

IN THIS ISSUE:

PRESIDENT'S MESSAGE: JUNE HAS ARRIVED	1
SCHEDULED JUNE OBSERVING SESSIONS	1
MINUTES OF MAY 12TH BOARD MEET- ING	1
MINUTES OF MAY 12TH NCRAL PLAN- NING MEETING	2
AL OBSERVING PRO- GRAM STANDINGS	3
2009 PUBLIC OBSERV- ING SESSIONS	4
2009 MEMBERS-ONLY OBSERVING SESSIONS	4
UPCOMING ASTRO- NOMICAL MEETINGS	4
MAY OBSERVERS' LOG	4
JUNE SKY GUIDE	4
2009 IYA SESSIONS @ BPL	5
JUNE'S IYA TOPIC: CLUSTERS OF STARS	5
NO HCC COURSE THIS AUTUMN	5
THREE TCAAERS TO SPEAK AT IDSSP	6
MAY EDUCATION/ PUBLIC OUTREACH	6
CONSTELLATION OF THE MONTH: CORVUS—THE CROW	6
TREASURER'S REPORT	7
JULY SKY MAP	

PRESIDENT'S MESSAGE: JUNE HAS ARRIVED

June has finally arrived during our 50th year. This month brings with it the summer solstice, more activities at the Bloomington Public Library and more chances to share and observe the night sky.

We've been continuing our public outreach activities and logged our first Public Observing Session last month. The turnout was limited to a few brave people who came out in spite of the rain, but the skies cleared and we had moderately good viewing. This was a distinct improvement over our first two sessions which were both cancelled due to inclement weather.

In the last month, NASA has kept up their end of the work by fixing the Hubble Space Telescope, launching the Herschel and Planck satellites as well as a set of "nano"-satellites. While the Spitzer Space Telescope was expected to run out of liquid helium this month, formally ending the primary mission to observe extreme infrared radiation, the telescope will now enter a new phase that will continue investigating shorter wavelength infrared light.

For a limited time, we are featuring warmer weather that makes observing comfortable, so don't delay, come out today so we can play.

SCHEDULED JUNE OBSERVING SESSIONS

The TCAA's scheduled observing sessions for June occur on the 20th (members-only) and the 27th (public). The MOOS starts at dusk at Sugar Grove Nature Center if a clear sky is prevailing at that time.

The public observing session on June 27th will run from 9:00 p.m. to 11:00 p.m. if the sky is clear. The plan currently is as follows:

- Talk commencing at 9:00 p.m. "Craters of the Moon"
- Followed by a laser-pointer-mediated sky lecture
- Followed by an observing session with a cadre of member telescopes

In order for the sky lecture and sky-viewing session to be held, the sky needs to be reasonably clear. We will plan on holding a set of talks even if the sky is overcast due to the fact that this session will serve participants of the National Wildlife Federation's *Great Backyard Campout*. We are anticipating a crowd of 60 campers according to Angela Smith at SGNC. If the sky is overcast, the sky lecture will be replaced by another talk with computer projection. That is,

- Talk "Craters of the Moon" commenting at 9:00 p.m.
- Talk "The July evening sky" commencing at about 9:30 p.m.

MINUTES OF MAY 12TH BOARD MEETING

Lee Green called the Board meeting to order at 6:36 p.m. in the offices of LYB, Inc. In attendance were Duane Yockey, William Carney, Dave Osenga, and Carl Wenning. The following items of old business were addressed:

- ☆ Presentations – Lee will assist Dave to make the May 23 POS dealing with Galileo's Universe. Duane will assist Dave with the June 27 POS dealing with Craters of the Moon. Carl will tentatively conduct the July 25 POS, and Duane will conduct the August 15 MOOS.
- ☆ Duane handed out literature about the Nebraska Star Party that will be held July 19-24.
- ☆ Carl noted that Angela Smith at SGNC indicated that she would not need help with the May 14th event at that location.
- ☆ Lee will talk with Jane at BPL about continuing the *Classroom for Kids* program after June 27. The attendance has been much lower than expected due in part – it was assumed – to poor marketing.
- ☆ Someone needs to promote the POS programs; no one can recall having seeing information in the Go! section of the *Pantagraph*. This is normally the duty of Vice President.
- ☆ Dave suggested that we include invitations to the public to bring binoculars to the Galileo oriented observing sessions as these are about the strength of what Galileo had to work with.
- ☆ In officer reports Duane noted as ALCOR that he has received a bill from the Astronomical League. The cost is \$5 per member and \$10 per club. The fee will amount to slightly more than \$200 this year.
- ☆ Lee noted as web master that he continues to develop the club's web page, but indicated that it wasn't receiving many

(Continued on page 2)

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

Vice-president Dan Miller
309-473-3465
damiller@mail.millikin.edu

3rd Director Carl Wenning
309-830-4085
cjwennin@ilstu.edu

4th Director Dave Osenga
309-452-4336
DaveOsenga@msn.com

5th Director Brian Barling
309-452-7507
res2213h@verizon.net

Secretary/Historian Carl Wenning
309-830-4085
cjwennin@ilstu.edu

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

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

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

MINUTES OF MAY 12TH BOARD MEETING (CONT.)

(Continued from page 1)

hits despite the content.

- ☆ With regard to the club's new logo revisions, Dave hasn't had a chance to meet with Emily yet about the re-design, but he has transmitted the club's request for revisions.
- ☆ William thanked the Board for the \$150 to be spent on converting his old TCAA photos to electronic files. He remarked, "I do appreciate the offer of money because it is expensive to put these images on CDs." He further noted that he has several boxes of TCAA memorabilia that he will try to convert in coming months and certainly by the Annual Meeting in 2010 when the club will celebrate its 50th anniversary.
- ☆ Carl noted that the June 9 new observatory meeting with Angela Smith at SGNC has been put off until July due to scheduling conflicts. It was further agreed to table any discussion of the membership drive and capital campaign until we have a suitable telescope to place therein.

William who indicated that he had recently fixed the weather stripping on both the SGO dome and door, brought up the only new business. He further noted that the LX200 12-inch telescope has been demounted due to "dangerous and unpredictable motions." A 10-inch telescope now rests in its place. William was authorized by the Board to demount the 12-inch Meade from the LX200 mount in order to weigh it. If the Board decides that a suitable Go-to equatorial head can be purchased for a reasonable price to match the weight of the telescope, the Board might opt to make a purchase. William suggested that the club look at both the Orion Atlas mount and the Celestron CGEM mount. This topic will be brought up for further discussion at the July Board meeting.

The next Board meeting will be held on Tuesday, July 14, 6:30 p.m. at LYB, Inc. The meeting adjourned at 7:26 p.m.

Carl Wenning, Secretary

MINUTES OF MAY 12TH NCRAL PLANNING MEETING

The 2010 NCRAL Planning Committee was called to order at LYB, Inc. by Carl Wenning. In attendance at this meeting were Lee Green, Duane Yockey, William Carney, and Dave Osenga. The focus of this meeting was to share reflections on the recent 2009 NCRAL meeting, and to hear updates from the various members. The following comments were made:

- ☆ Carl noted that the Friday events at Cedar Rapids deserved a "Wow!" It will be hard to compete with what this group offered. Duane noted that we need to showcase what we have and feature such things at the Challenger Learning Center, and a retro 60's planetarium visit at ISU and a movie at Normal Theater (perhaps in addition to some rock and role and a trip to Steak and Shake as noted earlier).
- ☆ There was a strong concern expressed that no one would be really interested in traveling to Peoria or Champaign to attend planetarium programs there.
- ☆ Because only about 80 showed up for the Cedar Rapids meeting, there was concern about "a terrible job marketing." We need to avoid this problem, and attempt like the Appleton, WI, meeting to do a better job of getting the word out.
- ☆ It was noted that the Friday night speakers in Cedar Rapids were rather poor, but not uniformly so. The Saturday speakers, while not "big names", did a good job.
- ☆ It was noted that if we do go to SGNC on Friday or Saturday evening, we need to have a true showing of club telescopes. The SGO cannot serve as the central focus of this session, especially in light of the tremendous club sites visited recently at other NCRAL meetings.
- ☆ Duane will again contact the Normal Theater about presenting a 1960's space thriller such as *When Worlds Collide* or *The Day the Earth Stood Still*.
- ☆ Carl will develop a PowerPoint presentation about NCRAL 2010 that can be added to other presentations that TCAAers will present locally and across the state this year.
- ☆ It was noted that the marketing agent needs to begin work on placing an advertisement in the AL's *Reflector*. We are entitled to a free 1/16-page advertisement. We also need to get the word out to *Sky & Telescope* and *Astronomy* magazines.
- ☆ Carl noted that John Werner expressed interest in taking over Mike Roger's position as marketing agent, but wasn't quite sure that John had agreed to do this for certain.
- ☆ Lee noted that he would be happy to develop a "video trailer" for use on the Web as well as for distributing to AL clubs in the north central region.
- ☆ It was noted that our team needs to get on the agenda of local clubs and conferences in order to promote 2010 NCRAL. Lee, Duane, and Carl all received statements of interest for doing so from individuals attending

AL OBSERVING PROGRAM STANDINGS

Below is a listing of the status of observers pursuing AL observing programs reported as of May 31st. If you would like to have your information included in next month's listing, be certain to forward your observing totals to Carl Wenning before the end of the month.

AL Award	Brian Barling	William Carney	Lee Green	David Hahn	Dave Osenga	Carl J. Wenning	Duane Yockey
S. Skies Binocular 50						50*	50*
S. Sky Telescope 50						(52)	(50)
Telescope Messier Prov70/Hon110	(110)	(110)	103*	101*	72*	(110)	31
Binocular Messier 50		(100)	42			78*	16
Deep Sky Binocular 60		33					
Herschel 400 Club	249	400*	400*			(400)	
Urban Club 100		(100)	95			100*	
Comet Club Silver12/Gold30		31*				4	
Double Star Club 100	17		0			100*	
Planetary Neb Club Bas60/Adv110		1				59	
Globular Cluster Club 50						56*	
Lunar Club 100	(100)	(100)	93			100*	
Lunar II Club 100		6					
Asteroid Club Reg25/Gold100		(46)					
Outreach Bas10/ Stellar60/ Master160			60 ^{h+} *, **			31 ^h -06* 26 ^h -07 44 ^h -08** 17.5 ^h -09	

* Program or first award level now complete. ** Second award level now complete. Both * and ** will receive AL recognition (certificate and pin) at the next general membership meeting if available. Numbers in parentheses (#) indicate that the award has been both earned and received.

MINUTES OF MAY 12TH NCRAL PLANNING MEETING (CONT.)

(Continued from page 2)

the 2009 NCRAL meeting. Carl has been able to arrange getting himself and Duane on the IDSSP Saturday agenda, and Dan Miller has done the same for Bobby Arn on Friday.

- ☆ Time was then spent developing a draft budget that included speaker expenses, banquets breaks, promotion, conference center ballroom, etc. Budgeting for 100 attendees, the registration cost will likely be on the order of \$75. Additional costs will be assessed for the movie, planetarium, and Challenger Learning Center visits.
- ☆ Carl will pursue getting formal agreements for speakers now that we are within one year of the 2010 NCRAL meeting. He will contact our tentatively invited speakers (Bakich, Svec, Altman, Webb telescope PR person) and see what the actual costs will be. If it is not possible to get these individuals at a reasonable cost, Carl will move on to contacting astronomers and space physicists at IWU, ISU, and UI.
- ☆ Lee noted that the website www.2010ncral.org website is up and running. As the site is active, Lee was encouraged to place such notes as "Registration opening TBA" and "Registration fee TBD" so that we don't end up with a bait and switch situation should people register before we are ready to have them do so.

The meeting was adjourned at 7:18 p.m. We will meet once again following the Board meeting on July 14 at LYB, Inc. Carl Wenning, Chair of NCRAL 2010

2009 PUBLIC OBSERVING SESSIONS

Throughout 2009 – the 400th anniversary of the invention of the telescope – we acknowledge the astronomical work of Galileo in our Public Observing Sessions. One, and preferably two, coordinators are needed for all Saturday events as illustrated in the table below. Don't hesitate to volunteer to lead a public sky viewing session if you are qualified to do so.

Date	Times	Sunset	Topic	Coordinator(s)
June 27	9:00 PM ~ 11:00 PM	8:31 PM CDT	Craters of the Moon	Dave Osenga Carl Wenning
July 25	9:00 PM ~ 11:00 PM	8:18 PM CDT	Galileo's Telescope	Dave Osenga
August 22	8:30 PM ~ 10:30 PM	7:43 PM CDT	Jupiter and Neptune	Dave Osenga Carl Wenning
September 19	7:30 PM ~ 9:30 PM	6:58 PM CDT	Exploring the Milky Way	John Werner Dave Osenga
October 17	7:00 PM ~ 9:00 PM	6:13 PM CDT	The Pleiades Star Cluster	John Werner Dave Osenga

Additional prominent sky objects such as planets, nebulae, star clusters, and galaxies will be viewed when visible. *When uncertain if an observing session will be held, call one of the following cell phone numbers after 6:00 pm: 309-830-4085 (Carl) or 309-824-2804 (Lee).* The 2009 public brochure for these sessions can be downloaded from

2009 MEMBERS-ONLY OBSERVING SESSIONS

The club's members-only observing sessions are slated one week earlier than the club's public sky viewing sessions. This ensures club members with a dark night, and a public sky viewing session with typically a crescent moon. Member-only observing sessions begin as soon as the sky grows dark enough for viewing, usually one hour after sunset. Coordinators are needed for each session to ensure that at least one telescope is available for viewing with TCAAers not in possession of their own telescopes.

Date	Coordinator(s)	Date	Coordinator(s)
June 20	Carl Wenning	September 12	Carl Wenning
July 18	Lee Green	October 10	John Werner
August 15		November 14	Lee Green
		December 19 (Saturnalia)	Carl Wenning

UPCOMING ASTRONOMICAL MEETINGS

For the record, here are the dates of regional astronomical meetings for amateurs that TCAAers might wish to attend. TCAAers in charge of outreach for the 2010 NCRAL meeting might want to get on the agenda of some of the meetings.

- ☆ Interplanetary Bike Ride: June 21, Lakeview Museum, Peoria, IL, see <http://www.lakeview-museum.org/>
- ☆ Midwest Astro-Imaging Conference: June 26-27, Hoffman Estates, IL, see <http://sites.google.com/a/mwaic.com/2009/Home>
- ☆ Illinois Dark Sky Star Party: October 15-18, Jim Edgar Panther Creek State Park, see <http://www.sas-sky.org>
- ☆ Prairie Skies Star Party: September 17-20, Bourbonnais, IL, see <http://www.prairieskies.org/>

MAY OBSERVERS' LOG

The month of May was dominated by clouds and rain so few observers were able to get quality time out under the stars. On May 20th, however, William Carney observed two more asteroids and 17 more Deep Sky Binocular objects. His AL observing totals are now 46 and 33 respectively. No other reports were turned in.

JUNE SKY GUIDE

05 Venus is at greatest western elongation (46°), 4 P.M.

06 The Moon passes 0.6° north of Antares, 11 P.M.

13 Mercury is at greatest western elongation (23°), 7 A.M.

The Moon passes 3° north of Neptune, 11 A.M.

The Moon passes 3° north of Jupiter, 1 P.M.

16 The Moon passes 6° north of Uranus, 1 A.M.

19 Venus passes 2° south of Mars, 9 A.M.

The Moon passes 6° north of Mars, noon

The Moon passes 8° north of Venus, noon

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

The Moon passes 7° north of Mercury, 4 A.M.

22 Asteroid Vesta is in conjunction with the Sun, 7 A.M.

Mercury passes 3° north of Aldebaran, 9 A.M.

23 Pluto is at opposition, 3 A.M.

27 The Moon passes 7° south of Saturn, 9 P.M.

2009 IYA SESSIONS @ BPL

The TCAA's saga into astronomy in recognition of the International Year of Astronomy continues with the *Classroom for Kids* program. Family astronomy workshops for those aged 10 years and above will take place from 1:30 to 3:00 p.m. on the 4th Saturday of each month at Bloomington Public Library throughout 2009. The tentative dates and topics for the remainder of the year are as follows:

Date	Topic	Possible Activity	Coordinator(s)
June 27	Clusters of Stars	The color-magnitude diagram	Carl Wenning
July 25	Black Holes	Building a black hole model	Carl Wenning (tentative)
August 22	Rocks and Ice in our Solar System	Making a comet	
September 26	Planets and Moons	CLC goo activity	
October 24	What is the Fate of the Universe?	Study an explosion	
November 28?	The Lives of Stars	Light and spectra	
December 26?	Discovering Other Worlds		

These events are all intended to include hands-on, minds-on activities. Coordinators are needed for the majority of these events. Please inform Carl Wenning at wenning@phy.ilstu.edu if you are willing to coordinate one or more of these events.

JUNE'S IYA TOPIC: CLUSTERS OF STARS

Look up in a dark sky and you will see from a few to a few thousand stars. Some of these stars, like our Sun, are loners as they move around the galaxy. Many stars are gravitationally bound in pairs, called binaries, and some are caught in a gravitational dance of three or more companions. Others reside in bigger clusters, and these clusters can be some of the most beautiful sights visible in a backyard telescope. Why are some stars in clusters and some not?

To begin with, there are two different types: open clusters and globular clusters. They are both groups of stars but that is where the similarity ends. Think of an open cluster like a stellar kindergarten class while a globular cluster could be thought of as huge retirement home for the stars in the countryside.

Open clusters contain up to a few hundred young stars that have been recently born from a cloud of gas and dust in the spiral arms of our Milky Way Galaxy. Usually these clusters don't stick together very long. Like teenagers, they eventually leave home. The Pleiades (also called the Seven Sisters) is a well-known open cluster in the Northern Hemisphere.

Globular clusters, like the one pictured here, are much bigger and older than open clusters. They shine steadily in their "retirement community" where they will stay for many billions of years. In spiral galaxies they don't stay in the disk like most stars, but orbit in all directions, making what scientists call a "halo," or spherical pattern. In 1918, astronomer Harlow Shapley used their locations to determine that we live in the "suburbs" of our galaxy, instead of the center as we thought before.

The age of globular clusters was a source of confusion for scientists for many years because they appeared older than the universe. It turns out that astronomers were very good at measuring the age of stars, but not at calculating the age of the universe. Estimates based on data from the Hubble Space Telescope, and observations of the early universe by NASA's WMAP spacecraft, have put things right. Stars in globular clusters are almost 12 billion years old, in a universe that is 13.7 billion years of age. That's old!



NO HCC COURSE THIS AUTUMN

Due to several requests for information, Carl Wenning notes that he will not be teaching the adult education astronomy class *Night Sky Watch* at Heartland Community College (HCC) this autumn. The deadline for applying to present this course passed during his recent travels as he found out upon his return. Besides, Carl notes that he will be teaching an Academy of Seniors astronomy course for ISU this autumn which will keep him more than busy. Having taught these courses before, Carl notes that 30 to 50 individuals usually attend these sessions.

At this point in time, Carl notes that he is unlikely to teach the winter/spring adult education astronomy class at HCC due to a heavy teaching load at ISU. If any TCAAer is interested in teaching this no-pay, non-profit course at HCC, please contact Carl directly for information about doing so.

THREE TCAAERS TO SPEAK AT IDSSP

TCAAers Duane Yockey, Carl Wenning, and Bobby Arn are now on the agenda of this autumn's 8th annual Illinois Dark Sky Star Party (IDSSP). The star party will take place from October 15-18 at the Jim Edgar Panther Creek State Park. Inexpensive astrophotography, celestial views of the Southern Hemisphere and extrasolar planets will highlight this year's presentations at the 8th Annual Illinois Dark Skies Star Party.

On Friday, Bobby, author of *Millikin's Guide to the Cosmos*, will give an introduction to inexpensive astrophotography. The goal of the talk is to identify equipment and techniques that are available to the average amateur astronomer. A live demonstration of the equipment and techniques will be given later that night. On Saturday, Carl Wenning and Duane Yockey will present *Stalking the Southern Tier*. These two intrepid central Illinois amateur astronomers will share experiences viewing the southern celestial wonders from Bolivia and Chile. In addition, Jim Hopkins, Professor of Astronomy at Joliet Junior College,

will talk about *Exoplanets: Their characteristics, orbits, and methods of discovery*. Other activities include an astrophotography contest, swap meet and attendance prizes.

Registration fees (same level as 2003) are due by the September 30, 2009 deadline to ensure availability of meals and t-shirt/sweatshirt orders. On-site registration is also possible, but meals and shirts cannot be guaranteed. Registration is \$45 per person that includes tent camping only. Tent camping will be in the general observing area where there are restrooms but no electricity.

You are welcome to bring your own food and drink, but the hosts are also planning a delicious and value-packed food menu to choose from including all-you-can-eat breakfasts on Friday and Saturday mornings. The Sangamon Astronomical Society in conjunction with the St. Louis Astronomical Society sponsor the IDSSP. Visit the IDSSP web site at www.sas-sky.org for additional info, menu details and registration forms.

MAY EDUCATION/PUBLIC OUTREACH

By Lee Green

The sky cleared nicely for our MOOS on May 17th and we had moderately good skies. William Carney was there working with his binoculars. Dan Miller and Bobby Arn also were there working on low-cost astrophotography techniques. Lee Green showed up later with his telescope. Also in attendance was a troop of Boy Scouts camping at the Nature Center. We spent some time observing and more time in lively conversation.

At May's *Classroom for Kids* program at BPL on the 23rd, we looked at the Sun and the solar system. We discussed the planets, orbits and coordinate systems, the Earth and the seasons, the Earth's Magnetic field and auroras. Then we discussed the Sun, sunspots, the solar wind and CMEs. We used most of the videos from the Night Sky Network's Sun teleconference to aid our discussions. The kids, home schoolers ages 6-12, asked a lot of questions and had a pretty good understanding of the mate-

rial. Lee and Duane Yockey were there for the club.

The May Public Observing Session also was held on the 23rd but at Sugar Grove Nature Center. Attendance was expectedly sparse due to the clouds and rain that accompanied our trip to the site. Because the Clear Sky Clock predicted clearing, we went ahead with the event and our hopes were fulfilled when the skies cleared in time for a successful observing session. Lee gave the *How Telescopes Changed our View of the Universe* toolkit presentation to the people who came to our session. This was followed by a sky tour when we pointed out the constellations and other objects. We used both binoculars and telescopes to show a variety of interesting objects. Kudos to Dave Osenga and Paul Pouliot for the outstanding jobs they did and to Duane for all his help.

CONSTELLATION OF THE MONTH: CORVUS—THE CROW

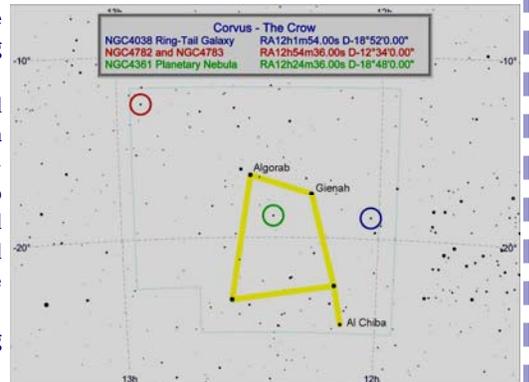
Corvus is a moderately small constellation located below Virgo and above the tail of Hydra. Corvus is visible early in the evening during the spring months.

In Mythology, the god Apollo had a beautiful white bird with a musical voice known as Corvus. One day Apollo bade Corvus to fetch some water in a cup, represented by the nearby constellation Crater. Corvus delayed his return when he saw a fig tree and waited for the fruit to ripen. Returning to Apollo with the cup and a water-snake, Hydra, in his claws, Corvus blamed the delay on the snake. Apollo, seeing through the deception, turned the bird black, destroyed its pleasing voice and set the snake to eternally separate Corvus from the Cup.

Astronomically, Corvus is small, the 70th largest constellation covering 184 square degrees. It is the 47th brightest constellation.

There are three named star in Corvus. The alpha star is called Al Chiba (the Raven's beak), the gamma star is Gienah (the right wing) and the delta star, Algorab, is a double star.

Among the deep space objects in Corvus are NGC4038 and 4039, colliding galaxies known as the Ring Tail Galaxy. NGC4782 and NGC4783 are two galaxies that are through to be interacting and are so near that they appear as a figure-8. Planetary nebula NGC4361 appears as a large circular disk with dim central star.



TCAA Treasurer's Report – May 2009

OPERATING FUND BALANCE – April 30, 2009 - \$ 2,813.87

Income

Marsha Fogarty (dues) - \$ 40.00
Matt Green (student dues) - \$ 25.00
Randy Gleason (dues – PayPal) - \$ 40.00
Jim Williams (dues) - \$ 40.00
Roy Lawry (senior dues) - \$ 25.00
PayPal verification - \$ 0.14

Expenses

LYB Inc. (May Observer) - \$ 23.30
LYB Inc (postage) - \$ 19.36

OPERATING FUND BALANCE – May 31, 2009 - \$ 2,941.35

OBSERVATORY FUND BALANCE – April 30, 2009 - \$ 2,175.41

Income

Donation - \$ 8.19

Expenses

None - \$ 0.00

OBSERVATORY FUND BALANCE – May 31, 2009 - \$ 2,183.60

TOTAL TCAA FUNDS – May 31, 2009 - \$ 5,124.95

Respectfully submitted,

L. Duane Yockey, Treasurer

Sugar Grove Observatory

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

Duane Yockey (renewed through 2009)
Michael Rogers (renewed through 2008)
William Carney (renewed through 2009)
Carl Wenning (renewed through 2009)
Brian Barling (renewed through 2009)
Christopher Franklin (renewed through 2008)
David Osenga (renewed through 2009)
Josh Lindsey (renewed through 2008)
Andrew Morrison (February 2008)
Dan Miller (renewed through 2009)
Lee Green (renewed through 2009)

UPCOMING EVENTS

June 20—Members-only Observing Session, SGNC, dusk

June 27—Classroom for Kids, BPL, 1:30—3:00 p.m.

June 27—Public Observing Session, SGNC in conjunction with National Wildlife Federation's *Great Backyard Campout*, 9-11 p.m.

The OBSERVER

Newsletter 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/