

THE OBSERVER

OF THE TWIN CITY AMATEUR ASTRONOMERS



Volume 39, Number 8

August 2014

INSIDE THIS ISSUE:

Editor's Choice: Image of the Month.....	1
August 23 rd Mini Conference Fast Approaching.....	1
A Note from President Weiland.....	2
Next Public Observing Session August 30 th	2
Calendar of Celestial Events – August 2014.....	3
New & Renewing Members/Dues Blues.....	3
This Month's Phases of the Moon.....	4
Minutes of July 8 th TCAA Board Meeting.....	4
Central Illinois Mini Confab.....	5
NCRAL-MSRAL 2016 Planning Meeting.....	6
Governor's Visit a "No Go".....	6
October Field Trip Tentatively Set.....	7
Education/Public Outreach for July 2014.....	8
Astrobits.....	8
ISU Planetarium Celebrates 50 th Anniversary.....	8
HowTimeFlies.....	9
TCAA Treasurer's Report – July 2014.....	10



EDITOR'S CHOICE: IMAGE OF THE MONTH

This month's Image of the Month is Messier 16 by Craig Prost. Editor's note: No details about the image were provided.

AUGUST 23RD MINI CONFERENCE FAST APPROACHING

Don't forget to register for the August 23rd Mini Conference for members of central Illinois astronomy clubs. Participation is by advance registration only. To register online (the only way possible), go to the following case-sensitive URL <http://goo.gl/KAmcm0> and complete the online survey. Deadline for registration is Saturday, August 16th. This will allow adequate time for preparations of the program, meals, and handouts. *On-site registration will not be permitted.*

As of August 5th, only 13 people have signed up for this event. This includes only 6 TCAA members, 4 CUAS members, and two guests from Astro-Physics – one of whom will be giving a talk. Several more have indicated a desire to attend, but they have not yet completed online registration. Please do so immediately if you expect to attend. Details about this event can be found later in this issue of *The OBSERVER*.



The TCAA is an affiliate of the [Astronomical League](#). For more information about the TCAA, be certain to visit our [club website](#).

The OBSERVER is the monthly *electronic* publication of the Twin City Amateur Astronomers, Inc., a registered 501(c)(3) not-for-profit educational organization of amateur astronomers interested in studying astronomy and sharing their hobby with the public.

TCAA OFFICERS

President

Tom Weiland 309-830-0167
tomcea52@yahoo.com

Vice-President

Dave Osenga 309-287-0789
DaveOsenga@msn.com

Secretary/Webmaster

Lee Green 309-454-7349
lee@starlightsoftware.com

Treasurer/ALCor/Registered Agent

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

3rd Director/Property Manager

Tim Stone 309-531-2401
tim.stone.piano@gmail.com

4th Director/Historian/Editor

Carl Wenning 309-830-4085
carlwenning@gmail.com

5th Director

Robert Finnigan 309-846-9533
robertfinnigan5@gmail.com

The OBSERVER

Carl J. Wenning, Editor
 21 Grandview Drive
 Normal, IL 61761-4071

Submission deadline is the end of each month.

Membership Dues

Individual Adult/Family \$40
 Full-time Student/Senior \$25
 (senior status equals ages 60+)

To join, send your name, contact info and dues payment to Duane Yockey, TCAA Treasurer, 508 Normal Avenue, Normal, IL 61761

A NOTE FROM PRESIDENT WEILAND

Summer.....picnics, cookouts, family reunions and this year some welcome rainy weather after last year's drought. Unfortunately, rain also means cloudy weather which has impacted night time viewing. The weather may have put a damper on some gatherings and activities, but we won't let it do so for our annual TCAA Picnic. Below are the finalized plans for this summer's gathering of our TCAA family.

This will be a rain-or-shine event held at our home in rural Heyworth on Saturday, August 9th. We'll plan on everyone arriving around 5:30. As this is a potluck we ask that you bring a dish to pass (be creative) as well as your own meat. A grill will be available for your use. Please bring lawn chairs. Drinks, table service, and a variety of chips will be provided.

This is a social event, so even if you are a casual TCAA member, I encourage you to attend so that we can get to know each other. I would also like to make this a family event, so I am encouraging members to bring spouses/significant others or a guest. My wife Carolyn and I are looking forward to seeing all of you on the 9th.

Directions: Go three miles south of Heyworth on US 51. Turn west on Bucks Rd. Proceed to the "T". At the "T" turn north (right) for a quarter mile until you see Alexander Rd. Turn west (left) and proceed to 7645 Alexander Road. We are the second home on the right, a tan house with a half circle drive and skylights among large oak trees.

Please RSVP your attendance (and your spouse/guest) to tomcea@yahoo.com
 Clear skies!

Tom Weiland
 TCAA President

NEXT PUBLIC OBSERVING SESSION AUGUST 30TH

The 2014 public observing sessions are continuing. Recall that these events will be held cloudy or clear. Only in the case of active rain will the events be cancelled. The August 30th program runs from 8:00 to 10:00 p.m. August's program, to be led by John Mori, is titled *From Earth to the Edge of the Universe*.

John's presentation has been described as follows, "Just how big is the universe? While we might not be able to find the edge to our universe, we can find all sorts of amazing and unusual things as we travel outward from Earth." John's talk will, in essence, consist of a "cosmic zoom" showing what the universe would look link on different scales if the editor recalls correctly. The POS brochure with additional information can be found on the [TCAA public events webpage](#).

This year's remaining dates (all Saturdays), topics, and speakers are as follows:

Date	Topic	Coordinator
September 27	<i>Globular Clusters</i>	Tom Weiland
October 25	<i>The Andromeda Galaxy</i>	Kevin Brown

Once again in 2014, the club will be collecting email addresses in exchange for a chance to win a basic telescope during an October POS free drawing. This year the telescope is a Meade ETX-125AT (f/15) Maksutov-Cassegrain telescope recently donated to the club. TCAA members *are* eligible for the drawing. Attendees may register for the drawing each time they come to a public observing session. The more frequently one registers, the greater one's chances of winning this fully functional telescope.

CALENDAR OF CELESTIAL EVENTS – AUGUST 2014

MORNING STARS (8/15): VENUS, JUPITER, URANUS, NEPTUNE

EVENING STARS (8/15): MERCURY, MARS, SATURN

03 First Quarter Moon – The moon sets at midnight and rises at midday.

10 Full Moon – This full moon was known by early Native American tribes as the Full Sturgeon Moon because the large sturgeon fish of the Great Lakes and other major lakes were more easily caught at this time of year. This moon has also been known as the Green Corn Moon and the Grain Moon. This is also the closest and largest full Moon of the year, an annual event that has come to be known as a “supermoon” by the media. The truth is that it is only slightly larger and brighter than normal and most people are not really able to tell the difference.

12 Perseid Meteor Shower – The Perseids is one of the best meteor showers to observe each year, producing up to 60 meteors per hour at its peak. It is produced by comet Swift-Tuttle, which was discovered in 1862. The Perseids are famous for producing a large number of bright meteors. The shower runs annually from July 17 to August 24. It peaks this year on the night of August 12 and the morning of August 13. The waning gibbous moon will block out some of the meteors this year, but the Perseids are so bright and numerous that it should still be a good show. Best viewing will be from a dark location after midnight. Meteors will radiate from the constellation Perseus, but can appear anywhere in the sky.

17 Third Quarter Moon – The moon rises at midnight and sets at midday.

18 Conjunction of Venus and Jupiter. These two bright planets will come unusually close to each other in the sky, only a quarter of a degree, in the early morning sky. Also, the Beehive star cluster in the constellation Cancer will be only 1 degree away. This double-planet event is definitely one not to miss. Look for the bright planets in the east just before sunrise. This is the closest conjunction of two naked eye planets in 2014.

25 New Moon – The moon rises and sets with the sun and is not visible.

29 Neptune at Opposition – The blue giant planet will be at its closest approach to Earth and its face will be fully illuminated by the Sun. This is the best time to view and photograph Neptune. Due to its extreme distance from Earth, it will only appear as a tiny blue dot in all but the most powerful telescopes.

NEW & RENEWING MEMBERS

The following individuals have paid dues for new or renewed memberships as of July 31st, 2014. (Others who paid after that date will appear in the September 2014 issue of *The OBSERVER*.)

Dennis Pendleton
James Meeker

DUES BLUES

If you have received a “your dues are due” statement along with the email that brought you this issue of *The OBSERVER*, please remit your dues to Mr. Duane Yockey, TCAA Treasurer, 508 Normal Avenue, Normal, IL 61761. Current dues are \$25 for senior (60 years of age and over) and \$40 regular.

SUBSCRIBING TO OUR E-MAIL LISTS

By subscribing to a group’s mailing list you will receive email messages from the group so you won’t have access to the group’s web features (like photos, files, links, polls, calendar, etc.) unless members [activate it later](#). The club now has two email listservs. The main email listserv is known as the **TCAA** listserv. It will be used to share announcements and reminders about astronomical and club events. To join this main listserv you must do the following:

1. Subscribe: Send a blank email to TCAA-subscribe@yahoogroups.com Note: You’ll be sent a confirmation email from the group. Reply to the confirmation email to activate your subscription.
2. Unsubscribe: tcaa-unsubscribe@yahoogroups.com
3. To post a message: tcaa@yahoogroups.com

A second listserv – **TCAA-imaging** – is for club astronomical photographers as well as those who want to view their images and follow their discussions. It is an easy way to keep up with all the stuff we’re doing at the observatories.

1. Subscribe: tcaa-imaging-subscribe@yahoogroups.com
2. Unsubscribe: tcaa-imaging-unsubscribe@yahoogroups.com
3. To post a message: tcaa-imaging@yahoogroups.com

Once members join a Yahoo! group, they can [manage group and subscription settings](#) whenever it is desired to customize the group experience.

THIS MONTH'S PHASES OF THE MOON



First Quarter
August 3



Full Moon
August 10



Third Quarter
August 17



New Moon
August 25

All moon phase dates are given for Central Daylight Time. Additional moon phases can be found for the 2014 calendar year by clicking [here](#). These four images were provided by J.K. Howell of the Champaign-Urbana Astronomical Society and are used with permission.

MINUTES OF THE JULY 8TH TCAA BOARD MEETING

The meeting of the TCAA Board was held at the office of Treasurer Duane Yockey. In attendance were Board members Tom Weiland, Carl Wenning, Robert Finnigan and Dave Osenga, as well as Secretary Lee Green and Duane. The meeting was called to order at 6:32pm. The minutes of the previous meeting were approved. One motion agreed to by the Board by electronic vote was approved since the last meeting. This is included at the end of this report.

Duane reported that the only activity of note was the payment of the annual Astronomical League dues.

Property Manager Tim Stone sent a report in his absence. Among the highlights of the report was the fact that Tom and Carolyn Weiland completed a series of improvements to the PSO including a new coat of stain and tightening many of the siding boards. The USB conduits have been removed. New pavers for the stoop had been delivered, thanks to Duane. Carl obtained the painting supplies for the new latching system and was reimbursed \$29.08 in costs.

Turning to old business, we reviewed the temporary policies for use of the observatories. Bob reported that there had been no requests to place personal equipment in the facility. We discussed the policies and how they were working. Tom recommended that we might consider a managed equipment configuration to be determined by the Board. The Board proposed and approved a motion to allow the observatory use policy to immediately lapse.

The written operational and training procedures remain a work-in-progress. Dave, Carl and Bob volunteered to continue refining the material we have and preparing addition content as time permits.

A discussion on hosting the 2016 NCRAL meeting was tabled for a separate meeting after the Board adjourned.

The effort to catalog and dispose of unused equipment had had modest progress. Tim has photographed the items. Next up is to distribute the photos to members so that we can solicit people who may be interested in the items.

We reviewed the use of the tcaa-imaging listserv. It seems to be in use and was considered to be reasonably useful as a means to share related information.

Carl reported it was unlikely that an invitation for having the Governor visit the observatories would be accepted.

The August 23 mini-conference plans were well underway. Invitations have been extended to several regional astronomy clubs. Carl reported that there were no volunteers for making prepared talks, but the 'things are cooking.'

As reported in the Property Manager's report, the pavers that were donated by Duane were delivered to the site. We discussed drainage issues related to the PSO and the Nature Center. It was reported that George Farnsworth was considering ways to identify and address, and that additional steps would be discussed in the near future.

Carl reported that the web content for the 'About the TCAA' page had been updated. Lee will apply those changes to the website in the near future.

Turning to new business, the next meeting of the Board will be held on September 16. Duane volunteered to host the event at his office.

Discussion about how the club acknowledges donations was discussed. After reviewing IRS regulation and discussing the issues of concern, it was decided that the club would no longer offer estimates of the value of donations of equipment in our acknowledgements.

Reviewing the possible dates for a summer picnic for club member, it was decided that August 9 would be the best date. Tom and Carolyn have offered to host the event at their home. All members are invited to attend!

A discussion of the club's 5-year plan was tabled.

We discussed the need for improving the polar alignment of the 11" telescope in the PSO, and considered way to achieve this. The Board will solicit suggestions from Tim.

With the PSO having been completed a year ago, thoughts turned to considering what type of periodic maintenance might be needed for the motors, track and roof. Carl agreed to contact the builders to learn what procedures were recommended.

The meeting was adjourned at 7:48pm.

Respectfully submitted,
Lee Green, Secretary

Motion made and approved via email:

President Tom Weiland proseed that a letter to the editor be forwarded to the Pantagraph to address the issue of Lighting Pollution. The motion was approved. The letter appeared in the Sunday, June 1, 2014 edition.

CENTRAL ILLINOIS MINI CONFAB

The TCAA is inviting members of central Illinois astronomy clubs (TCAA, CUAS, PAS, SAS, DAAC) and selected others to attend a mini conference at SGNC on Saturday, August 23, 2014. If you don't have your reservations completed by August 16th, you'll not be able to participate in the free meal associated with this event. Complete your online registration now using this case-sensitive URL if you plan to attend: <http://goo.gl/KAmcm0>

This FREE event will feature a selection of brats, hamburgers, hotdogs, and a choice of sides. Refreshments also will be provided. This Star-B-Q is being made possible courtesy of two TCAA members, and will be available only to those who have registered by the deadline. Attendance is by reservation only; no reservations will be accepted on site.

The program is as follows and is subject to change depending upon the number or reservations and contributed talks:

4:00 p.m. Open House at the TCAA's Observatories

4:30 p.m. Welcome and introductions

4:45 p.m. Contributed 15-minute talks:

- George Whitney of Astro-Physics speaking about *Remote Imaging in Chile with Astro-Physics*
- Audrey Fischer of the Chicago Astronomical Society (tentatively) speaking about starlight restoration with the Illinois Department of Natural Resources.

6:00 p.m. Break (open house continues)

7:00 p.m. Free Star-B-Q dinner

8:00 p.m. Keynote speaker:

- Dr. Carl Wenning of the TCAA speaking about the upcoming series of total and annular eclipses visible from the USA from 2017-2024 and their relationship to the NCRAL/MSRAL 2016 joint convention.

9:00 p.m. Evening observing session

The TCAA is still soliciting 15-minute contributed presentations that will consist of a 10-12 minute talk followed by 3-5 minutes for questions and answers. The number of such talks will be limited, and not all who offer to present will necessarily be given an opportunity to do so. You may request to present a talk by completing the talk request form at the following case-sensitive URL: <http://www.goo.gl/GWPf1j>.

There is no rain date for this mini conference. Because we have access to a large picnic shelter and a nature center, the event will be held rain or shine, cloudy or clear. Should you wish to camp out during the night of August 23/24, you may do so. However, there will be a \$5 per person fee will be collected on site.

Mark your calendar and get your reservations in now so you won't miss this event. If you have trouble with registering your attendance or a talk, please contact Carl Wenning at carlwenning@gmail.com immediately.

NCRAL-MSRAL 2016 CONFERENCE PLANNING

Following the Board of Directors meeting on July 8th, the conference committee met and the following points were made:

- Duane Y. has contacted Holiday Inn Express near CIRA. They are willing to provide us rooms at \$99 plus tax, the convention center will cost \$500.
- Tom W. has not heard back from Dan Miller about providing us with a sound system and stands for the astrophotography contest.
- Carl W. has a bit of information from the HCC conferencing unit and will contact Stacey Shrewsbury shortly about possibly co-sponsoring this event so that we might gain access to the Astroth Community Education Center.
- Carl displayed his solar eclipse booklet that whiteboardsUSA.com is willing to produce at no cost for conference attendees.

On July 16th Carl W. had a short conversation with Stacey Shrewsbury, Lead Flight Director at the Challenger Learning Center. During the discussion, Carl pointed out the TCAA's need for using Heartland Community College's Astroth Community Education Center (ACEC) as a conference site and the importance of getting CLC as a co-sponsor. Stacey agreed to the mutual benefit (to be detailed shortly). Stacey contacted HCC's Conference Services (Julie El Zanati). Julie indicated that the ACEC is available April 29-30, 2016. A hold has been placed on the whole building starting Thursday afternoon through Saturday.

In exchange for this cost-saving consideration (all of the ACEC will be available to us at no charge – including A/V), the gist of the tentative cooperative agreement is as follows:

- The TCAA will work with the CLC to make it "the center" for information about the 2017 total solar eclipse; as the center they would have the sole authority to sell the whiteboardsUSA.com-sponsored eclipse book, and that the booklet will carry the CLC logo on its cover. The logos of the TCAA, whiteboardsUSA.com, and other sponsors would appear on the back.
- The Saturday evening post-banquet lecture will be provided by the conference, will likely be a travel log about viewing total solar eclipses, will be held in the Astroth Auditorium, and will be open to the general public.
- The TCAA will work together with the CLC to communicate information about the offerings of the CLC until at least the date of the total solar eclipse in 2017 (August 22).
- The TCAA will include a mission as part of the Friday night's optional events for NCRAL-MSRAL 2016 (as we did in 2010).

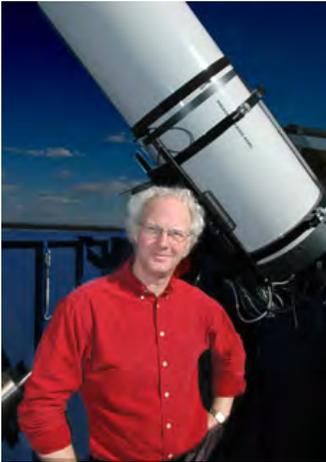
GOVERNOR'S VISIT A "NO GO"

TCAAers might recall that we requested the presence of Governor Quinn as a kick off for STARLIGHT WEEK in Illinois, August 9-16. The Governor signed a proclamation to this effect on April 14th. Despite adhering to the scheduling request protocol, the Governor's office had not responded to our request by the indicated deadline. This in effect says that Governor Quinn will not be joining us at SCGN.

The possibility was a long shot, but we decided to take it as a way a garnering more attention on the need to control light pollution and to preserve natural settings such as Sugar Grove Nature Center. With the election this fall, it is now a busy political season and we understand the Governor's reluctance to attend this event.

The proclamation roughly centers around the August 11/12 Perseid meteor shower which will, unfortunately, be blotted out by the nearly full moon. For those who would like to see the Governor's proclamation, it is available for download as the PDF at the following URL: http://www.phy.ilstu.edu/~wenning/2014_Proclamation_Starlight.pdf For those who would like to do a bit of viewing that night nonetheless, consider joining Carl Wenning as he heads to Weldon Springs State Park to share a few views of the sky with observers.

OCTOBER FIELD TRIP TENTATIVELY SET



TCAAers might not be familiar with the NEO observation program sponsored by NASA that is taking place near Charleston, IL. The program features a number of large automated photographic telescopes operated by Bob Holmes. The largest telescope, a 50-inch behemoth, will soon be operating at the Astronomical Research Institute, and we have been invited to attend a rare open house event.

CUAS President Dave Leake recently wrote, "I just exchanged emails with Bob Holmes in Charleston. He said the 50-inch mirror is in Ithaca, New York being coated. We are tentatively scheduling a club trip down there for October 11th. I'm told that it's most impressive in the daytime. No time has been set, but I'm thinking maybe we should leave Champaign around 1pm or so. You'll note this is near a full Moon time (I think the full Moon is the Wednesday before). This is Bob's wish. Obviously he is hard at work observing during darker sky times. I don't know when he might "kick us out" but I'll finalize that later. For now, if you guys don't have an event on the 11th of October, maybe tentatively pencil that in. We can do details later."

The TCAA membership is invited to participate in this very rare event, and Carl W. will be maintaining contact with Dave L. about this field trip. Watch future editions of *The OBSERVER* for details. We should feel honored to have been invited. To learn more about Bob Holmes and his work, see this somewhat dated online article by the [Herald-Review](#).

E/PO FOR JULY 2014

With the exception of the public observing sessions, the club's public outreach recently has been on the ebb. As with all things, there are bound to be times where there are more and then fewer calls for the TCAA to provide talks and viewing sessions. During this past month Carl Wenning provided two public talks with follow-up observing sessions. Carl visited Walnut Point State Park (20 miles WNW of Paris, IL) on Friday, July 18th and then Lincoln Trail State Park (20 miles S of Paris, IL) on Saturday, July 19th. Because this was a first-time event for both parks, the promotion was less than effective. As a result, the attendance at both events was relatively low given the wonderfully dry and cool weekend and large number of campers.

Carl presented a short PowerPoint talk about the TCAA and celestial objects, demonstrated the motions of the sky with simulation software, distributed star maps and explained their use, pointed out constellations and planets, and conducted a viewing session with his CPC telescope. The Friday evening event was attended by 10 and the Saturday evening event was attended by 25. Despite the darkness within the tree-filled parks and the two viewing sites, the sky was a bit hazy and the viewing relatively marginal. Despite this, those who were in attendance were greatly interested and most appreciative – including the park managers Daniel Dare (WPSP) and Tom Hintz (LTSP).



In Carl's opinion the sites were incredibly peaceful and a strong sense of tranquility filled his spirit. Ergo, he might well make the trip again next year despite the costs. On Sunday morning Carl did take the opportunity to view the now abandoned U of I Prairie Observatory located on the west end of WPSP and seen here in the accompanying photograph. He had known about this abandoned facility for several decades, but never knew where it was before this trip.

Bob Finnigan reported from the July 26th POS that "Tim Stone's presentation [*Star Death – Supernovas*] last night was excellent and after the presentation the weather cleared. Tony Cellini was able to set up the roll-off-roof observatory and get the 11-inch telescope going. He found Saturn and a number of people viewed it through the 11 inch. About 10:15 PM the sky cleared enough to get the 20-inch telescope going. I was able to show M51 reasonably well on a one-minute exposure. One of the guests asked to see the planetary nebula M 27. We did find it and did a five-minute exposure. This turned out very

good because the clouds were creeping back in. I closed the Prairie Sky Observatory and went home about 11 o'clock." According to President Tom Weiland, some 40 individuals were present at this event. This include among those previously named Lee G., Tony C., Carolyn Weiland, Dave Osenga, Kevin Brown, Darren Erickson, Bryce and Mark Heiniger, as well as Paul, Eve, and Amber Pouliot. Tom Willmitch from the ISU Planetarium was also present.

"Astronomy is useful because it raises us above ourselves; it is useful because it is grand;... It shows us how small is man's body, how great his mind, since his intelligence can embrace the whole of this dazzling immensity, where his body is only an obscure point, and enjoy its silent harmony."

– Henry Poincare, Physicist

ASTROBITS

- ★ Mark Cabaj and Carl Wenning took advantage of a clear sky on Tuesday, July 1st, to get in a bit of observing. Carl oriented Mark on the use of the PSO 11" Celestron and then Mark used it to do some video imaging of Saturn. Carl in the mean time continued work on his AL Stellar Evolution observing program. He was able to view an additional 12 objects. He has now completed 98 of the required 100 observations for the award pin and certificate.
- ★ The 13th annual Illinois Dark Skies Star Party will be held September 25 – 28, 2014 at Jim Edgar Panther Creek State Fish & Wildlife Area. This event is featured by the Sangamon Astronomical Society and features dark skies, great facilities, and fantastic food according to the promotional materials! This event is held near Ashland, Illinois, and northwest of Springfield off of Illinois State Route #125. Registration is now open. Registration can be completed and details obtained at http://sas-sky.org/?page_id=1152
- ★ The Challenger Learning Center at Heartland Community College is looking to expand its advisory board. The board meets quarter for only one hour. If you might be interested in this position, please let Carl Wenning know.
- ★ Beth Turner, wife of former TCAA member Mike Turner, passed away on Tuesday, July 8th. She was 69 years old. Few of the club's current members other than the Historian will have ever met her. Her husband Mike passed away following a long battle with brain cancer on December 2, 1987.
- ★ If anyone wants to subscribe or renew *Astronomy* magazine at a reduced annual rate through the TCAA, send a check made out to TCAA in the amount of \$34 for one year or \$60 for two years to our Treasurer, Duane Yockey.
- ★ Dave Osenga notes that he recently submitted his Analemma Observing Club report, but has learned that he needs to redo a couple parts of that. He has logged 54 objects for the Urban Observing Club.

ISU PLANETARIUM CELEBRATES 50TH ANNIVERSARY SEPTEMBER 1ST

A Brief History: As part of the Felmley Hall Annex construction project, the ISU Planetarium officially opened without fanfare on September 1, 1964. Opening without a formal staff, physics professor Dr. Harold Born asked Illinois Wesleyan University's astronomer Dr. Ray Wilson to help with getting the new planetarium operational. That September Dr. Wilson gave several TCAA members a peek at the new facility, and explained how the Spitz A3-P star machine projected sun, moon, and planets, along with 1,354 stars, their coordinate systems, and the Milky Way. He subsequently was asked to "give a show" to the rest of the astronomy club. He did this on October 1, 1964, one month after the official building opening.

Ray again explained the workings of the Spitz A3-P star projector, and allowed the membership time to do a bit of constellation study as well. Thus began the long and cordial relationship between the ISU Planetarium and the club that continued for many years under the guidance of various ISU Physics faculty members – primarily Drs. Born, Crew, and Frahm – who gave monthly planetarium programs for the general public (1964-1971). After the Physics Department was established in 1966 as an entity separate from the former science department, the planetarium fell under its auspices. It then became known as the ISU Physics Department Planetarium.

From 1970-1974 Mr. Nerio Calgaro served as de facto part-time planetarium director while still a physics major at the University. He was hired officially as the planetarium's first director and served in this capacity from 1971 through 1974 following graduation. Patrick McGee, a bona fide planetarium director with an M.A.T. degree from Michigan State University

(MSU) in planetarium education served as director from 1974 through 1978. Carl J. Wenning, also with an M.A.T. degree in planetarium education from MSU served in this capacity from August 21, 1978 to June 30, 2001. Thomas Willmitch, an experienced planetarium director was hired on November 1, 2000, to assist Wenning whose duties were split between the planetarium and serving as coordinator of the Physics Department's growing Physics Teacher Education program. Willmitch became the next planetarium director following Wenning's official departure as director. Willmitch was officially named planetarium director on July 1, 2001, and he continues in this capacity to the present.

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 [Twin City Amateur Astronomers: 1960-2010](#) or in [The OBSERVER archive](#) found on the [TCAA website](#).

50 Years Ago: August 1964 – Club members continue to learn how to observe variable stars. Six members have now submitted observations to AAVSO: Bill Blunk (7), Hank Janecek (4), Mike Ryder (4), Lyle Rich (4), Barry Beaman (2) and Taylor Cisco (1). The wider membership is studying various constellations one-by-one in order to get to know them better.

25 Years Ago: August 1989 – Darren Drake and Carl Wenning made extensive observations of the Perseid meteor shower on the night of August 11/12. Some two hundred members of the general public joined the TCAA for a public viewing of a lunar eclipse on August 16th. Because the sky was partly cloudy, "the moon was barely visible." Four TCAAers ventured out to the 5th Annual DAAC Jamboree.

10 Years Ago: August 2004 – The TCAA is now cooperating with a "coordinating committee" consisting of members from various science, nature, and environmental groups. The focus of this month's meeting was an autumn celebration at SGNC. Carl Wenning publishes a "puzzle" for the membership in the August issue of **The OBSERVER**. To what at SGNC does this puzzle allude?

LORD OF THE RING

I am master of all I see:

I lord it over even thee.

Field and creek, trail and grove:

I watch over my treasure trove.

Thousands there are who lend an ear:

They stand beside me waiting to hear.

Many lords bow down before me:

They circle round, once merely tree.

Even the sun's very service is mine:

He marks for me the passage of time.

Who can tell this mysterious thing?

I am Lord of the Ring.

TCAA TREASURER'S REPORT – JULY 2014

OPERATING FUND BALANCE – June 30, 2014 -		\$ 2,191.29
<u>Income</u>		
Dues (Dennis Pendleton) -	\$ 26.00	
Dues (James Meeker) -	\$ 41.00	
<u>Expenses</u>		
Carl Wenning (SGO improvements) -	\$ 29.08	
PayPal (James Meeker)	\$ 1.20	
OPERATING FUND BALANCE – July 31, 2014 -		\$ 2,228.01
<hr/>		
OBSERVATORY FUND BALANCE – June 30, 2014 -		\$ 4,381.02
<u>Income</u>		
Interest (2 nd quarter) -	\$ 0.63	
<u>Expenses</u>		
None -	\$ 0.00	
OBSERVATORY FUND BALANCE – July 31, 2014 -		\$ 4,381.65
<hr/>		
INSURANCE ESCROW BALANCE – July 31, 2014 -		\$ 5,274.00
<u>Income</u>		
None -	\$ 0.00	
<u>Expenses</u>		
None -	\$ 0.00	
INSURANCE ESCROW BALANCE – July 31, 2014 -		\$ 5,274.00
<hr/>		
TOTAL TCAA FUNDS – July 31, 2014 -		\$ 11,883.66
<hr/>		

Respectfully submitted,
L. Duane Yockey, Treasurer