

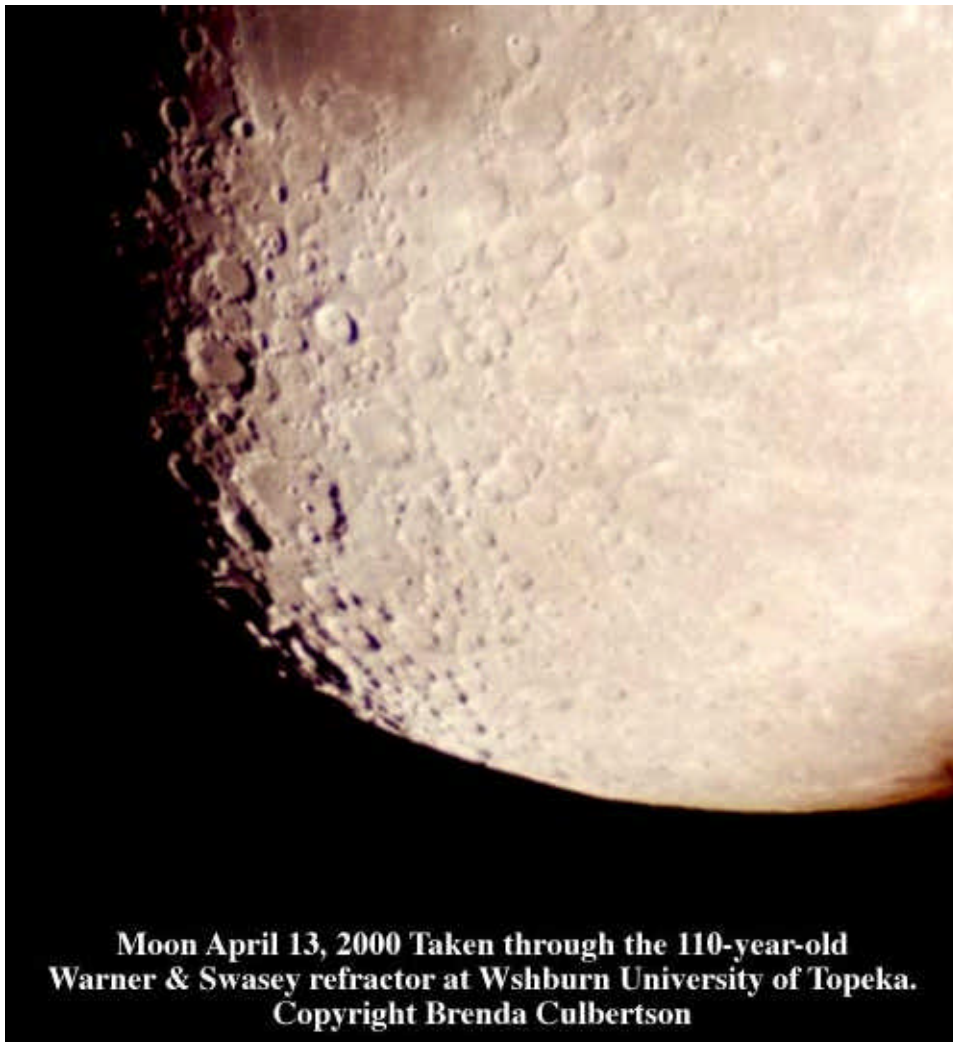


# The American Astronomer

THE QUARTERLY NEWSLETTER OF  
THE AMERICAN ASSOCIATION OF AMATEUR ASTRONOMERS

Volume IV, No. 3

June 2000



**Moon April 13, 2000 Taken through the 110-year-old  
Warner & Swasey refractor at Washburn University of Topeka.  
Copyright Brenda Culbertson**

Lunar observing is an astronomical pursuit we can all still take part in, right from our own back yards. The moon is the brightest celestial object we can view, aside from the sun. And during the course of a month, it goes through a regular series of interesting transformations. The moon is also a rewarding telescope subject, revealing its craters, seas, and mountains in even a modest amateur instrument. And observing a first quarter moon is one of the most popular objects, after Saturn, you can show the general public at a star party.

AAAA member Brenda Culbertson is director of the observatory at Washburn University in Topeka, KS. She has been involved in a long running project to refurbish the Warner & Swazey 11.5-inch refractor there after many years of neglect, and make it available to the general public through regular observing sessions. As you can see from the above photograph, the optics of this instrument are superb. Brenda has a wide ranging interest in astronomy. You can find out more about her projects on her own web page, [www.geocities.com/ksstargazer/](http://www.geocities.com/ksstargazer/).

The Astronomical League's Lunar Observing Club is a great way to learn more about the moon and is a easy backyard project for any observer. Download the Lunar Club requirements from the AAAA web page: [www.corvus.com/aa01006.htm](http://www.corvus.com/aa01006.htm).

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## **Stephen LaFlamme Hits Grand Slam of Binocular Astronomy**

AAAA member Stephen LaFlamme of Bridgewater, MA, completed both the Binocular Messier Club and the Deep Sky Binocular Club, at the same time. Stephen used 10x50 binoculars to observe 50 Messier objects and 60 Deep Sky objects, a number equal to the 110 objects required for the Honorary Messier Certificate for telescopes. Way to go Stephen. We are proud of you, Stephen.

## **Richard Brown Earns Deep Sky Binocular Club Certificate**

AAAA member Richard Brown of Carrollton, TX, completed his Deep Sky Binocular Certificate observing 60 deep sky objects using 10x50 binoculars. Richard, who has a Binocular Messier Club Certificate, completed his observations at this year's Texas Star Party. Very, very nice job, Richard.

## **John Lusher II Awarded Honorary Messier Club Certificate**

AAAA member John Lusher II of Webster, TX, recently received his Honorary Messier Certificate observing all 110 Messier objects with his telescope. Congratulations, John. We are happy you are a member of the AAAA.

*John Wagoner, AAAA President*



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THE AMERICAN  
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The opinions expressed by contributors to the AMERICAN ASTRONOMER do not necessarily reflect the opinions of the AAAA or the Editor. Articles representing supporting or opposing views will be published promptly after receipt.

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A Member  
Society of  
The  
Astronomical  
League

## President's Letter

We just keep on observing. John Lusher II of Webster, TX, received the Honorary Messier Certificate, Richard Brown of Carrollton, TX, earned his Deep Sky Binocular Certificate, and Stephen LaFlamme of Bridgewater, MA, knocked down both the Binocular Messier Certificate and Deep Sky Binocular Certificate. And there are more on the way.

And talk about growing; your club just gets bigger and bigger. In addition to the standard members in the United States, Mexico, and Canada, we looked closely at our roster and found out that we had members on six continents now. Not bad for the "American" Association of Amateur Astronomers. Our newest member, Leopoldo Andrião Júnior of Araraquara, Brazil, just purchased our AstroMax Introductory Astronomy Kit and is having a wonderful time learning the Southern Skies with the included 10x50 binoculars. Read more about Leopoldo and his adventures elsewhere in this newsletter. Any member know of someone in the Antarctic who would like to become an AAAA member? That would give us all seven continents.

And speaking of the AstroMax Introductory Astronomy Kit, the binocular kits have been so successful since we introduced them last November that we are going to offer a Telescope Kit of the same high quality. The optics will be an exquisite 70MM Maksutov telescope that is extremely portable. See the AAAA online store at [www.astromax.com](http://www.astromax.com) for more details.

Look for more exciting things from your astronomy club in the future. For example, we are considering expanding the AAAA newsletter, *The American Astronomer*, from four issues a year to six issues. And watch for partnerships between the AAAA and other major astronomical organizations, partnerships that will benefit you, the AAAA member. Also, we are considering sponsoring our own observing programs just for AAAA members. If you have any opinions on the above, either pro or con, please let me know by e-mail at [stargate@gte.net](mailto:stargate@gte.net). I will look forward to hearing from you.

Finally, for our mailout next month we are considering putting out a club roster with names, addresses, and e-mail (no phone numbers). Many of you have expressed the wish to know about other members of the AAAA. Let me know how you feel about this, either through snail mail at the club address, or by e-mail at [stargate@gte.net](mailto:stargate@gte.net). I need your input to make an educated decision.

Best regards,

*John Wagoner President  
American Association of Amateur Astronomers*

### OBSERVING IS THE HEART OF AMATEUR ASTRONOMY

The American Association of Amateur Astronomers provides the AL's FREE Observe Programs on our website in Adobe Acrobat Portable Document File format at no charge as a service to members of the AAAA, the Astronomical League, and the astronomical community at large. The Observe Programs which require a published manual must still be obtained from Astronomical League Sales, PO Box 572, West Burlington, IA 52655. (You can now purchase AL manuals online at the AL Sales website, <http://www.astronomicalleague.com>.)

AAAA encourages you to download these PFD files for your own use, and to distribute them, in either electronic or printed form, to your friends and other interested observers, as an encouragement to further participation in amateur astronomy.

AAAA members are eligible to earn any of the AL's observing awards. We encourage you to participate in all of the programs which interest you.

[www.corvus.com/aa01006.htm](http://www.corvus.com/aa01006.htm)



## AAAA Finds Proud New Member in Brazil

### A Southern Perspective

by Leopoldo Andrião Júnior  
Araraquara, Brazil  
leo@sunrise.com.br

It is three weeks since I've gotten my AstroMax First Light Astronomy Kit, and I'm writing this letter to tell you the good news.

First let me introduce myself. I'm Leopoldo Andrião Júnior, a 39 years old dentist who lives in Araranqua, Brazil, a city of 200,000 inhabitants, about 270 km west from São Paulo. My wife Iris and I have a 7-year old daughter, Andressa. My first view through a telescope was last year in Atlanta, GA, at the local observatory there. Because of that, I decided to buy my own telescope, so I could share the wonder of the night sky with my daughter. I purchased an ETX 90-EC, the one without the AutoStar hand controller. At first, it was great to see the Moon, Jupiter and Saturn, but soon came difficulties and frustration.

Then I jumped to an 8-inch f/7.5 Newtonian with equatorial mount and put it at the center of my backyard. This new telescope was good, but something was missing. I was getting depressed after spending so much time and money with so little reward. My daughter had also lost interest completely, and I was becoming an ex-amateur astronomer.

That's when I found the AAAA home page on the Internet, and there was the answer. I found out that I'd started out the wrong way. Instead of a big telescope, all that I needed at the beginning was in the AstroMax Introductory Astronomy Kit.

After reading the Chandler book, *Exploring the Night Sky with Binoculars*, that came with the kit, I waited for a clear night sky. Then I went out to a dark place out of the city, equipped with my new binoculars, planisphere, Sky Atlas and red flashlight. Oh boy, I must say to you, with no doubts, it was the most amazing experience that I've had in astronomy.

From Carina to Sagittarius, passing

through the Southern Cross, Centaurus, Ara, Triangulum Australe, and Scorpius, I saw so much beauty that I'm still astonished. Even Omega Centauri and NCG 3532, objects that I always liked to see with the telescope, have another perspective to me now. And with all the information provided in the kit, I'm getting more proficient with the telescopes, too.

Let me tell you about another recent astronomical adventure. The last few days here have been of poor seeing and bad weather. So I've spent my spare time studying and preparing myself to observe for the AL's Southern Skies Binocular Club. I've used the software "Cartes du Ciel" to print the charts that I needed. I want to try to spot at least 50 objects in order to get the Southern Sky Binocular Certificate.

With the coming of our winter solstice here in Brazil, a clear beautiful night sky came together with some cold weather. I've found a good place in a country club 25 kilometers from Araraquara, where I live, with "almost" no light pollution, and there I was with everything in hand at 19:30 sharp. I began my observations and notes, and kept at it until the cold became freezing. (A pair of gloves and a cup of hot coffee did the job to warm me back up.) But I use glasses for reading and writing, and there came humidity. After some more attempts at changing between glasses and binoculars, turning the red flashlight on and off, and seeing everything becoming damp (as can you imagine!) I decided to relax and simply enjoy that breathtaking sky. At 10 PM that night, the moon rose up, so I tried some lunar shots with a second hand camera that I bought some weeks ago in order to begin in astrophotography, too. If I get some good ones, I'll send them to you.

It was a wonderful experience but I think I'll have to wait a little more time to send you my notes on 50 objects in order to get the Southern Sky Binocular Certificate.

Thank you again for everything so far. I am a proud member of the AAAA.

### Texas Star Party Observing Programs

The final tally on this year's Texas Star Party Observing Programs shows that 177 observers earned Glorious Globulars pins, 38 observers earned the Planetary Party pins, and 41 observers earned pins for the Great Southern Skies Challenge. That is a total of 256 pins for the telescope programs. Add to that 86 pins for the Binocular Program, and TSP awarded a total of 342 pins this year. That smashes the old record of 276 pins.

Next year we will have two new telescope programs for the attendees and I promise they will be a lot of fun, if not different. You can find the TSP binocular and telescope observing programs in Adobe PDF format on the AAAA web page at the following URL: <http://www.corvus.com/tsp-2000.htm>

During TSP, I was fortunate to visit with Brazilian amateur Jose Carlos Diniz, pictured above. Jose is the president of a small astronomy club in Brazil and collaborating partner of many Brazilian associations. Brazilian interest in astronomy grows quickly. Jose's greatest interest is the popularization of the astrophotography, but he says equipment costs are very high in Brazil. Jose reports that he got some good pics during TSP (Galaxy center, Scutum, North America nebula, Cygnus etc.) and that he is still cleaning the west Texas dust out of his mount and lenses.

Send e-mail to José Carlos Diniz in Brazil at [dinizfam@uninet.com.br](mailto:dinizfam@uninet.com.br)

John Wagoner

TSP Observing Chairman

President, AAAA

### Magazine Subscriptions

A regular subscription to Sky & Telescope magazine is \$39 per year, but you can get it at the club discount through the AAAA for only \$30 per year. Astronomy magazine is also \$39 per year, but the club discount rate is only \$29. Subscribe to these magazines or extend your current subscription on the AAAA web page. Or send a check for the correct amount, made out to AAAA, to:

AAAA, 3131 Custer Rd., Suite 175 PNB  
175, Plano, Tx. 75075  
[WWW.CORVUS.COM](http://WWW.CORVUS.COM)

# Career Profiles: Astronomy

## How to Become an Astronomer by Robert Anthony Robinson

Freelance web author Robert Anthony Robinson has written a career biography about becoming an astronomer which you can now find on the AAAA web site. This article should be of interest to students who are interested in a career in astronomy, as well as for the school research project. All facts contained within the article have been fully researched and can be verified with documentation, mostly with U.S. government studies and statistics. Robert says, Verifying facts is important, I think, considering the esteemed and astute group of people it represents. And I can't think of a cooler Web site to have my work appear than on the AAAA site. I think astronomers are interesting and intelligent people. I hope this article can help young, aspiring astronomers.

The address of this article on the AAAA web site is [www.corvus.com/aa01faq6.htm](http://www.corvus.com/aa01faq6.htm). This article is one of several FAQ on the AAAA web site, including information on the following topics:

1. Career Profile: Astronomy
2. How to Use a Telescope
3. Polar Aligning an Equatorially Mounted Telescope
4. Questions from the Internet
5. Can I Buy a Star or Have one Named?
6. About Meteors and Meteor Showers
7. Observing a Lunar Graze
8. Total Solar Eclipse Photography - Tips and Recommendations

Robert Anthony has been a freelance author, visual artist, and technical writer for more than 20 years.

For portfolio samples and a one-time, free consultation, call:

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**Robert  
Anthony  
Robinson**



## AAAA Attends MSRAL Convention

The Midstates Region of the Astronomical League held its annual convention at Avila College in Kansas City, Missouri, June 9-10, 2000, hosted by the Astronomical Society of Kansas City. Several AAAA members attended the meeting, including AAAA VP Ed Flaspoebler from Dallas, Brenda Culbertson and Mike Calderwood from Topeka, KS, and Doug Kniffen from Warrenton, MO. AAAA member Larry Robinson (right) was Master of Ceremonies for the paper sessions during the day. Larry is also a member of the ASKC, and is running for president of that club.

AAAA donated an AstroMax Introductory Astronomy Kit as a doorprize at the convention, and is happy to welcome winner Margaret Miller (above) from Colorado Springs as a new member. Margaret is pictured accepting her prize with Brian Warner. Both Brian and Larry are very active with the ASKC Minor Planet and Asteroid Search Program. Larry has recently been appointed as coordinator of the Astronomical League's Asteroid Observing Program.

Nearly 200 astronomers from throughout the Mid-west attended.



### Check out these features:

1. Sturdy case More likely to survive being dropped or stepped on than other astrolights. Flat sides permit attachment of decals, cork, velcro, magnets, etc.
2. Large Knob The dimmer control can be operated when wearing bulky mittens (Try that with a thumb wheel control).
3. AA batteries They cost less than 9 volt batteries and have more power.

Read Doug's article on the AAAA web page: [www.corvus.com/kniffen.htm](http://www.corvus.com/kniffen.htm)



## The Optimum Astrolight !

The Optimum Astrolight, designed by experienced deep sky observer and AAAA member Doug Kniffen, was created for only one purpose: to facilitate reading star charts with minimum disruption of low light visual sensitivity. 7 out of 8 deep sky observers will be able to see fainter objects when using this light to read star charts!

The goal is accomplished by using dim polychromatic green LED lamps instead of the traditional bright monochromatic red lamps which can seriously disrupt night vision, even at low illumination levels!

The light source and control were chosen to recognize and acknowledge the variable sensitivity of the eye and the the luminance range at which the eye can see best without adjusting sensitivity. High spatial resolution is required to read small chart text, and various colors of light focus on the retina differently. Traditional red lights do not even address these important considerations. Using a dim green light results in better visibility with less eyestrain!

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## The *Official* Jared J. Lutkowski Sevens in the Universe Web Page

[www.mypage.org/JaredL](http://www.mypage.org/JaredL)

Jared Lutkowski has been a member of the American Association of Amateur Astronomers for more than three years. He was reporter for the AAAA to the Jersey Astronomy Conference and Showcase in November 1999, sponsored by the Amateur Astronomers, Inc., of New Jersey. His report on that event appeared in the quarterly newsletter of the AAAA, as well as the REFLECTOR, the Astronomical League Newsletter. Jared has applied for time on the Hubble Space Telescope, with a proposed topic of Spectroscopic Analysis of Quasars and Active Galaxy Nuclei. He has also been busy as a speaker on astronomy and physics topics to school and civic groups in Moosic, PA, his hometown. Jared plans to major in astrophysics at the University of Chicago.

Sevens in the Universe is an astrophysics lecture written by Jared to share his knowledge of the cosmos with the General Public. Sevens in the Universe is basically lists of Mysteries, Wonders, and Facts which are grouped in Sevens. It encompasses a list of what Jared feels are seven of the most important questions which will not be answered by our top scientists any time soon. It also contains a list, with slides, of the fourteen greatest and most spectacular observable objects, objects which have a deep meaning behind them. This list is broken down into two separate lists, one of which comprises the objects of our Solar System and the other list comprises objects in the Observable and Visible universe. The last list encompasses what he feels are the seven facts that have shaped our understanding of the cosmos.

Anyone interested in subscribing to Jared's newsletter can contact him at [astroteen@uplink.net](mailto:astroteen@uplink.net). He can also be contacted by e-mail for his "Sevens in the Universe" T-shirt, which helps offset his travel expenses and materials. Meanwhile, Jared continues to educate children and adults about the bas

Universe, with the help of his telescope and computer.

### Jared's Online Chat Session

Jared Lutkowski hosts a regularly scheduled chat session through IRC (Internet Relay Chat). The chat session is not hosted on the mIRC web page. Rather, go to the web site <http://www.mirc.com> and follow these steps.

1. Click on the link entitled Download mIRC. This will bring up a new web page in which you choose the version which will suit your computer's specifications.

2. Click on a version of mIRC.

3. After you click on a version of mIRC you will be prompted to Run this application from its current location or Save it to disk. Click save to a disk and choose a folder which will be found easily.

4. After download is complete, open folder in which you saved mIRC and click on the icon. Then follow the screen directions.

5. After installation, open mIRC. You will be prompted for your Name, E-mail address, and a screen name (you can choose any name you like). After filling in these fields, make sure that the server is set to dalnet. Then click connect.

6. After you are connected to a server, another box will pop up. In the top line type this ID: **#sun-stars** Type this exactly as you see it and then click JOIN.

After you click Join, you will enter into the chat room. Jared's screen name is AstronomerJared and it will have an @ sign in front of it to show that he is the channel owner.

Jared's next chat session will be on June 30, 2000, from 8 to 10 pm EDT

The American Association of Amateur Astronomers teams up with Bushnell Sports Optics and the David Chandler Company.

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*At David Chandler Company, our printed products focus on the needs of the beginning observer. The Chandler philosophy is that the beginner will not be a beginner for long! We want to nourish the enthusiasm of the beginner with solid, helpful reference materials. All of our observing aids are clear, accurate, and reliable. They are designed to help the beginner become knowledgeable and proficient as quickly as possible.*

*We are excited that the American Association of Amateur Astronomers is able to make our products available to you through their AstroMax Online Store. We hope they will point you on your way as you begin to explore the universe.*

*David and Billie Chandler*

*PS: Be sure to take a look at the AstroMax Introductory Astronomy Kit, which includes our First Light Astronomy Kit, a pair of Bushnell Powerview 10x50 Binoculars, and full membership in the American Association of Amateur Astronomers. It's a great way to get started in astronomy for less than \$100! It makes a great gift, too.*

**WWW.ASTROMAX.COM**

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# The Milky Way is High

by Brenda Culbertson  
stargazr@holtonks.net

Summertime, and the livin' is easy. Fish are jumpin', and the Milky Way is high. Well...that isn't exactly how the song goes, but it's true, nonetheless. The Milky Way is best in the summer...my opinion. You may have heard that if you are in a very dark site, the Milky Way is so bright that shadows are cast on the ground. I promise you that this is true. During one of the Nebraska Star Parties...the one when it DIDN'T rain...I saw shadows cast from the illumination of the Milky Way as it spanned overhead. There were some other effects that are nearly unbelievable, which I'll save for another time.

Scanning the MWG with binoculars will provide a mere sampling of objects offered in the summer sky. There are galaxies, galaxy clusters, nebulae, open and globular clusters, asterisms and a whole bunch of stuff to be seen in the summer nights. All of these types of objects can be seen in binocs, many can be seen without optical aid. Just imagine what can be seen through a telescope!

Early summer is when many people are finishing up on their Messier Object lists. I have heard of several people who are making a repeated attempt at getting through the Virgo group of galaxies in order to obtain their AL Messier Club Certificate. It took me more than one try, but I kept at it until I was confident that I saw the ones on Messier's list.

There are many star parties, conventions and workshops all around the world where people of all levels of expertise get together and talk astronomy. New e-groups are popping up on the internet, too. Whatever your likes, there is some activity for you.

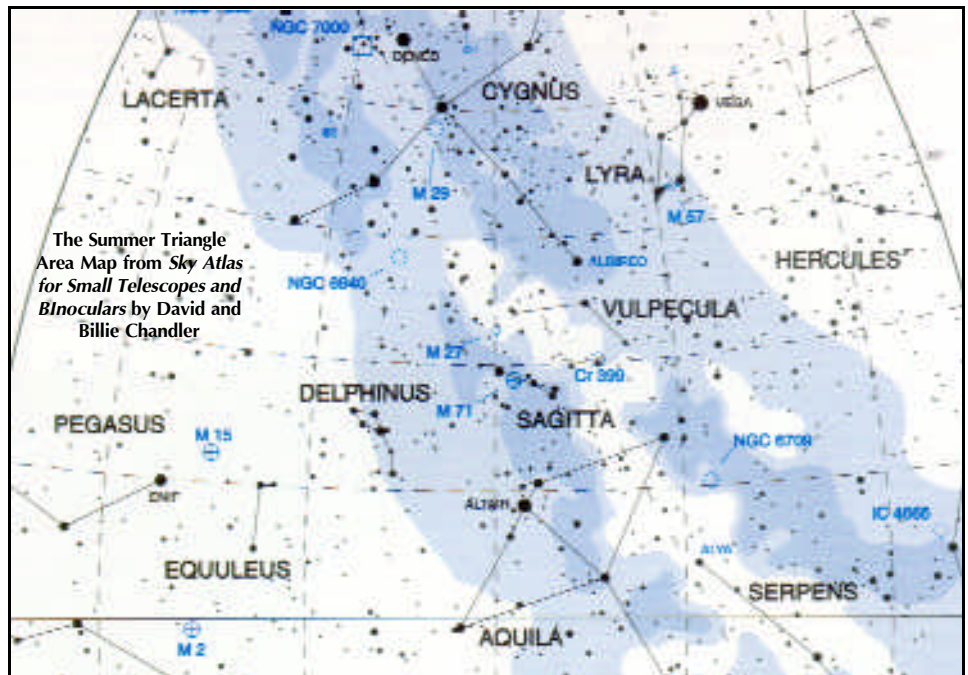
Summer observing means late nights, lots of mosquitoes and projects to be finished. Don't spend all your time working, but take a few leisurely strolls along the MWG from time to time. Relax and take it easy. After all, summertime is when the livin' is easy...as the song goes.

Here are a few things to look for while you are strolling along:

## Easy Objects

**Summer Triangle:** The Summer

# S u m m e r



The Summer Triangle Area Map from *Sky Atlas for Small Telescopes and Binoculars* by David and Billie Chandler

Triangle is something that does not take optical aid to see. Just connect Deneb, the bright star in Cygnus, with Vega, in Lyra, and Altair, in Aquila. This will make a very large triangle that anyone, including children, can make out.

**M-13:** An easy binocular object is the Hercules Cluster. This cluster can be seen in low power binoculars and is an object that can be seen without optical aid if you know where to look and look from a dark site. Hercules is between the constellation Corona Borealis and Lyra. The Keystone area of Hercules is where the cluster lies, between the two brighter stars.

The whole sky is full of easy to see objects as you scan the MWG with or without aid. The list is too long to put in a small amount of space. You will not be disappointed if you just go out and take a look.

## Moderate Objects:

**NGC 891:** Andromeda contains many interesting objects to view in late summer. This edge-on spiral galaxy is one of the most beautiful. It is about halfway between Gamma Andromedae and M34 in Perseus. It is about 12th magnitude and will require a moderate-sized telescope to find. Once you find it, though, you will be glad you took the time

**NGC 5128:** The galaxy is one of the objects, but the dark lane is another.

Early in the summer, from southern latitudes, look for this 7th magnitude galaxy in Centaurus about four and one-half degrees north of the Omega Centauri globular cluster. The nature of the dark lane is a topic of heated discussion.

**M-56:** This open cluster of 8th magnitude can be found in the southeast part of Lyra about halfway between Beta Cygni and Gamma Lyrae. It is an interesting cluster since it is difficult to resolve its components.

## Difficult Objects

**NGC 5614:** Look for this oddly structured galaxy in Bootes. It is about 13th magnitude and has a filament extending from one edge. It looks rather like a pony tail.

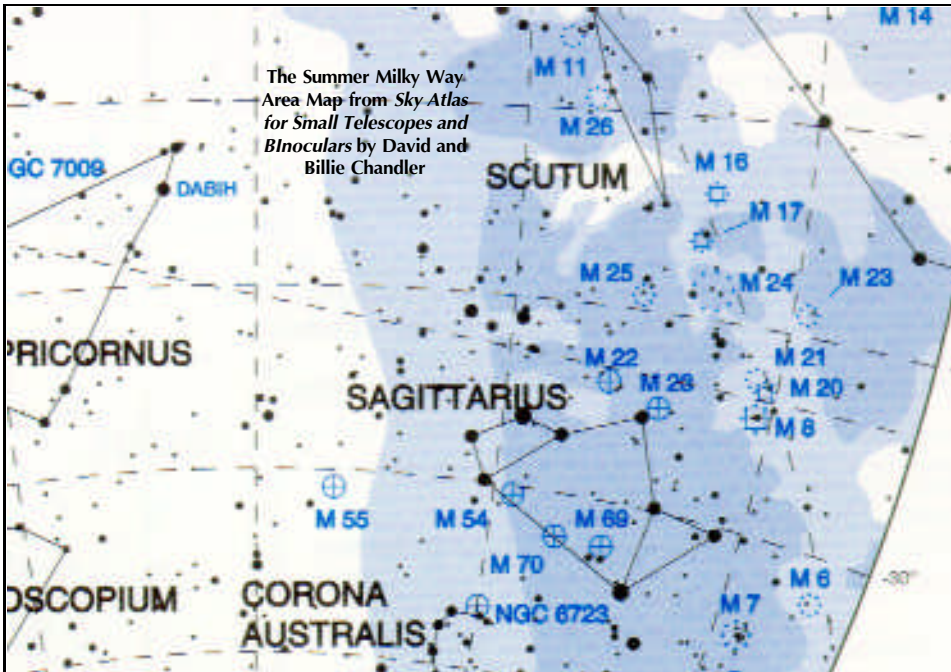
**NGC 7006:** A globular cluster in Delphinus can be seen at about 12th magnitude with some of its members being extremely more faint, about 16th magnitude. It won't be very big.

## Other

Don't forget the meteor showers, planets, Moon, Sun, and, most certainly, aurorae. This summer is predicted to be the peak of sunspot maximum, so make sure you don't let the Sun set before you get a good look at the spots.

Check a star chart for exact positions of the objects listed.

# O b s e r v i n g



## Dates to Remember

### July

- 1 New Moon (Partial eclipse)
- 4 Independence Day
- 16 Full Moon, Total Eclipse
- 27-29 Delta Aquarids
- 30 New Moon, partial eclipse

### August

- 10-13 Perseids (between First Quarter and Full Moon)
- 15 Full Moon
- 29 New Moon

### September

- 4 Labor Day
- 13 Full Moon
- 22 Autumnal Equinox
- 27 New Moon
- 29 Rosh Hashanah begins

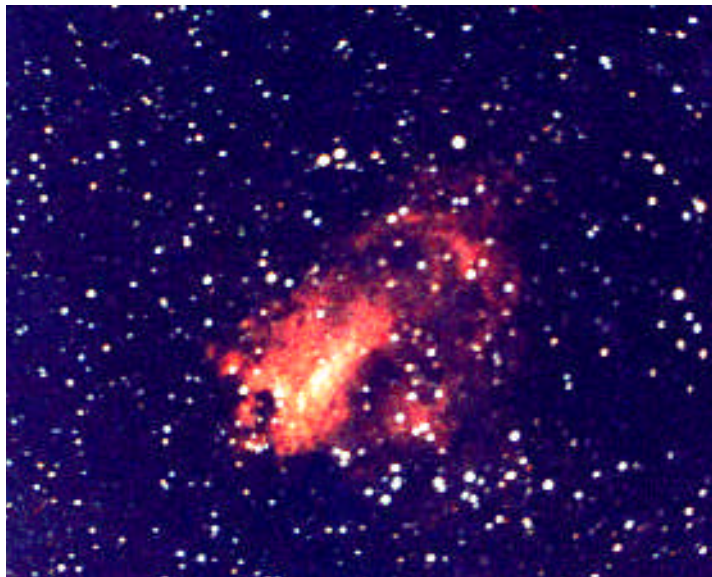
There are several occultations of various sorts and other astronomical events over the next few months. Check your calendar for dates. Also *Sky & Telescope's News Bulletin* and *Sky at a Glance* will give specific information. You can e-mail me with your geographical coordinates and I'll check into any for you.

Brenda Clubertson  
stargazr@holtonks.net

### M17

#### The Omega or Swan Nebula in Serpens

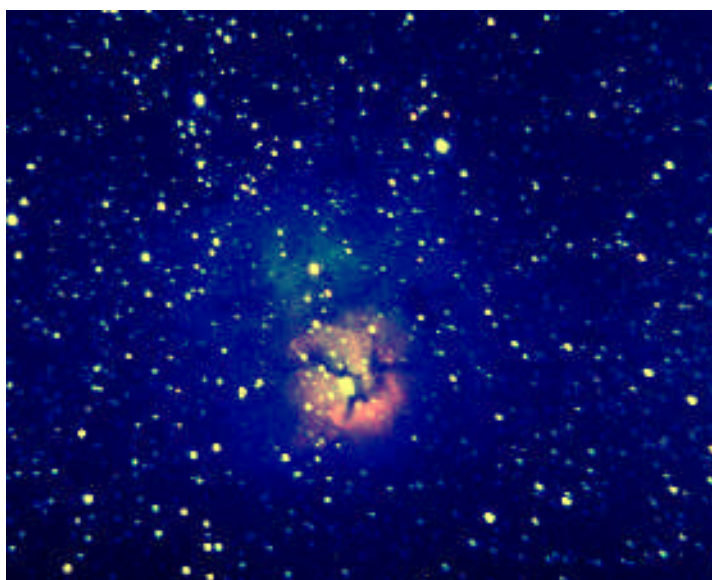
Image copyright Mark Cunningham, Craig, Colorado



### M20

#### The Trifid Nebula in Sagittarius

Image copyright Mark Cunningham, Craig, Colorado





## AAAA Establishes Online Discussion Group

The American Association of Amateur Astronomers has started a new online discussion group, hosted by eGroups. The purpose of the group is to create a forum in which AAAA members can share ideas, experiences and challenges, and just get to know each other. If you are an AAAA member, or have friends interested in amateur astronomy and the AAAA, we invite you, and them, to become a part of this eGroup.

If you would like to join the AAAA discussion group, please send an e-mail request to: Quad-A-subscribe@eGroups.com or visit the web site at: <http://www.egroups.com/list/Quad-A/info.html>

[www.egroups.com/group/Quad-A](http://www.egroups.com/group/Quad-A)

Moon April 13, 2000 Taken through the 110-year-old Warner & Swasey refractor at Wshburn University of Topeka. Copyright Brenda Culbertson



## Tell Your Friends the Benefits of Joining The American Association of Amateur Astronomers!

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