TWIN CITY AMATEUR ASTRONOMERS, INC.

The OBSERVER

IN THIS ISSUE:

IULY 200

PRESIDENT'S MESSAGE: TCAA BOOTH AT McLEAN COUNTY 4-H FAIR

The TCAA is going to the fair.

As part of the Community Awareness Days feature of the McLean County Fair 2008, the TCAA will be hosting an exhibit from July 31 through August 3. This is a great opportunity to meet our neighbors and share our love of astronomy and the night sky.

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We will have a 10'x10' booth inside the Interstate Center. We'll have a display, handouts and a computer. We may have a telescope or two there also. We will have access to a locked room, and the building will be locked each evening so we won't have to pack up our display every night.

We need your help! We need members present at the booth from 8 AM to 1 PM on July 31 and from noon until 9 PM on August 1—3. We will provide free parking passes and

entrance tickets for volunteers.

If you are available, please contact me as soons as possible so I can prepare a schedule and arrange for free parking passes and entrance tickets. If you have suggestions for special activities that we can hold or handouts we can prepare, feel free to suggest these, too, so we can make this an exciting opportunity for everyone.

This is going to be one of our biggest outreach events of the year, and we expect to talk with 1000 people at the fair. This is a great chance for all members to help out and to visit the fair for free. I hope you will all join in!

[Editor's note: Carl adds a special thanks to Terry Lee Wright and Lee Green for their efforts to make this happen.]

JULY MOOS AT FARM VIEW OBSERVATORY

Readers will recall that John Werner completed construction of his Farm View Observatory on Memorial Day. Now, the TCAA membership is invited to attend the next members-only observing session at his observatory south of Streator on July 26. Members are asked to arrive near suset (8:13 PM) with viewing beginning at mid-twilight about an hour later.

Farm View Observatory is located 8 miles south of Streator, Illinois, 2.5 miles east of Long Point and one mile west along Long Point Road off IL Route 23. The simplest directions are to travel up I-55 to Route 23, then head west until you see the sign for Long Point Road. The observatory is the 1st place on the south side of the road heading west about one mile. Watch the listserv for details about a car caravan that evening.

John indicated that he will go early to open up and have power available for those who bring telescopes. He notes that the restroom facilities are very modest but functional and located in a vacant farmhouse. He also advises visitors to bring lawn chairs, lights or the usual equipment for remote site viewing. He has one concrete pad (well top, actually) for one very stable platform and will have a drop cord available for power. He also notes that the fame has curious cats around so expect them to be checking everyone out.

TCAA TO OFFER AUTUMN ADULT EDUCATION COURSE

Because of its ongoing popularity even as a winter course, the TCAA will now offer an autumn adult education course at Heartland Community College. The course will be offered on four consecutive Thursday evenings from 7 PM to 9 PM September 11 through October 2. With the pleasant evening temperatures and clear skies of autumn, we are looking forward to a large enrollment.

Join us as we narrow our attention on the constellations and solar system objects. Receive resources to learn constellations, star names, and their associated mythology. Learn how astronomers explain the motions of the sun, moon, and planets. Find out about comets, meteors, and asteroids. In-town observing sessions will be held immediately after the first and second nights' classes if the sky is clear. Includes a scheduled visit to the ISU Planetarium. During an optional fourth session at Sugar Grove Observatory, we will train our telescopes on these objects and more.

The fee for this course is \$60.00 and will include Terence Dickinson's *Nightwatch* as well as a 10-inch-diameter planisphere. Many other handouts will also be provided. Visit the HCC website to register for this course later this summer. Carl Wenning will serve as lead instructor of this course; feel free to contact him with any questions you might have during the interim at (309) 830-4085 or wenning@phy.ilstu.edu.

PRESIDENT'S MESSAGE: I
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Reflections of an Aging

TREASURER'S REPORT 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 309-454-7349 lee@starlightsoftware.com

VP/Publicity Dan Miller 309-473-3465

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

Treasurer/ALCOR Duane Yockey

309-452-3936 duane@lybinc.com

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

3rd Director William Carney willcarney@aol.com

4th Director Dave Osenga DaveOsenga@msn.com

5th Director Terry Lee Wright 309-963-4135

Property Manager

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

The 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

HISTORY OF THE TCAA

Beginning with the article, "The Origin of the Twin City Amateur Astronomers" in the May 2007 issue of The OBSERVER, TCAA Historian Carl J. Wenning began chronicling the history of the club. He will continue this series, culminating with the 50th anniversary of the club in 2010.

The End of an Era – Part B 1990-1994

The membership put on some well-received displays as well. These included a 1993 Diamond Star Employees Day (for which the TCAA received a \$200 honorarium), Astronomy Day, and a six-month astronomy display set up at the Prairie Aviation Museum at the B-N airport by Carl and Rebecca Wenning during the summer of 1994. A beautiful astronomy display was also erected at the Bloomington Public Library during the summer of 1994 by Sandy McNamara and Mike Rogers.

Non-public observations were rewarding as well. Supernovas were observed in M81 and M51 during the time period, and several spectacular auroras were observed by club members during the winter of 1992. Rebecca Wenning seeing these one night at 7 years of age called the aurora "dancing air" – an apt description. The July 1994 comet impacts on Jupiter were the rage among TCAA observers. Several TCAA members attempted and completed the club's seasonal mini-Messier marathons as well.

During this five-year interval the TCAA membership carried the banner to a host of astronomical conventions scattered all over the nation. These included Astrofest (yearly), Hidden Hollow (1992), the Universe '92 convention in Madison and Universe '94 in Phoenix (Lenore Trainor). Three members (Sharon MacDonald, Mike Miller, and Carl Wenning) attended ALCON '93 in Madison and one member, Sandy McNamara, attended ALCON '94 in Kansas City. Time Maurer attended the Riverside Convention in California in 1992 and 1994. Lenore Trainor and Carl Wenning attended the North Central Astronomical League convention in Burlington, Iowa, in April 1994. Carl gave the keynote address at the convention. His talk dealt with a national survey of amateur astronomers that he has been conducting.

Shorter field trips to the Adler Planetarium by seven members and one guest in August 1992, to Yerkes Observatory in both August 1990 (12 participants) and November 1991 (2 participants), and to the Field Museum in December 1993 to see the Star Trek display (four members and one guest) were undertaken.

Several members ventured far a field in pursuit of their astronomical and space interests. Field trips of an extensive nature took place during 1991, 1993, and 1994. These included a three-day Space Camp field trip by Carolyn and Rebecca Wenning in December of 1993, and two expeditions undertaken by club members in an effort to view total solar eclipses. In an effort to observe the July 11, 1991, eclipse club members Sharon MacDonald, Roy and Barb Ostberg, Lynn Waishwell, Mike Starasta, and Garth Bock, along with non-member Ann Krump journeyed to Mazatlan, Mexico. Four club members (Roy and Barb Ostberg, Sharon MacDonald, and Carl Wenning) organized a trip and traveled in a group of eight to Potosí, Bolivia, to view the November 3, 1994, event. Only the second venture was successful.

TCAA members were honored during this time period as well. At the 1991 Annual Meeting Jim Moncher was inducted into the G. Weldon Schuette Society of Outstanding Amateur Astronomers. The same honor was conferred upon Sandy McNamara at the Annual Meeting in 1994. Former TCAA member Darren Drake, video astrophotographer extraordinaire, had video footage of the Jupiter comet impacts shown on national TV (PBS) in July 1994. Sandy McNamara received her honorary Messier certificate and Brian Barling his provisional Messier certificate in

In an effort to revamp the way the meetings were conducted three different interest groups were arranged which gave monthly reports or presentations in 1992. The three groups were naked eye, solar system, and deep space. This format operated for about a year until it fell out of use due to the fact that members in charge of the various sections would miss meetings from time to time.

One of the changes that the club has undergone during this time period is a change in the editorship of the TCAA Observer. In June 1993 Michael Rogers and Jean Memken took over the production of the Observer. There were immediate changes in form and content, the likes of which the TCAA had never seen before. Production quality, layout, and content have markedly improved due to the untiring efforts of the editors. This author would be remiss not to mention that the editorial staff has prepared, printed, and posted the 16-page monthly *Observer* at their own expense since taking over the editorial duties in 1993.

As a group, the TCAA has been honored by the presence of keynote speakers at its Annual Meeting banquets. Banquet speakers have included Pamela Gossin (Millikin University English Department, '90), (Herman) Lew Detweiller (IWU Physics Department, '91), Jim Stanlaw (ISU Anthropology Department, '92), David Leake (Champaign-Urbana Astronomical Society, '93), and Eric Clifton (Peoria Astronomical Society, '94).

Though the junior division of the TCAA died an untimely death, the younger members of the group still found time to make significant contributions to the club. Briana Trainor and Rebecca Wenning both wrote articles for *The OBSERVER* and were recognized for their literary accomplishments during the 1994 Annual Meeting.

WENNING RETURNS FROM TEXAS

Carl Wenning recently returned from Texas where he spent several days with former TCAA member Shaukat Goderya. Shaukat, as you might remember, has a Ph.D. in astronomy. He departed central Illinois about three years ago, and is now observatory director for Stephenville State University, a part of the Texas A&M system. Shaukat has under his control

a 32-inch fully automated Ritchey-Cretion telescope that he can run remotely from his home in Aledo, TX, about 50 miles distant.

While Carl and Shaukat did not get an opportunity to observe with this instrument during Carl's visit, Carl is learning how to operate this telescope remotely. He and Shaukat plan on making photometric studies of eclipsing binary stars starting this autumn. The accompanying photographs show the facility and its telescope.





AL OBSERVING PROGRAMS

What follows is a listing of the status observers pursuing AL observing programs as of June 2008. If you would like to have your information included in next month's listing, be certain to forward your observing totals to Carl before the end of the month.

	William Carney	Lee Green	Duane Yockey	Carl Wenning	Sandy Wolford	Brian Barling	David Hahn
S. Sky Binocular 50			50*	50*			
S. Sky Telescope 50			50*	50*			
Telescope Messier 110	(110)	67		(110)	(110)	(110)	65
Binocular Messier 50	(100)	12		23			
Herschel Club 400	352	397		399	(400)	210	
Urban Club 100	(100)	63		54			
E/O Satellite Club 24				4			
Comet Club Slvr12/Gold30	22*						
Arp Galaxy CCD Club 100					53		
Dbl. Star Club 100				55	(100)	17	
Lunar Club 100	(100)					98	
Asteroid Club Reg25/Gold100	24						

^{*} Program or first award level complete – will receive AL award at next TCAA Annual Meeting in February 2009. Numbers in parentheses (#) indicate that award has been both earned and received.

JULY SKY GUIDE

O1 The Moon
passes 8° north
of Mercury, 10 A.M.



o6 The Moon passes 3° south of Mars. 1 P.M.



The Moon passes 3° south of Saturn, 5 P.M.



og Jupiter is at opposition, 3 A.M.



11 Mars passes 0.3° south of Antares, 7 A.M.



14 The Moon passes 0.3° south of Antares, 7 A.M.



The Moon passes 3° south of Jupiter, 7 A.M.



20 The Moon passes 0.9° north of Neptune, 8 A.M.



22 The Moon passes 4° north of Uranus, 5 P.M.



29 Mercury is in superior Conjunction, 3 P.M.

JUNE E/PO SUCCESSFUL

The public observing session held at SGNC on Saturday, June 7, was very successful if not well attended. Despite the warm temperature and high humidity, the sky was surprisingly clear - but not especially dark. The crescent moon, standing adjacent Mars, cast its light over the landscape. The session began with Lee Green delivering the presentation for the evening (showing off the club's new XGA video projector) followed by Carl Wenning giving a laser-pointermediated sky lecture. Viewing through the telescopes followed with the assistance of Duane Yockey, Lee Green, and William Carney. Duane and Lee had brought out their own telescopes while William conducted viewing with the 10-inch Meade temporarily installed in SGO. With only 14 attending despite good publicity (Pantagraph, e-mailing through SGNC, etc.), the audience showed high interest and most remained until after 11:15 p.m. One member of the general public brought in a 4.25-inch reflector and used it to observe a few of the brighter objects of the night sky, but was more than captivated by views through the memberships' larger telescopes. It is hoped that one or more of these individuals will become TCAA members.

Duane Yockey give an astronomy presentation to the Sunrise Rotary club on Tuesday, June 16th. Duane noted that the membership was fascinated by the content that was a repeat of the program he did last month for the Bloomington Rotary group.

Lee reported that, "we had a lot of fun last night at our MOOS [June 28]. Minier Cub Scout Pack 111 was camping at the Nature Center and we were able to give them a little introduction to astronomy. There were 15 scouts along with 10 adults in the audience. We used the *Our Galaxy, Our Universe* materials from the Night Sky Network to show the kids about the Earth, the Solar System and the Milky Way galaxy and to try to give them some perspective about the size of the universe. That was followed with a sky tour and telescope observing. Thanks to Duane Yockey, Dan and Chris Miller and William Carney for providing telescopes for everyone to look through."

JUNE OBSERVERS' LOG

Despite the high temperature and relative humidity, Carl Wenning along with Rebecca and Chrystian Vieyra set up their CPC1100 telescope in Normal on Friday, June 6, to do a bit of urban observing. They observed from approximately 9:30 to 11:15 p.m. looking mostly at Messier objects.

At an impromptu observing session on June 10, Lee observed six additional Messier objects using his C14 "by hand." He would have gotten more but for the moon. His current count is 43. Lee is also restarting his Binocular Messier List. He had four objects previously, but never recorded them. So he also got his first binocular Messier – M4. William Carney was at that observing session and showed Lee his impressive binoculars and tripod which they used to observe a number of objects including M57.

During the late June MOOS on the 28th, Duane Yockey was able to finish up observing all required objects for the Southern Sky Telescope Club. Two nights later, on June 30th, Carl Wenning was able also to finish up his observations for the Southern Sky Tele-

scope Club award. That same evening, Carl, Lee Green, William Carney, Dave Osenga, Roy and Diane Lawry, and two "guests" found wondering in the woods of Funk's Grove (Brett and Amy) spent the evening observing just south of the Funk's Grove tree line for better "southern exposure." Lee was able to pick up four addition Messier objects before midnight, making seven for the extended weekend. and Carl left at around 11:30 pm and William and Lee continued observing until after midnight. After William left, Lee continued to observe "very productively." He noted, "I finally got the Messier observing session I'd been waiting for. I got 25 objects from the Messier list, bringing my total to 67. I also got 10 [Messier objects] by binocular, bringing that total to 12. Glad I took a nap in anticipation of observing."

[Ed.'s note: Because Carl was out of town for the last two weeks of June, this log is not up-to-date as it could be. Updates for the latter half of June will be included in the July Observer's Log.]

JUNE MOOS REPORT

We had a lot of fun at our June MOOS on June 28. The Minier Cub Scout pack 111 was camping at the Nature Center and we were able to give them a little introduction to astronomy. There were 15 scouts along with 10 adults in the audience.

We used the Our Galaxy, Our Universe materials from the Night Sky Network to show the kids about the Earth, the Solar System and the Milky Way galaxy and to try to give them some perspective about the size of our galaxy and the universe. That was followed with a short sky tour, a tour of our observatory and telescope observing the continued until midnight.

Duane Yockey, Dan and Chris Miller, William Carney and Lee Green provided telescopes for everyone to look through.

POS and MOOS COORDINATORS NEEDED

For the record, here is the list of the 2008 Public and Members-Only Observing Sessions at Sugar Grove Nature Center. Two coordinators per session are preferred. Please add your name to the list if you are willing to co-host one of these Saturday sessions by contacting Carl Wenning. See the POS brochure available through the TCAA website for details about starting times.

2008 Date	POS Topics	POS Coordinator(s)
July 5	Mighty Hercules and His Treasure – M13	Duane Yockey
August 2	Black Hole Survival and Cygnus X-1	Dan Miller
September 6	Our Galaxy, Our Universe	Lee Green
October 4	Andromeda and Her "Rock" – M31	Carl Wenning

Members-Only Observing Sessions occur one week earlier than the above POS – on Saturdays nearest the full moon. Two coordinators (one of whom should be an SGNC key holder unless they have their own telescope they can bring along) are desired for all of these Saturday sessions. Please sign up with Carl Wenning (309-830-4085, wenning@phy.ilstu.edu) if you are willing to assist with coordinating any of these events.

2008 Date	Location	MOOS Coordinator(s)
July 26	John Werner's	See Article
August 30	SGNC (8:18 p.m.)	Dan Miller, Carl Wenning
September 27	IDSSP, Springfield	Details to follow
October 25	SGNC (6:45 p.m.)	William Carney, Carl Wenning

UPDATES AT SGO

The heavy and repeated rains of May and June demonstrated that the SGO dome was allowing significant amounts of rainwater to leak through. William Carney, TCAA Property Manager, noted several times recently on the listserv additional problems with the LX200 mount, and with the telescope itself. The control paddle has been problematic and essentially has failed. The mirror lock mechanism has seized as well. The telescope was removed by William Carney, Lee Green, Dave Osenga, and Carl Wenning on Thursday, June 5, and shipped to Meade the next day for repair. The club's 10-inch now sits in the SGO and is readily for use by any of the key holders.

During early June, William visited the SGO during a rain showed and found out that the leakage of water was not coming from under the dome, but through sections of the dome slot. William subsequently caulked the area with the gaps, and the flood appeared to have been stemmed.

SGO users will also note that the white light in the dome has been repaired. The white light (on the opposite side of the door way) turns on and off with the observatory white lights controlled from ground level. There is no switch on the white light under the dome proper.

ALCON 2008 CONVENTION JULY 17-19

BPL DISCUSSION SERIES SLATED

TCAA President Lee Green has scheduled a series of programs this fall with the Bloomington Public Library. He coordinated these efforts in response to Brett Nafziger at the BPL who had requested a "discussion" series. The format of each night's events will be to start with a discussion period to talk about current events in astronomy. This might include current NASA missions and celestial events, as well as any other topics we'd like to address. Following that, we have time to present materials from the Night Sky Network.

Lee noted that he'll be happy to take the lead on any or all of these discussions, but that TCAAers are more than welcome to jump in on any of these dates. Note that the listed times for all events are 7PM-9PM, and all dates are the third Tuesday of each month.

- ➤ August 19 Explorer's Guide to the Solar System
- ➤ September 16 How Telescopes Changed the World
- > October 21 The Search for another Earth
- November 18 Our Galaxy, Our Universe
- > December 16 How to Survive a Black Hole

The Board will discuss these events further at the Board meeting on July 22.

This summer's Astronomical League Convention (ALCon Expo) national meeting will take place in Des Moines, IL, from July 17-19. Several TCAA members are planning to attend. To learn more about this event, visit the official Website at the following URL: http://www.alconexpo.com. If you wish to attend and ride with another TCAA member, please make arrangements through the TCAA listserv. More information about the listserv can be obtained through the TCAA Website at the following URL: http://twincityamateurastronomers.org/.

WORLD WIDE TELESCOPE

By Lee Green

Microsoft has been taking on Google and in that clash of the titans, we get the benefits. First there was Google Earth which was updated to include Google Sky, an excellent free program that allowed astronomy aficionados to have a desktop universe at our command. Google did a wonderful job of presenting the sky, letting you scroll around, zoom in on interesting objects and link to various sites for more information.

Microsoft's new World Wide Telescope program is also a free desktop program that performs these same basic features with ease. When you start the program, the default images shown is visible light from the Digitized Sky Survey but you can select from over 50 different datasets covering the whole range of the spectrum from infrared to gamma radiation.

The program has three main areas on the screen, the Tabs Pane that provides program navigation, the Field of View that can zoom from 60° down to 1 arcsecond, and the Navigation control area. It's easy to find objects using navigation through a variety of data and image collections or by searching. When you find an object, it will scroll and zoom to the object and you can right-click to bring up the Finder Scope which details the object of interest and presents option for accessing additional information.

For selected objects that have been studied in detail, you can fade between datasets to visualize and overlay different wavelengths. So now you can see how radio sources appear in infrared or microwave. This feature, which I have never seen before, provides insights into objects that could only be imagined.

The program further provides a presentation interface that allows you to download a variety of Guided Tours. The introductory tours show you how to use the program and more advanced tours take you through a series of steps to introduce a variety of topics. For example, the Seven Greatest Galaxies tour was created by Michael Bakich from Astronomy Magazine. Some of you remember Michael's presentation at NCRAL 2008 when he told us about the history of the Constellations. The Guided Tour feature lets us create our own tours, adding text, video and sound to the mix, to produce compelling content.

The last feature that I will review here is the ability to connect the program to your telescope. A built-in ASCOM interface lets you control your scope visually. Point the field of view at the target you want to see and go there by pressing a button. What could be simpler?

Microsoft has given us an advanced program for astronomy. The price is right, since it is available at no cost, but it only runs on Windows XP and Windows Vista operating systems. You can find more information and download the program at www.worldwidetelescope.org.

STARGEEZER!

Reflections of an Aging Astronomer

The opinions expressed by the Stargeezer are entirely his own. They do not necessarily represent the opinions of the TCAA or any other of its members.



Everyone reading this month's issue of *The OBSERVER* should be stunned by the great number of education and public outreach activities taking place under the club's auspices over the next few months. The number of such events is truly astounding, even to someone like me who has been a member of this club for nearly three decades. I know of no other group as dedicated to service to the membership and the general public as the TCAA. This goes to show the tremendous leadership, vision, and skills of our organization, but especially our board members and officers of whom we all should be proud.

Be certain that you don't miss any of these events. You'll want to put them into some sort of written calendar – perhaps on your laptop where can can't miss them. Also watch for reminders on the TCAA listserv. If you are not a member, go to the TCAA web site and search for information about signing up for this valuable service.

We should all keep in mind that we can also conduct astronomical events on our own as well. Recently TCAA members have traveled to Chile and Peru to undertake astronomical observations. What have you done lately to make this an enjoyable hobby for yourself?

TCAA Treasurer's Report – June 2008

OPERATING FUND BALANCE - May 31, 2008 -	\$ 2,324.01	
<u>Income</u>		
Sheri Rodgers (elect. dues renewal) -	\$ 25.00	
Lucian & Val Ionescu (dues) -	\$ 40.00	
Josh Lindsey (elect, dues renewal) -	\$ 25.00	
Expenses		
LYB Inc. (June Observer) -	\$ 16.04	
OPERATING FUND BALANCE – June 30, 2008 -	\$ 2,397.97	
OBSERVATORY FUND BALANCE – May 31, 2008 - Income	\$ 2,009.69	
Donation (anonymous) -	\$ 1500.00	
Keyholder renewal (Josh Lindsey) -	\$ 5.00	
Expenses		
None -	\$ 0.00	
//1000 September 100 September	\$ 3,514.69	
OBSERVATORY FUND BALANCE – June 30, 2008 -		
OBSERVATORY FUND BALANCE – June 30, 2008 -		

Respectfully submitted,

L. Duane Yockey, Treasurer

Sugar Grove Observatory

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

Duane Yockey (renewed through 2008)

Michael Rogers (renewed through 2008)

William Carney (renewed through 2008)

Carl Wenning (renewed through 2008)

Brian Barling (renewed through 2008)

Christopher Franklin (renewed through 2008)

David Osenga (renewed through 2008)

Gerry Schroeder (renewed through 2007)

Josh Lindsey (renewed through 2008)

Andrew Morrison (February 2008)

Dan Miller (renewed through 2008)

Lee Green (April 2007, renewed through 2008)

UPCOMING EVENTS

July 17-19—ALCON, Des Moines, IA
July 22—TCAA Board Meeting
July 26—MOOS @ Farm View Observatory
July 31-Aug 3—McLean Co. 4H Fair
August 2—Annual Picnic & POS

WELCOME NEW MEMBERS

Lucian & Val Ionescu

The OBSERVER

Newletter 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

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