue this work, and will ask Meade about replacement of

(Continued on page 4)

Coordinators are needed still for several of the 2007 Public and Members Only Observing Sessions at Sugar Grove Nature Center. Additional POS coordinators are needed; two per session are preferred. Please sign up by contacting one of the Board members if you are willing to host or co-host one of these sessions.

Members Only Observing Sessions occur one week earlier than the above POS. Coordinators (who should be SGNC key holders unless they have their own telescope) are still needed for nearly all of these sessions. Please sign up by contacting one of the Board members if you are willing to coordinate one of these events.

MOOS 2007 Date	MOOS Coordinator(s)
June 9	1. Duane Yockey
	2.
July 14	1. Brian Barling
	2.
August 11	1. Lee Green
	2.
September 8	1.
	2.
October 6	1.

2007 Date	POS Topic(s)	POS Coordinator(s)
June 16	Globular Clusters M3 and M13	Dave Osenga Duane Yockey
July 21	First Quarter Moon and Jupiter	1. John Werner 2. Lee Green
August 18	Planetary Nebulas M27 and M57	Carl Wenning Michael Rogers
September 15	The Milky Way Galaxy	Carl Wenning Dave Osenga
October 13	Double Cluster in Perseus	1. Lee Green 2.

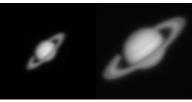
CHASING SATURN

by Lee Green

At the April Public Observing Session, I brought my camera along with the idea that I would capture Saturn after the meeting adjourned. It was fun and I took some pretty good images, but I made several mistakes. The fatal one was that I did not use my Barlow to adjust from the scope's optics from its native F/10 to F/20.

At F/10, the image is half the size that at F/20 and the image at the right show them side-by-side. The scope focuses the image onto the CCD chip which is an array of sensors. The Nyquist sampling theorem tells us that the smallest feature we can record must be two pixels in size. So at F/10 features like the Cassini division got washed out in the sampling. So I made a second outing the following weekend and corrected my mistakes and successfully recorded a series of images at F/20.





I use the Maxim DL program to perform many of the functions needed to create images. The first step is acquiring the data. The camera (I have an SBIG ST-10 with a filter wheel) is mounted in place of an eyepiece and is hooked to the computer by a USB cable. Once the program connects to the camera, exposures can be made by selecting the exposure time and the filter to be used. I took several exposures to adjust the focus so the target was sharp and centered.

Next I set the program to take a sequence of images where you can define the exposure times, filters and repeat counts for sequences of images that are stored on the computer. I took 200 unguided images of 0.05 seconds without a filter to provide a good sampling of the luminance channel. In addition, I took sets of 40 images for the Red, Green and Blue channels and some dark frames for calibration.

That took care of collecting the data. Reducing the data to a usable image took longer since I am still working my way down the learning curve by trying different programs and approaches at each step along the way. So this sequence describes what I did, this discussion is not intended to be a definitive process.

I reviewed the luminance images - all 200 of them and selected the best of these (67) as the basis for processing. The others were not as good due to seeing conditions - fluctuations as the light is refracted by air - and were partially out of focus and/or distorted. The images were then calibrated using the Dark frames using Maxim's Process, Calibrate feature and aligned (the image drifted across the field of view due to my scope's imprecise alignment) using the Process, Alignment feature where I selected the Planetary alignment option. Then I combined these images (stacking) using the Process, Combine feature selecting Median Combine to average out effect of seeing, dust and other 'noise' that show up in the raw data. The result was a pretty good monochrome representation of Saturn that appeared slightly out of focus.

I repeated these steps for the Red, Green and Blue filtered image sets. However, for those sets I did not discard any frames and accepted all the data. because the color channels are used to qualify the luminance data.

Next I exported the four files (luminance, red, green and blue) to .TIFF format files and I opened these in Photoshop. I created one layer for the luminance channel. The second layer used the other files as RGB components and the layer's Blending was set to Color. Then, I used Photoshop's Unsharp Mask (500%, 3px radius, 1 level threshold) to sharpen up the details. Finally I cropped and exported the final image.

Special thanks to John Werner for his advice and encouragement.

JUNE SKY GUIDE

- The Moon passes 6° south of Jupiter, 7 A.M.
- **02** Mercury is at greatest eastern elongation (23°), 5 A.M.



o5 Jupiter is at opposition, 6 P.M.



The Moon passes 1.5° south of Neptune, 9 A.M.

The Moon passes 1.6° north of Uranus, 10 A.M.

Venus is at greatest eastern elongation (45°) , 10 P.M.



- The Moon passes 5° north of Mars, 5 P.M.
- The Moon passes 6° north of Mercury, 4 A.M.
- The Moon passes 0.6° north of Venus, 10 A.M.
- 19 Pluto is at opposition, 2 A.M.



The Moon passes 0.4° north of Saturn, 3 A.M.

The Moon passes 0.4° north of Regulus, 7 P.M.

21 Solstice (northern summer/ southern winter begins), 1 P.M.



28 The Moon passes 0.5° south of Antares, 3 A.M.



The Moon passes 6° south of Jupiter, 9 A.M.

Mercury is in inferior conjunction, 2 P.M.

TCAAers ATTEND 2007 NCRAL CONVENTION

Duane Yockey and Carl Wenning attended the North Central Region Astronomical League (NCRAL) Regional convention May 18-19 in Moorhead, Minnesota, to fly the colors of the Twin City Amateur Astronomers and to confirm that we will be hosting the annual meeting in 2010. Approximately 35 NCRAL members were in attendance representing ten member societies. The Fargo-Moorhead Astronomy Club (FMAC) hosted the event.

Our inveterate travelers made it to Moorhead (on the North Dakota border adjacent to Fargo) late on Friday evening after an 11-hour, 688-mile drive. They arrived too late to attend the planetarium program at Minnesota State University Moorhead (MSUM), but had a nice evening meal at the local *Speak Easy* restaurant. They attended the full meeting with evening banquet on Saturday, and followed up on this with a field trip to a local nature center with its observatory.

The Saturday talks were, in a word, excellent! Geologist Russell Colson presented the talk Exploring the Moon from a Laboratory: Mysteries and Resources on the Moon. He used a number of terrestrial rock samples and demonstrations to explain the lunar environment and history. Following a short break for a group photograph, astronomer Mike Gaffey gave a superb talk about Telescopic Studies of Potentially Hazardous Asteroids. He explained how astronomers can distinguish between metallic and rocky asteroids, and told why it is that airbursts resulting from rocky asteroid impacts with Earth are so much more dangerous than ground impacts by equally massive metallic asteroids.

After a break for lunch, the group came back together to hear MSUM planetarium director Dave Weinrich talk about the importance of direct observations with a telescope rather than with video images when dealing with the general public. Astronomer Tim Young then spoke about *Type I Supernovae* describing several recent examples. Following these presentations, the annual business meeting was held.

At this meeting it was (finally) acknowledged that the TCAA had invited the Region to meet in central Illinois during 2010 to help celebrate the 50th anniver-

sary of the TCAA. It was motioned, seconded and carried that the TCAA would serve as the 2010 host. Following the business meeting, FMAC member Robert Brummond explained the club's outreach activities with youth by demonstrating how to *Make Your Own Spectroscope*.

The afternoon session and evening activities were parted by a dinner banquet after which a number of door prizes were awarded. Duane won a MEADE cap and Carl won a set of quality Konus 8 X 42 binoculars (a \$100 value!). He was completely surprised by being awarded the N.C.R.A.L. service award after having been nominated by the TCAA the previous year. After dinner, North Dakota aurora watcher extraordinaire Lyndon Anderson provided the keynote address, Photographing the Northern Lights. An informal star party was then held about 14 miles east of Moorhead at the MSUM Science Center. The sky was mostly cloudy, but conferees were treated by a wonderful view of the crescent moon and Venus through the breaks in the clouds. The moon and Venus were so close as to be visible in the same field of view of a lowpower telescope. Participants also visited the 16-to-18 foot wide dome that housed a 16-inch classical Cassegrain telescope used mostly for asteroid studies.

On their way home, Duane and Carl visited the Norske Nook Restaurant and Bakery in Osseo, Wisconsin, for some additional "mighty fine dining." They had a really great time going to and from the event, and wished that more TCAAers had taken advantage of the opportunity to travel as part of the group.

It was unfortunate that the overall conference turnout for this fine NCRAL meeting was so low. The registration could easily have been doubled to 70 had the Fargo-Moorhead Astronomy Club promoted the event in any meaningful fashion beyond their club's web page. According to the conference leader, the invited speakers were not confirmed until about a week before the conference making promotion difficult.

The 2008 meeting will be hosted by the Northern Cross Science Foundation <www.ncsf.info> from April 18-19 at Port Washington, Wisconsin.

BOARD MEETING MINUTES (CONT.)

(Continued from page 2)

the hard-to-work hand controller at the same time that some have suggested might be the source of the ongoing troubles with the telescope.

• Carl suggested once again that the TCAA consider purchasing its own video projector. The suggestion was tabled in light of current expenditures and the fact that at least two other members have recently purchased video projectors that they can loan to the TCAA for POS and other activities.

The meeting was adjourned at 8:15 p.m.

Respectfully submitted,

Carl J. Wenning, Secretary

NCRAL REGIONAL AWARD PRESENTED TO

CARL J. WENNING

By Duane Yockey

Each year the North Central Region of the Astronomical League requests nominations for the NCRAL Regional Award. This award recognizes "exceptional individual effort and meritorious service to amateur astronomy through a member's local astronomy club, public outreach, the NCRAL or the Astronomical League". Our TCAA Board of Directors nominated Carl J. Wenning for this award, and it was awarded and presented to Carl by incoming NCRAL president Gerry Kocken at the NCRAL Annual Conference held in Moorhead, Minnesota on May 19, 2007.

Carl's accomplishments and service on behalf of amateur astronomy are too numerous to list in their entirety, but a few are as follows. He has been a member of TCAA for almost 30 years and has earned lifelong honorary membership. He has been inducted as a member of the G. Weldon Schuette Society of Outstanding Amateur Astronomers by the TCAA. He has held a variety of offices since 1979 including President, Vice President, Secretary and Historian. As TCAA Historian, he wrote the club's 25th, 30th, and 40th anniversary editions of the club's history (See http://twincityamateurastronomers.org/history.html). He contributes regular articles to our monthly newsletter, The OBSERVER. He has given hundreds of public presentations at TCAA observing sessions and events and has taught the astronomy course sponsored by TCAA. He was Director of the Illinois State University Planetarium from 1978 to 2001. He has served as an astronomy and aerospace merit badge counselor for both Boy Scouts and Girl Scouts since 1978. He has earned his Messier Award from the Astronomical League. He has been a writer, traveler in search of eclipses, a fundraiser for astronomy and science causes, and has worn many other hats on behalf of astronomy.

Congratulations, Carl! Thank you for your past, present and future service on behalf of amateur astronomy, the Twin City Amateur Astronomers, Inc. and science education at large. You have helped introduce and bring astronomy and science alive for countless people, young and old alike, who will forever be in your debt.





HISTORY OF THE TCAA: PART 2

By Carl J. Wenning

Historian's Note: Beginning with the article "The Origin of the Twin City Amateur Astronomers" in the May issue of The OBSERVER, Carl Wenning, TCAA Historian, began chronicling the history of the club. This article is the second of a series.

The first year of the club's existence (1960) proved to be very active. An attempt at monthly public viewing sessions was made. On the night of March 12-13, club members viewed a lunar eclipse with the general public at Fairview Park. This was followed by an August 1 observing session featuring Jupiter and Saturn. Seven telescopes were used to exhibit the wonders of the solar system to some 200 attendees. Later that month Perseid Meteors were observed. On September 5 a lunar eclipse and the Aurora Borealis were observed simultaneously. On September 20 club members viewed a partial solar eclipse, and three days later the public was treated to another peak at Jupiter, Saturn and, this time, a crescent moon. October 8 marked the date for the first club trip to the Adler Planetarium in Chicago. On November 7 members observed the transit of Mercury across the face of the Sun. On December 1 two films describing the Moon and "featuring sound" were presented to club members and visitors.

During the first year of the club, there were only three notable telescopes among the membership – a 6-inch reflector built and owned by John Kieviet, a 3-inch refractor owned by Robert Courtney, and a 3-inch Newtonian reflector owned by David B. Williams.

Besides hosting observing sessions at Fairview Park in Normal and Oakland School in Bloomington, John Kieviet encouraged TCAAers to prepare "Vital Statistics" (Julian date, moon phase, age, sidereal time, location of planets, sunset, end of twilight, and other current information) for every meeting. These "Vital Statistics" became a part of regular meeting activities for years to come.

During the winter the club met at the Fairview Park bathhouse in Normal. During the winter it was converted into a recreation hall because bathers were not then using it. During the summer the bathhouse was not available and so club members met in Normal's "city hall," Fairview Sanitarium, Citizens Savings and Loan, Victory Hall, ISU's Felmley Hall of Science, and IWU's Sherff Hall of Science.

The astronomy club had an excellent beginning under the auspices of Bertha and John Kieviet; the club certainly agreed, for at the end of 1960 the club membership presented John with a plaque recognizing him as founder and first president, and Bertha received a corsage in recognition of her interest in and support of the TCAA. The first anniversary of the club was celebrated at the Normal Swimming Pool cabana with a large photograph appearing in the Pantagraph newspaper the next day. In this first year the Pantagraph carried no less than 15 articles chronicling the activities of the newly formed club. Thanks to a young member by the name of David Williams, the next five years of TCAA activity was chronicled quite carefully in a newsletter.

PROFILES IN AMATEUR ASTRONOMY: DUANE YOCKEY

By Carl Wenning

Historian's Note: During the coming months, Carl Wenning, TCAA Historian, will profile several of the club's more active members – but only with their help. This month the "telescope" is focused on TCAA Treasurer L. Duane Yockey.

Duane Yockey became interested in astronomy and space flight in the late 1950's when he was only 10 to 12 years old and living in Monticello, Illinois. Sputnik, science fiction novels, and the space program helped spur his interest in all things space related.

While a high school student, Duane purchased his first telescope – a "tabletop refractor from Edmund Scientific." That was 1964. When Duane attended the University of Illinois starting in 1966, he originally wanted to become an astronomer. However, due to a perceived lack of jobs in this area, Duane focused on preparing for a more "practical" career – civil engineering with a minor in structural engineering.

It wasn't until 23 years after that first telescope that his wife Carolyn purchased for him a 10-inch Coulter Odyssey telescope at Christmastime in 1987. Admittedly, Duane didn't do much observing with the telescope after that, but still he yearned to meet up with those who were actively involved in amateur astronomy.

Between 1987 and 1999, Duane attended several TCAA functions at Comlara Park, Ewing Park III, and the area's public libraries. Nonetheless, he didn't become actively involved with the TCAA until several years later. As co-owner of an engineering firm in downtown Bloomington, Duane wanted to join the club but was held back due to time constraints resulting from job commitments. In recent years, while still incredibly busy, Duane has found the time to participate. He currently serves as the TCAA Treasurer, and has served as a Board member continuously since 2000 with the exception of the current year.

Duane's greatest satisfaction as an amateur astronomer is finding his way around in the night sky and sharing what knowledge he has and his sense of awe with others, especially young people. In Duane's words, "A 'wow!' from someone looking at Saturn or Jupiter or the moon for the first time through a telescope warms the cockles of my heart!" Among Duane's fondest astronomical memories are laying out on the shoreline in the Canadian Boundary Waters to view the night sky, especially the Milky Way, meteor showers, and auroras. He really enjoys using binoculars to pick up celestial objects under those conditions. His all time favorite memory is the

November 2001 Leonid meteor shower that he chased into Indiana to avoid cloud cover and fog over Illinois. Duane noted, "It was spectacular."

Duane recounts the event upon finding an observing site in Indiana, "I quickly set up my lawn chair and sat back to view what I considered an awesome spectacle. I saw literally hundreds of meteors (I would say at least a thousand between 3:30 a.m. and 5:00 a.m.).



Most were small streaks, but there were many larger ones and a good two dozen that flared brightly during their track across the sky and left a luminescent trail for a good 5 minutes after they had disappeared. The track of most of the meteors was away from Leo. I saw 5 to 10 at one time radiating out from Leo. At other times, I could see 3 or more at once streaking parallel to one another. I concentrated on the Leo part of the sky, but the meteors were all over, even into the foggy perimeter of my little viewing island. During some of the bright displays, dogs (coyotes?) began howling and yipping somewhere not so far in the distance. It was a unique sensory experience!"

Duane now regularly observes with the TCC during public and members-only observing sessions. He would like to begin some of the Astronomical Leagues observing programs (Messier, Herschel) and will do so as he reduces his work commitments over the next few years. Doing some traveling to see astronomical events or just to find some really dark skies or views from the southern hemisphere are high on his "to do" list as well.

In Duane's opinion, "both amateur and professional astronomers have access to extraordinary technology today. These tools allow the amateur to enjoy his/her hobby with results that professionals could not do previously. Professional astronomers often seem so immersed in the science and technology that the joy of viewing the night sky has been severely diminished or is lacking entirely."

MAY OBSERVING LOG

~ contributions by Lee Green, Dave Osenga, Sheri Rodgers, & Carl Wenning ~

This past month's MOOS was held on May 12th at SGNC. As we set up our scopes, a few clouds were gathering on the horizon. We had a current year record of seven telescopes with Brian Barling, Lee Green, Dan Miller, Michael Rogers, Carl Wenning, John Werner, and Duane Yockey all manning instruments. Dan also demonstrated the impressive capabilities of the Celestron Sky Scout that was mounted on a tripod with a laser pointer. About 20 Olympia school district students and parents attended. High altitude clouds continued to gather throughout the evening and we finally yielded to Mother Nature around 10 p.m.

The May POS was held on the 19th. The event was hosted Mike Rogers and Dave Osenga. Mike gave a verbal overview talk about galaxies to the group of about twenty-five as no video projector was available. Dave later gave the group a constellation tour with stops along the way to telescopically view the moon, Venus, and Saturn using his 6-inch telescope. Of course, Saturn was showing off quite a bit and observers could even see the shadow of the planet cast on the rings. At times, the Cassini division was visible. All of the constellations along the ecliptic were very visible as were many others. The 12" Meade in the observatory was made operational (following a breakage of the electric focusing mechanism) by cannibalizing parts from another telescope. William Carney came a little later and set up a scope as well. Dave had a few people stay until about 11:00 looking at M51, M81 & 82, and M13, and Mel 111. About that time, Jupiter came out from behind the building and four of the main moons were very evident. Scorpius was visible also making M4 visible. Other TCAAers in attendance were Sheri Rodgers, Brent Rodgers, and Blake Rodgers, along with their guests Matt Gobtop, Caleb Fogler and Brady Fogler.

Carl Wenning and Chrystian Vieyra observed under the so-so sky of Monday, May 21st, at SGNC. The sky was filled with scattered cirrus clouds, and a 6-day-old moon. Nonetheless, they were able to observe the moon, Venus, Jupiter, Saturn, 6 Messier objects and 23 NGC objects on the Herschel 400 list.

Carl Wenning hosted an informal public observing session at Lincoln College at the request of Mike Miller on Wednesday, May 23rd. Some 7-8 students and staff observed the moon, Venus, and Saturn.

TCAA Treasurer's Report - May 2007

OPERATING FUND BALANCE – April 30, 2007 -	\$ 2,655.29
Income Chris Franklin (Dues Renewal) - Mark Cabaj (Dues Renewal) -	\$ 40.00 \$ 40.00
Expenses LYB Inc. (May Observer) -	\$ 16.62
OPERATING FUND BALANCE – May 31, 2007 -	\$ 2,718.67
OBSERVATORY FUND BALANCE – April 30, 2007 - Income	\$ 1,092.86
Mark Cabaj (Donation) - Chris Franklin (Keyholder renewal) -	\$ 10.00 \$ 5.00
Expenses None -	\$ 0.00
OBSERVATORY FUND BALANCE – May 31, 2007 -	\$ 1,107.86
TOTAL TCAA FUNDS – May 31, 2007 -	\$ 3,826.53

Respectfully submitted, L. Duane Yockey, Treasurer

Sugar Grove Observatory

Listing of Official Keyholders (Paid \$10 deposit/\$5 renewal)

Duane Yockey (renewed through 2007)

Michael Rogers (renewed through 2006)

William Carney (renewed through 2007)

Carl Wenning (renewed through 2007)

Brian Barling (renewed through 2007)

Kevin Brown (renewed through 2006)

Christopher Franklin (renewed through 2007)

David Osenga (renewed through 2007)

Gerry Schroeder (renewed through 2007)

Karen & Ed Duran (renewed through 2006)

Josh Lindsey (August 2006)

Andrew Morrison (February 2007)

Dan Miller (renewed through 2007)

Lee Green (April 2007, renewed through 2008)



UPCOMING EVENTS

June 9—Annual Potluck followed by MOOS

June 16-POS





The OBSERVER

Newletter of the TCAA, Inc.

Erin Estabrook, Editor 314 Covey Court Normal, IL 61761

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

Visit the Twin City Amateur Astronomers on the web at www.twincityamateurastronomers.org/