

The Photon Gazette

A quarterly publication of the Christian Association of Stellar Explorers (CASE)



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Welcome from the President

Winter is upon us, and I realize that its getting harder and harder to go outside and enjoy the night skies when the temperature gets down to 10 or 12 degrees. I remember the total lunar eclipse from 2000 when I decided to go out and photograph it. Well, after several days of having a high fever I learned two things: 1. Always wear a hat when going out in the cold to do anything, and 2. Remember how crazy it was in the first place to be out in sub-twenty degree temperatures to take a look at the lunar eclipse. Do I regret it? Absolutely not!! I just learned that I need to remember to bundle up warmly in order to spend any prolonged amount of time under the cold, cold winter skies. Ah, but it was a beautiful sight to behold.



New Members

There have been interest shown by several new families and individuals at our star and lunar parties about membership. We are glad to welcome Ed Jones, who is the current President of the Astronomical Society of Northwest Arkansas to our club! Remember, if you have a change of address, please be sure to contact the CASE office either by e-mail or snail mail so that we can insure you continue to receive this newsletter and the Reflector from the Astronomical League. We don't want to keep sending your newsletters to someone else's home to enjoy.

MSRAL 2002

The Mid States Regional Convention is getting closer and closer every day. The committee has looked over the meeting site here at John Brown University and are very, very pleased with the new Walker Student Center, which will house the convention meetings. The facilities are very roomy, and will give us a great opportunity to show our club and its members to the rest of the region. Please be sure to make plans now to attend the convention! Also, there is still a need for volunteers to work! Please contact me for further information.

CASE Observatory

Plans are still being made for the CASE Observatory to be built at New Life Ranch. I have personally met with the great folks out at NLR, and they are planning on building our observatory in the spring of 2002! It will house a 16" newtonian reflector on a Schaeffer mount, which is supplied by JBU's Advance Program. There will also be a SBIG ST-4 Autoguider which will enable us to do some long exposure astrophotography. I am also planning on filing for our club's non-profit status in this first quarter of 2002, so please get your dues in as soon as possible! This will allow the CASE officers to go out and talk with potential donors, all of who have already shown an interest in the work that CASE has done with young people in the astronomical community.

Here's to a great new year. Working together, we can expand the outreach and cooperation with other astronomical organizations that CASE has here in Northwest Arkansas.

Dark (and Clear) Skies to All,

Patrick Carr
President/Editor/ALCor & MSRAL Chairman

Memberships Coming Due This Quarter

Membership in CASE is based on a calendar year. The following members listed will be responsible for renewing their memberships on or before the date listed beside their name.

Stephen Sbanotto Family (7/31/01)
 Steven D'Annolfo (11/30/01)
 Michael Peterson (1/1/02)
 Jon Peterson (1/1/02)
 Patrick Carr Family (1/1/02)
 David Cater (1/1/02)
 Michael Cater (1/1/02)

opportunity for anyone who actually wants to see the beautiful night sky.

There are a few ways that we can combat this problem before it becomes so bad that we can no longer see the arms of the Milky Way. One way is to write, e-mail or fax the Governor of your state. By letting them know that there are people concerned with light pollution we will be able to hopefully start to educate them as to how it is bad for not only the nocturnal animals, but for children who will never be able to see the wonders of the night sky.



A night-time photo of the Earth from space, which illustrates quite well the problem of light pollution!

The second way is to join the International Dark Sky Association, or IDA. Membership dues are very affordable and are used to educate legislators in the United States to the problems of light trespass and light pollution. We would never throw trash on the side of the road, so why would we want to throw light into the sky? Lights are needed at night, but they do need to be aimed to light the areas that are intended. Safe lighting is a concern of all! IDA has been the group who is working very diligently to educate people nation- and world-wide on the problem of light pollution. You can see their website at www.darksky.org for more information on membership opportunities and ways that we can partner with them to increase the awareness and importance of a truly dark sky.

Only by our getting involved will we be able to save and preserve our night skies for our children and grandchildren to come.

Dark Sky Preservation and the International Dark Sky Association

Patrick Carr, MSRAL Chairman

As the end of 2001 was coming about, I took a long trip by car to Atlanta, Georgia to spend Christmas with family and friends. I love to travel at night, so I can see the stars, and enjoy all that dark skies have to offer. On this trip, however, I was more vigilant to notice the amount of light pollution and light trespass in the normally dark areas of the drive. We take I-40 through Little Rock, and continue through Memphis, Nashville, and Chattanooga, Tennessee, until we arrive in Atlanta. Now Atlanta is known for having terrible light pollution, but I started to notice it well before we were even within one hundred miles of the city limits! What causes these bright lights, you ask? The answer is simple. Many people don't realize that their "safety" lights are actually not being used to their fullest potential. Many of these lights are shining on areas either out of people's yard and intended targets, or are simply shining straight up. Case in point: lights that are used to illuminate billboards on the highway. I noticed on this trip that many of the billboards along I-40 in Arkansas were lit by way of shining spotlights straight up. Only about 20% of the intended light, by my estimation, were actually hitting the billboard. The rest was just lighting up the night sky, and ruining a pristine viewing

The Gallery . . .

This area is reserved for photographs, drawings and musings from our membership. If you have an interesting thought, please be sure to e-mail it to thecarrs@tcac.net or by mail to the CASE office. If you have photographs or slides of interesting objects in astronomy, please get them to the CASE office for inclusion in our quarterly publication.



Drawing of the Solar System by Rachael Carr, age 7

Dues Paid in Full!

The following people have paid their membership dues for the current year.

Ed Jones

All dues paid will be good for 1 year from the date of payment.



Solar Eclipse of December 14, 2001 by David Cater



Single Leonid Meteor by Michael Cater

Treasurer's Report

Income (YTD December 31, 2001)

Balance Forward:	\$72.80
Membership Dues:	\$170.00
Money Returned from AL:	\$9.00
Miscellaneous Deposit:	\$12.80

Total: \$264.60

Expenses (YTD December 31, 2001)

Postage:	\$35.96
National Astronomy Day Materials	\$26.00
Astronomical League 2001-02 Dues	\$45.00
Checks Ordered for Account:	\$12.25

Total: \$119.21

Total Cash Reserves: \$ 119.21

CASE Hosts Messier Marathon: 2002

Patrick Carr, MSRAL Chairman

Well, last year's scheduled Messier Marathon was clouded and rained out, so let's give it a go again this year. The first actual annual CASE Messier Marathon will be held on March 15, 2002 starting at 7:00 pm at our normal viewing site. Members will want to be sure to drink plenty of liquids, and maybe bring something to munch on since this party will go on all night!!

The CASE Messier Marathon will be an unconventional marathon to say the least. Five members will have their scopes set up for all to use. Each scope operator will be given a list of Messier objects and the time that they will be up to be viewed. This will happen for each of the five scopes that will be in use. As each member find each one of their objects, they will call to others in attendance so that they may move to and from each scope in order to see all 109 objects in a single night. Remember that marathon viewing does not qualify for the Astronomical League's Messier Certificate.

Scope sizes will range from 10" up to 16" and should make this a great night for all to see Messier objects that you may not have viewed before. Be sure and bring your friends and casual observers, since this will be the first event of this magnitude held by CASE. The listings are already prepared, the timings are set, and the star maps are specifically configured for each time of the night, so let's make this a great first annual Messier Marathon.

If you are interested in using your scope, please contact Patrick Carr to arrange to receive your listings, timings sheets and star charts.

MSRAL 2002 is Coming!!

We still need lots of help to make this the best MSRAL Conference ever!!

Let's show the region what a small club can accomplish!!

World Wide Web Has Lots of Great Resources

Patrick Carr, MSRAL Chairman

The world wide web has literally thousands of links related to astronomy and astronomical subjects. Here are just a few of my favorites that I have been using regularly in the last couple of years. This will be the first of three part installments. Look for the next two issues of *The Photon Gazette* for the rest!

www.astroleague.org: The AL's home page. This page contains a lot of good information on the League, observing programs and education-related topics. A great place to start!

www.astromart.com: Another great website that offers an opportunity to purchase or sell new and used astronomy equipment, with no fees like e-bay.

www.heavens-above.com: This website is a great way to learn about the other "heavenly bodies" that orbit the earth, like satellites. Also provides charts for observing the night sky.

www.skypub.com: The home page for Sky & Telescope magazine. Lots of great resources!

www.astronomy.com: The home page for Astronomy magazine.

Important Club Activities Dates for 1st Quarter 2002

January:

January 11 - 7:30 p.m. (Star Party)
January 25 - 7:30 p.m. (Lunar Party)

February:

February 15 - 7:30 p.m. (Star Party)
February 1 - 7:30 p.m. (Lunar Party)

March:

March 15 - 7:30 p.m. (Messier Marathon)
March 29 - 7:30 p.m. (Lunar Party)

What's Up This Quarter?

Mike Peterson, Treasurer

The Sky in Winter

In early to mid January, when the moon is not washing out the sky, Cygnus is approaching the western horizon. As it disappears, so will the Dumbbell Nebula. Even now, to see it at all, you have to get out early in the evening. If you get out early enough after sunset, you can also find the planet Mercury. On the 14th. the crescent moon might be seen below Mercury. Also, on the 14th., Neptune will be just to the right of that crescent moon. Looking further south, Mars can be found moving through the constellation Pisces. Over in the East, Saturn can be found keeping Taurus company. Near by M45, The Pleiades, can be seen. Also in the constellation Taurus, but following behind at they travel across the sky is M1 the Crab Nebula. Just behind that, in Gemini, is the planet Jupiter. Closer to the eastern horizon is the Beehive Custer in Cancer.

The exact location of an object depends on exactly when you are observing it in the evening. This

is especially true at this time of the year when one can be stargazing anywhere from about 6 PM, to midnight. The stars can move quite a ways in that amount of time.

While looking to the south, we can find Orion, with the Great Orion Nebula. Near by is the Rosette Nebula, and the Christmas Tree Cluster. If you are up late enough, you can view the Realm of the Galaxies between Leo and Virgo.

Also, during this time of the year, the Andromeda Galaxy can be found high in the sky. On a good (dark) night, it can easily be seen with the naked eye. Not too far away the Double Cluster in Perseus can be found.

Looking toward the North, the galaxies M81, and M82 can be found between Ursa Minor and Ursa Major, along with M108, and M109 in Ursa Major.

By the time mid March comes around, Mars is in the west approaching the horizon. Higher up is Orion, and the planet Saturn, in Taurus the Bull.

Current CASE Membership

(Current dues up to date)

Patrick*, Adriane and Rachael Carr (F) - 3
David Cater* (I) - 1
Michael Cater (I) - 1
Brian*, Jane Greuel and Family (F) - 4
Ken Knight* (I) - 1
Mike Peterson (I) - 1
Jon Peterson (S) - 1
Stephen*, Elaine and Pete Sbanotto (F) - 3
William D. Leiser, Jr. (I) - 1
Steven D'Annolfo (I) - 1
Roger Youmans* (F) - 5
Ed Jones (I) - 1

Total Paid Membership - 23



* = Mailing name on all newsletters.

F = Family Membership I = Individual Membership

S = Student Membership