

 **Current** OCTOBER  
2004  
**Astronomy**  
**RIVER BEND ASTRONOMY CLUB NEWSLETTER**

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**After sundown our eyes gradually grow more sensitive to dim light — a process called dark adaptation. Although even a glimpse of white light will diminish it, red light preserves this sensitivity during astronomical observation. PHOTO BY ERIC YOUNG**

# RIVER BEND

## ASTRONOMY CLUB

RIVERBENDASTRO.ORG

*River Bend Astronomy Club serves astronomy enthusiasts of the American Bottom region, the Mississippi River bluffs and beyond, fostering observation, education and a spirit of camaraderie.*

### Officers and administrators

<b>PRESIDENT</b>	Gary Kronk kronk@amsmeteors.org
<b>VICE-PRESIDENT</b>	Deb Wagner starstuff@starband.net
<b>TREASURER</b>	Ed Cunnius ecunnius@att.net
<b>LEAGUE CORRESPONDENT</b>	Jamie Goggin jamie.goggin@ugsplm.com
<b>SECRETARY</b>	Eric Young younger@wustl.edu
<b>ASTRONOMY DAY COORDINATOR</b>	Mark Brown loneastronomer@charter.net
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<b>FOUNDING MEMBER</b>	Kurt Sleeter sleeterk@pathology.wustl.edu

### Contacts

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Affiliated with the Astronomical League, dedicated to fostering astronomical education, providing incentives for astronomical observation and research, and assisting communication among amateur astronomical societies.  
[www.astroleague.org](http://www.astroleague.org)



Affiliated with the NASA Night Sky Network, a nationwide coalition of amateur astronomy clubs bringing the science, technology and inspiration of NASA's missions to the general public.  
[nightsky.jpl.nasa.gov](http://nightsky.jpl.nasa.gov)

### Current Astronomy CLUB NEWSLETTER

**EDITOR** Eric Young  
younger@wustl.edu

Submissions to the newsletter are encouraged.  
Contact the editor for more information.

## Events

### September Meeting

**Saturday, October 9th, 2004**

**Menz Home (see directions, page 7)**

**Meet at Kronk's at 6:45 p.m.; form convoy**

## Looked up lately?

### Join River Bend Astronomy Club

Want to learn more about astronomy? The members of River Bend Astronomy Club invite you to join. You won't need expensive tools or special skills — just a passion for observing the natural world.

- Meetings offer learning, peeks through great telescopes and fun under the stars.
- You will receive the club newsletter, *Current Astronomy*, packed with news and photos.
- Get connected with our member-only web site and discussion group.
- Borrow from the club's multimedia library.
- And that's not all! Through club membership you also join the Astronomical League, with its special programs and a colorful quarterly newsletter to enrich your hobby.

We meet monthly, observe regularly, e-mail news and quips constantly, and generally have a good time. Won't you join us?

Name(s) \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone (Day) \_\_\_\_\_ (Evening) \_\_\_\_\_  
 Email address (to receive club news and information): \_\_\_\_\_

Where did you hear of our club?  
 \_\_\_\_\_

How long have you been interested in astronomy? \_\_\_\_\_

Do you have optical equipment? \_\_\_ Telescope \_\_\_ Binoculars

Are you afraid of the dark? \_\_\_ Yes \_\_\_ No (just kidding)

I am submitting my application for:

\_\_\_\_\_ Adult membership(s) \_\_\_\_\_ Youth membership(s)  
 @ \$20.00/year @ \$15.00/year  
 (18 years or older) (under 18)

I enclose a check for a total of \$ \_\_\_\_\_  
 made out to "Ed Cunnius, Treasurer RBAC."

Signature \_\_\_\_\_

Date \_\_\_\_\_



**River Bend Astronomy Club**

c/o Gary Kronk, 132 Jessica Drive, St. Jacob, IL 62281

web: riverbendastro.org e-mail: riverbendastro@att.net

SEPTEMBER 04

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# Observe the rules

## Enjoy astronomy by following our basic guidelines

BY DEB WAGNER

**A**mateur astronomy is an increasingly popular hobby. Like other astronomy clubs, the River Bend Astronomy Club has experienced a rapid growth in membership. As a result, the RBAC has elected to adopt rules of etiquette for meetings and observing sessions. Whether you use astronomy as a way to unwind after a stressful day at work, use it to contemplate the meaning of life, or just like to look at cool stuff in the sky, we hope these rules of etiquette will ensure your continued enjoyment of this rewarding hobby. ***Please note: Anyone who fails to comply with the rules will be asked to leave.***

### **USE RED-FILTERED FLASHLIGHTS AND SHIELD OTHER LIGHT SOURCES**

Avoid the use of white lights and use red lights sparingly. Even red LED lights can spoil night vision if turned up all the way. Keep your lights directed down, on low power, and well shielded. Be certain your laptop screen is not illuminating the observing field.

### **AIM LASER POINTERS ONLY AT THE SKY; ADULT USE ONLY**

A green laser pointer is a wonderful educational tool. It should not, however, be used as a toy. Therefore, green laser pointers should be handled by responsible adults and should only be pointed toward objects in the sky. Never aim a laser pointer at another person.

### **CHILDREN MUST BE SUPERVISED AT ALL TIMES**

Members exchange information and ideas at meetings — please do not allow your child to disrupt the proceedings. During observing sessions, the area is dark and a great deal of expensive equipment is assembled in a small area. Help protect our members' investments and respect what they choose to share with your young ones.

### **NO RUNNING; NO HORSEPLAY**

The observing area is not a playground — no running or horseplay will be permitted.

**BE QUIET** Astronomy is regarded as a peaceful, quiet hobby. For many, it leads to introspection and discussion. Avoid loud and raucous behavior. Please wear headphones if you enjoy listening to music.

### **BE AWARE OF YOUR SURROUNDINGS AND RESPECTFUL OF OTHERS' ACTIVITIES**

Many RBAC members enjoy astrophotography and everyone attending club observing sessions should be sensitive to that fact. A poorly aimed flashlight or laser pointer can ruin an exposure. Even walking too near an astrophotographer's setup can potentially ruin what could have been a great picture.


### **ASK PERMISSION TO USE OTHERS' EQUIPMENT**

Most telescope owners enjoy sharing their telescopes and/or binoculars. Even so, always ask permission before looking through someone else's equipment. Never use unattended equipment without permission. Never touch the surface of a lens, mirror, or eyepiece.

### **DO NOT SPRAY AEROSOLS NEAR EQUIPMENT**

Mosquito repellent is a necessity when observing during the warmer months. Please leave the observing area to apply repellent from an aerosol can. The airborne spray can settle on eyepieces, lenses, and mirrors.

**NO SMOKING** Out of concern for the health of everyone and their optical equipment (smoke particles can fog optics), never smoke on the observing field.

**NO ALCOHOL** No alcohol consumption is permitted at RBAC meetings or club events. 



# Autumn highlights

## What one man saw on a Saturday night

BY BILL BREEDEN

**O**bservation Report from Bill Breeden at Kronk Observatory, Saturday night, September 11, 2004. We enjoyed mostly clear skies with a few high clouds drifting by now and then. Overall, it was a very nice night for observing, although hazy near the horizon. Temperatures were comfortable, and humidity wasn't bad. Our 8" Schmidt-Cassegrain Telescope (SCT) had very little dew by 11:45 p.m.

In Cassiopeia, I observed the Double Cluster, NGC 869 and NGC 884. They were brilliant, and Deb Wagner showed me this cluster in her Dobsonian telescope. Magnificent view. I also looked at M103 with our 8" SCT and 10 x 50 binocs — this was easy to find near Delta ( $\delta$ ) Cassiopeia.

In Perseus, I observed Algol, Beta ( $\beta$ ) Perseus, and M34. M34 appears very open in a telescope. Very nice in binocs.

In Andromeda, I looked at M31, the Andromeda Galaxy. This looks large and fuzzy (but pretty bright) in the 8" SCT. I also saw it in Rip's 18" Dob. What a great view! M32, the small companion to M31, was visible in the 18" Dob, but I couldn't really see it in our 8" SCT. I also observed M33, which appeared very faint.

I spent a lot of time investigating the area around Capricornus. I observed M72 and M73. M72 is a small but pretty globular cluster, but M73 just looked like a few stars. I tried to find NGC 7009, the Saturn Nebula, right next to M73. Even if I did find it I didn't actually see it. I observed M75, a globular cluster. Very beautiful.

In Aquarius, I jumped up from M72 and M73 (in Cap.) to observe M2. This is a very nice globular cluster, very bright and pretty in the 8" SCT.

While in this area of the sky I decided to observe the star Fomalhaut in Piscis Austrinus. The star was low in the south, and the atmosphere made it appear to change colors and twinkle wildly. It was a beautiful sight. I just watched Fomalhaut for a while.

In Sagittarius, I observed M20, M21, and M22. M20 and M21 are spectacular in the 8" SCT, and I could easily see nebulosity in M20, the Trifid Nebula

last night. Along with M21, a beautiful open cluster, these were very pretty. I observed M22 in binocs and with the 8". The telescope resolved individual stars in this globular cluster. Trying my hand at navigating the sky without the go-to, I began at Nunki, the brightest star in the Teapot asterism. From there, I managed to find M22. It was a challenge, but I did it!

In Hercules, I observed Rasalgethi, the Alpha star. It is a very pretty double, appearing yellowish-orange and blue in the SCT. Then, Deb invited me to locate this star using her Dob and Telrad finder. She showed me how to find an object with the Telrad. My first try, and I found it! (Deb's Telrad is perfectly aligned.) Deb spent a lot of time teaching my wife, Rita, how to find objects in the sky.

In Ophiuchus, I observed Rasalhague, Alpha ( $\alpha$ ) Ophiuchi. This was my starting point to locate IC 4665, an open cluster. This cluster appeared very loose in the 8" SCT.

I also saw Uranus and Neptune in Mike Veith's ETX telescope. Uranus appeared as a small greenish disk, and Neptune as an even smaller blueish disk. Several people had a look, and we are all fairly sure that we did see these distant planets. No other planets were in position to observe Saturday night.

Overall, it was a very fine evening for observing and enjoying the night sky with fellow amateurs. I was able to find many objects with and without help from the Meade Autostar (GoTo) control on my telescope, and with the book *Night Watch* by Terence Dickinson.

*Clear skies to everyone!*

*Bill Breeden*

### **SURGEON GENERAL'S WARNING**

Bill Breeden's enthusiasm for astronomy is contagious and has been known to cause prolonged stargazing.

# The River's Edge

BY ERIC YOUNG

## Back to school and back to stargazing

**SEPTEMBER 11, 2004** As the world paused in solemn remembrances of this tragic anniversary, RBAC members gathered to look outward into the unknown depths of space. When searching for a light in the darkness, as poet Robert Frost wrote of our human journey, *choose something like a star...*

**INTERNATIONAL RBAC** Jeff Sjoquist and Jim Pauling are currently overseas and working hard in France. According to Jeff, "We did bring Jim's scope with us and are waiting for a good clear evening — when we don't have to be in too early in the morning — so we can do some observing. I wonder if things will look different from over here :-)"

"On our flight over we had some great northern lights. We tried to take some pictures but the airplane wasn't stable enough even for an 8-second exposure."

On the ground the boys were able to observe.

"The French chapter of RBAC met prior to the meeting in St. Jacob. Jim and I had a hard time finding the best location, but eventually decided the best place was by the . . . pool. The area of France we are in is fairly dark at night and the pool had only one problem — a Coke machine. But that's why things have plugs, right? One easy pull and the pool area was very dark.

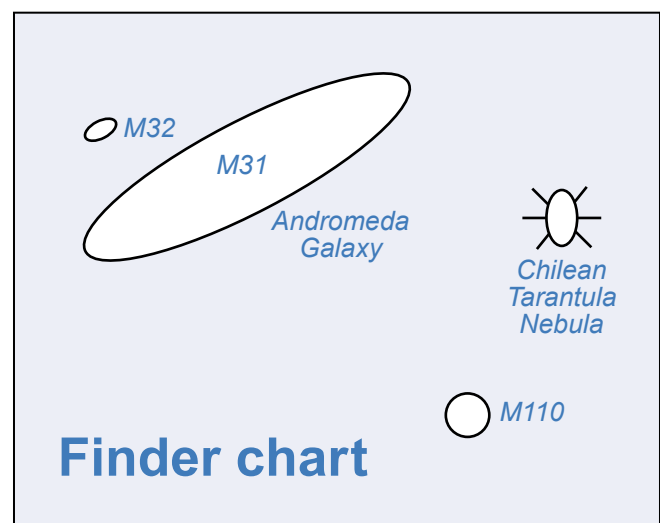
"Had a great view of the Milky Way. We could see things down to about magnitude nine and spent over four hours looking at objects and showing them to folks from our unit. Jim took some pictures and got a couple good shots of the Ring Nebula and M31."

**STAMPEDE** Where did everybody go? They're standing at the south end of Kronk's poolside, peering into Mike Veith's little ETX telescope for good looks at Uranus and Neptune. While we studied the blue dot called Uranus, the telescope's digital keypad spelled out the planet's name in big red letters. Later, we gawked at Neptune, a dot that the keypad noted was only 2 arcseconds in diameter. Tiny.

**GALACTICA** At one time or another throughout the evening most of us took a peek at the Andromeda Galaxy — an island universe we can see with just our eyes, but binoculars or a telescope will gather more light from this myriad of stars. Astronomers believe that Andromeda resembles the appearance of our Milky Way Galaxy viewed from a great distance. Telescope challenges nearby include M32, big and bright, and M110, more subtle.

**ARACHNOPHOBIA** When he visited the St. Louis Zoo he got a behind-the-scenes tour and had the opportunity to hold a Chilean Tarantula in his hand — so says member Tim Bucher. But then Tim angered the arachnid with a comment about its hairy legs and the big spider ate Tim's camera — thus no photos are available to verify its existence or Tim's story.

**RING OF FIRE** We climbed a ladder to look at the Ring Nebula in Rip Rippelmeyer's big bad Dob. That's the biggest and brightest I've ever seen the Ring. The elongated edge was clearly visible and the object appeared at least as large as a full-grown Chilean Tarantula.



**RICH AND REWARDING** Attending with his 7-year-old son, Frankie, Rich Halasey talked about camping at Wren Lake with friends and family this summer. At the lake he showed folks the sky including the Ring Nebula. Rich hopes to expand his astro toolbox with more eyepieces. (If you have a nice 32mm ocular then you'd better keep it locked up — it's hard to see what Rich is doing in the dark.)

**THE DIVINE MISS "M"** She's completed two more Astronomical League observing clubs: Binocular Messier Club and Messier Club. Deb Wagner observed 50 Messier objects to complete the requirements for the Binocular Messier Club and logged 70 Messier objects with her telescopes to become a member of the Messier Club. When she's observed the remaining Messier objects she plans to resubmit her observing logs to qualify for membership in the Honorary Messier Club. Deb says, "It's always fun to locate and observe the Messier objects. I enjoyed working on both of the certificates, but the biggest surprise was how enjoyable it is to observe with binoculars. Binoculars are extremely portable and it was nice to occasionally abandon my telescopes and head out with

my folding chair and my 'binos' for a relaxing, stress-free evening under the stars. I highly recommend that everyone take a break from their telescope once in a while and peruse the sky with binoculars." For information about these and other Astronomical League observing clubs, visit [www.astroleague.org](http://www.astroleague.org)

**FOUR OR MORE EYES** And speaking of binoculars, it seems more and more members have been using these hand-held optical aids lately. Binoculars are an inexpensive way to get started in astronomy — they're easy and they're fun. Compared to a telescope, binoculars offer a more comprehensible leap from natural vision to magnified vision. And most of us who graduate to bigger light-gathering devices still reach for our binoculars again and again.

**FOR SHAME...** While building PowerPoint presentations on astronomy for his job in the planetarium at St. Louis Science Center, Mark Brown can't access his favorite web sites and complains that the Center's software blocks them. Must have something to do with "naked"-eye observation... Gotta get over and see one of his presentations.



**3rd annual Illinois Dark Skies Star Party, September 16-18**

The Triangulum Galaxy, M33, a naked-eye object? Must be some of Illinois' darkest skies — like those at Jim Edgar – Panther Creek State Park, home of the Illinois Dark Skies Star Party. Deb Wagner and Lois Butler attended and Gary Kronk spoke at the event.

Deb, who left her telescopes at home, enjoyed the summer Milky Way and worked on her Deep Sky Binocular Club certificate. Lois logged many objects on the Binocular Messier list and sketched asterisms for the Constellation Hunters certificate.

"The other attendees were courteous and friendly, the weather was beautiful, and the skies were fantastic," says Deb. "I truly hope more RBAC members will attend next year's star party."

Lois Butler reports having had a wonderful time at her first star party. "It was rewarding to find objects in my binoculars that I had not been able to find in more light-polluted areas. Other attendees were novice observers and it was encouraging to realize that I know the sky as well or better than some of them."

Dear RBAC,

Thank you so much for coming to our school on Tuesday, September 14th, with your club and your telescopes. The children enjoyed the "Star Party" and looking through the telescopes to find the different celestial bodies. Your club's enthusiasm was contagious and made it a fun event. It allowed us to do something different for the children — certainly a departure from what they normally get to do at school.

As a token of our appreciation, you'll find a \$50 donation for your club. We appreciate your time and hope that you will be able to use this for the benefit of all involved.

Thanks again for everything.

Sincerely,

Lori Ehlers


President, La Verna Evans PTO

**RBAC thanks Deb Wagner, Lois Butler, Mike Veith and Mark Brown for sharing the night sky with 100 students and parents on September 14th.**

**LIVE LONG AND PROSPER** Highland dentist Byron Barker just loves it when people cut their teeth on astronomy. Byron brought family friend Tom Pruett, a sophomore at Highland High School (*Go Bulldogs!*), for a look at RBAC and the night sky. Tom must love the stars because he's affixed over 1,500 glow-in-the-dark stars to his bedroom ceiling. This makes it difficult to fall asleep at night but at Tom's age that may not matter. Tom's e-mail address includes the word *Enterprise* — as in that famed starship. In other Star Trek news, the DVD of the original series' first season has just been released. RBAC'ers are growling worse than bulldogs about the disc's astronomical price.

**HAPPY ANNIVERSARY** Believe it or not (and I really can't blame you if you don't), Gary Kronk and Kurt Sleeter discovered a meteor shower 11 years ago. That September night they saw some 11 meteors over 90 minutes. All the meteors appeared to have a common origin in the sky, a point called a radiant. This radiant was confirmed by another observer and has

produced shooting stars every year since. Now called the Aries-Triangulids, the display peaks about every 5 1/2 years. Learn more: [comets.amsmeteors.org/meteors/showers/aries\\_triangulids.html](http://comets.amsmeteors.org/meteors/showers/aries_triangulids.html)

**GO-GETTER** Sure, he's got a big go-to telescope that points toward stars and planets at the touch of a button. Bill Breeden can hop the sky faster than a cow can jump the Moon. But Bill says he's learning to appreciate spending a little more time on one area of the sky in order to know it better. Enjoy Bill's observer's report in this issue. If you don't already log your observations, consider doing so — it impresses the experience into your brain. Down the road the notebook grows to become an autobiography of your journey through the universe. 

### Visit Menz Observatory in October

The Menz family invites RBAC to observe at their home on October 9, 2004. Meet at the Kronk's at 6:45 and join the caravan or follow these directions:

From St. Jacob, continue EAST on Rt. 40. About 2.6 miles past St. Jacob, cross the railroad tracks at Highland Road and proceed into Highland.

Continue on Highland Road, which turns into Broadway in town. Continue traveling EAST on Broadway. Pass the town square on your left.

From the intersection at Broadway and Poplar, continue traveling EAST on Broadway (which becomes St. Rose Rd. at Iberg Rd.).

Kayser Rd. is 2.4 miles from the Broadway/Poplar intersection, just past Sugar Creek.

The road sign is on the right, turn LEFT onto Kayser Rd.

The Menz house is the second one on the left on the hill, grey with burgundy shutters. You may park in the grass on the uphill (East) side of the driveway or on the road. Please leave the driveway open for early departers.

#### Don't forget your bug repellent!

Jeff & Terry Menz

13721 Kayser Road

Home: (618) 654-1150

Cell: (618) 910-4068

# October 2004



## September 2004

S	M	T	W	T	F	S
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

## November 2004

S	M	T	W	T	F	S
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

■ Holidays    
 ■ Moon Phases    
 ■ RBAC    
 ■ Space Mission    
 ■ Observing    
 ■ Trivia

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28 ● Full Moon 8:09 a.m.	29 ● Schwassmann-Wachmann 1 closest to	30	1 ● NASA established 1958	2
3	4 ● Sputnik I launch 1957	5	6 ● Last Quarter 5:12 a.m.	7 ● C/2004 R2 (ASAS) Perihelion	8	9 ● RBAC 8:00 p.m. ● Draconids peak
10 ● Columbus Day ● Launch of Pioneer I	11	12	13 ● New Moon 9:48 p.m.	14 ● Moon occults Mercury	15	16
17	18	19	20 ● First Quarter 4:59 p.m.	21 ● Orionids peak	22	23
24 ● C/2004 R2 (ASAS) closest to Earth	25	26 ● Cassini: 1st targeted Titan flyby	27 ● Total lunar eclipse ● Full Moon 10:07 p.m.	28	29	30
31 ● Halloween ● DST ends	1	2	3 ● Taurids peak ● 1957: Laika in orbit	4 ● Last quarter 11:54 p.m.	5	6