

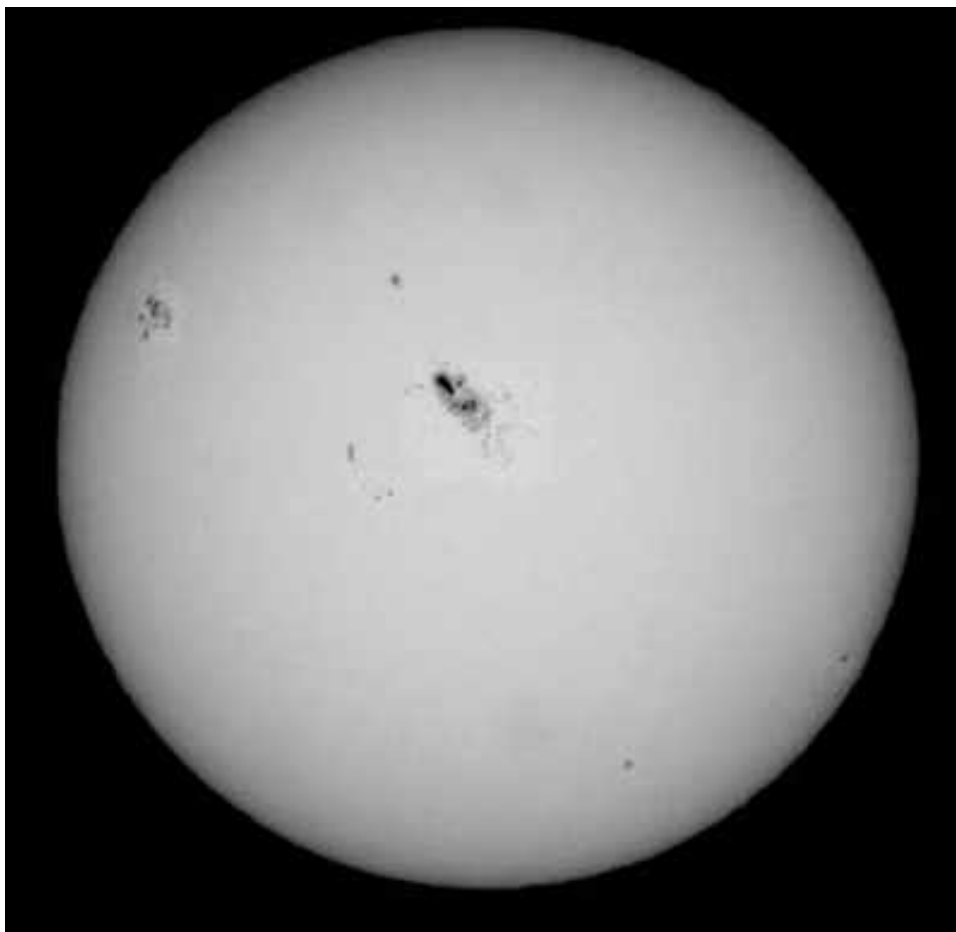


The American Astronomer

THE QUARTERLY NEWSLETTER OF
THE AMERICAN ASSOCIATION OF AMATEUR ASTRONOMERS

Volume IV, No. 4

September 2000



Sunspots Again !

I was very thrilled to see my color photo of Sunspots Setting in the Astronomical League's REFLECTOR for August! Thank you for sending it in to be included in that publication. My friend William Phelps is the fellow who taught me the digital photography.

Thank you very much also for the weekly News Bulletin and Sky at a Glance info from Sky Publishing on various and valuable astro matters ... especially for this week about the big sunspot group (#9169) I just snapped this photo yesterday, Sunday, September 24, 2000, at 12:40 PST.

Our neighbors and friends were wowing at it and asking about what effect it might have on us. One good thing may be that it is a cause for a great aurora show; but on the other hand, the electronic communication system may be greatly hindered when it bursts at a bad time.

At least it was a photo opportunity for me!

Heidi & Isaac Kikawada
HeidiandIsaac@windandtree.com

S&T's Weekly News Bulletin and Sky at a Glance are available via electronic mailing list. For a free subscription, if you are not already signed up, send e-mail to join@astromax.com and put the word "join" on the first line of the body of the message.

Raymond Andrews Earns Double Star and Lunar Certificates

A hearty congratulations to Raymond E. Andrews of Loudonville, NY, for observing 100 doubles using a ten inch Newtonian telescope. If that wasn't enough, he then turned around and, using a six inch dobsonian, observed 100 features on the moon. Way to go, Raymond.

David Hasenauer Awarded Lunar Certificate

David M. Hasenauer of Pasadena, CA, earned his Lunar Certificate using a six inch APO refractor. David is the consummate observer and has several other certificates under his belt. Nice job as usual, David.

Ellen Wilson Achieves Messier 70 Certificate

Ellen Wilson of Sicklerville, NJ, using an eight inch dobsonian has observed 70 Messier objects, earning her the telescopic Messier 70 Certificate. Ellen is well on her way to observing all 110 Messier objects. Good luck and congratulations, Ellen.

John Wagoner, AAAA President



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AAAA
3131 Custer Road, Suite 175/175
Plano, TX 75075
E-mail: aaaa@corvus.com

Web Page <http://www.corvus.com>

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EDITOR & LAYOUT
Edward P. Flaspoebler, Jr.

ASSISTANT EDITOR
Brenda Culbertson
stargazr@holtonks.net

PRESIDENT/TREASURER
John Wagoner
1409 Sequoia
Plano, TX 75023
(972) 422-3301
astrowagon@home.com

VICE-PRESIDENT/SECRETARY
Edward P. Flaspoebler, Jr.
5027 W. Stanford
Dallas, TX 75209-3319
(214) 357-2744
eflaspo@aol.com



A Member
Society of
The
Astronomical
League

President's Letter

As usual, AAAA members have been very busy observing and earning their certificates. David Hasenauer and Raymond Andrews were awarded the Lunar Certificate, while Raymond Andrews also picked up a Double Star Certificate and Ellen Wilson grabbed a telescopic Messier 70 Certificate. We are very happy to have all of these observers as members of the AAAA, and are extremely proud of them.

If any of you complete any of the observing programs, please remember to send a COPY of your observations to me for verification and I will forward my recommendation to the appropriate observing chairman so that you can be awarded your certificate and pin. As the observing coordinator of the AAAA, it is my duty to verify all observations. Send your observations by snail mail to: John Wagoner, 1409 Sequoia Dr., Plano, Tx. 75023, or you can e-mail them to me at astrowagon@home.com. Let me know anytime you have any questions concerning any of the observing programs.

Finally, after having created eight observing programs for the Astronomical League, and helping start several more, and after having run these eight programs for ten years, I have decided to step down as the AL's Binocular Observing Chairman. As your club, the AAAA, grows, it continues to demand more and more of my time. I felt that I wanted to spend more time with the AAAA, helping our Vice President Ed Flaspoebler add new and more services for our membership. Along these lines, please look for a major announcement in the next newsletter concerning the AAAA.

Well, enough of the teasers. Please keep on observing, and enjoying this wonderful hobby of ours, and I hope you have clear skies.

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 Observing 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

Have ETX - Will Travel

A few months ago, I was thumbing through an astronomy magazine and noticed that Meade had introduced two new ETX telescopes, both small refractors, and at an incredible price. I already had an 8 Dobsonian, but it does not travel very well. Armed with the Meade ad, I set out to convince my wife that I needed one of these scopes.

The two telescopes are the ETX-60AT and the ETX-70AT. They are identical except for their apertures (60mm and 70mm respectively). I would go with the EXT-70 if you can find one. I bought the ETX-60AT because I had a very strict budget, (although I should have sprung for the extra 50 dollars), and 10 mm is quite a bit when you're down in the 60 mm range. I ordered the tripod and carrying case over 8 weeks ago, but have yet to see either, so I have been using it on a tall barstool on hard ground.

My first impressions are very good. I was a little concerned about its size because I have really only used 4.5-inch and 8-inch scopes until now, but it performs well for such a small little guy. The optics are good, but not like my friend's EXT-90 that I have played with. I am still very excited about it because I can have it out on the balcony in five minutes (try that with an 8-inch Dobsonian and a 30 degree temperature difference!). The super wide field, (I get about 3.5 degrees with a 25mm eyepiece) makes it very easy for the Autostar to place objects in the field of view.

The Autostar that is included has a fairly small database of objects, but this is appropriate for the telescope's small size. I found it easy to setup and a pleasure to use. The telescopes GO-TO functionality has enabled me to engage in more weekday viewing, when my busy schedule doesn't allow for time beforehand in planning my observing session. Setup consists of a simple two star alignment which is virtually automatic and can be performed in about 2 minutes.

My only complaint is that Meade still

has not figured out what to do with the ETX's focus knob. It is very small and is very hard to reach in certain scope positions. I actually have my 4 year old help me focus sometimes because I can't get my fingers to it when viewing high altitudes. The ETX-60 lacks a finderscope, but with its short focal length combined with the Autostar, I found that isn't really necessary.

Overall, I think that the telescope is a great buy. I would recommend it as an ultra-portable addition for serious observers and a wonderful first scope if you are looking for something to get your feet wet with.

Michael Doornbos, Bowie, MD
mike@imapenguin.com

A.L. newsletter ?

Hi, Stuart Palmer here.

My wife and myself joined as a family package not long ago. As members, we received our new package for new members not long thereafter. I thought that the A.L. newsletter would be included also as we became members of the A.L. when we joined AAAA. Is there a mix up or something, or do we have to pay extra for that. I'm mixed up, can you please help?

Thanks for your help, and I think you have the greatest astro site on the web!

Stu Palmer
stuwmp@worldnet.att.net

Hi Stu.

No, there is no mixup.

The A.L. newsletter is printed once a quarter. Your membership came after the deadline for the August issue (They have a six week lead time for addresses from the AAAA) so your first issue will be in November. Rest assured though, you will get four issues with your membership. Since we don't print the A.L. newsletter, we don't have back issues to send to new members. We do however print the American Astronomer, and that is why you got a back copy of it.

Thanks for the nice words on the web page.

Best regards,

John Wagoner - AAAA President



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

Observing Aids from David Chandler Company

Large Planisphere - \$10.00

Small Planisphere - \$6.00

Exploring the Night Sky - \$8.00

Sky Atlas - \$13.00

First Light Kit - \$25.00

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

AAAA

3131 Custer Road
Suite 175 PMB 175
Plano, TX 75075

aaaa@corvus.com

A Legend Will Forever Change

By AAAA Member Ryan Hannahoe
Leesport, Pa. HSTINST@AOL.COM

We sit on a famous breezy hill at Springfield, Vermont, the one known as Stellafane. Stellafane is the birthplace of amateur astronomy as we know it. Some readers of this article may have competed there in the Amateur Telescope Making competitions.

The time of this talk is a Friday afternoon on which the clouds are calm and the wind is a cool breeze. I sit down with a man you know as David Levy, a man who has changed the lives of thousands with his inspiring talks.

I quote Carl Sagan in saying, "We cannot look out into space without looking back into time." So let's listen in and find out the impossible.

David's own heroes are people like Elizabeth Williamson, Clyde Tombaugh, Leslie Peltier, and the now legendary amateur astronomer Walter Scott Houston.

David met Clyde Tombaugh, who became one of his best friends, when he had a childhood illness of asthma. Clyde started out as a farm boy who, at age 5, had a dream of knowing what was out there in the Universe. As children of that age, most of us think the moon is made of green cheese. But Clyde had the dream of going to the moon.

Another of Levy's mentors was Elizabeth Williamson, the person who brought women into astronomy. Mr. Levy, a Canadian, met her at the Royal Astronomical Society of Canada. Elizabeth presented David with an assignment. She gave him a map of 300 craters on the moon, and asked him to label them from one to three hundred. This project began David's drive to start a hobby that became his life's work.

Walter Scott Houston taught David, "not to tell people what you're going to do in astronomy, just go ahead and do it." David is not a professional Astronomer, but an inspiring full time writer and amateur astronomer. And he has gone ahead and become one of the most famous astronomers in the world.

David thinks it's important to look at astronomy to know why you want to be active in it. Is it that you want to meet other people? Is it that you want to be involved in the political part of astronomy? Do you just want to share your knowledge with other people? All those are reasons to joining an astronomy club.

So what do you think Mr. Levy does in his astronomy club? He used to be president of the Tucson Amateur Astronomy Association for many years. But when he was 14, he made a difference by starting his own astronomy club, which he called the "Amateur Astronomers Association." The reason he started his own club was because the club in Montreal, Canada, where he lived,



AAAA member Ryan Hannahoe visits with comet hunter and author David Levy during Stellafane 2000

had a rule of that you couldn't join until age 16. He really enjoyed breaking the rule by starting his own club!

Now let's go back in time to find out what kind of scope was David's first. Back in the 1960's you might have heard about the "Sky Scope". It's a little 3.5-inch f/11 reflector. His uncle brought it to him in the Christmas of 1960. Boy what a treat that must have been, to get your first telescope. But then, there's nothing like your first telescope.

After he received his telescope, he worked on a science fair project that would last a lifetime for most of us. The project he did was to display his observing log. You might think that's not much of a project unless you have 600 different observing sessions to show. It was a record.

But what really got David into astronomy? He says he was riding his bike to school while in 6th grade in 1960, hit a curb, fell off, and broke his arm. His cousin gave him a book about the planets as a "get well" present, and David was hooked.

Many years later. David had still never taken a course in astronomy at college. because he learned that he couldn't be a professional. You see, as an English major, he didn't have the math.

But David doesn't just look at the narrow physics part of astronomy. Instead, he looks to see how it spreads its tentacles into just about every aspect of life.

During his college career, Mr. Levy took geology courses and English courses. And he discovered an amazing thing: poets throughout the ages have done amazing work writing about astronomy. So he ended up getting two degrees, a BS and a Masters, writing

about both astronomy and literature. He was able to do that, and thoroughly enjoy doing it, because he has a passion for reading and poetry, as well as astronomy.

It's not just poetry when a writer sits down and writes something about the night skies. Shakespeare, for example, takes the battle between Astrology and Astronomy and puts it right into its place. Shakespeare wrote some of the most famous plays written, and maybe is the most famous writer who ever lived. In his play King Lear, eclipses played a big role. "So, as David says, astronomy isn't just for astronomers, it's for everybody. It's for poets and writers, and it's for everyone else.

Furthermore, according to geology, we are probably here today because a comet collided with the earth 65 million years ago, destroying the dinosaurs. The organ of life probably comes from comets. Astronomy thus has to do with biology, and of course SETI, the Search for Extraterrestrial Intelligence, is as much about biology as astronomy.

There are other areas that involve astronomy that have nothing to do with science at all. In art, for example, great paintings like van Gogh's "Starry Night" can be interpreted astronomically. Astronomy goes into everything.

After going through college Mr. Levy discovered his favorite observing site: his back yard in Tucson, AZ, that has 7th magnitude skies. So what kind of telescopes do you think he has now? He has a 16-inch, an 8-inch, a 6-inch, an 8-inch Schmidt camera, a 10-inch Cassegrain, an 8-inch Cass, and that first 3.5 inch refractor. He uses five others as finders. It's quite a bit, but there is

the Life of a Young Astronomer

an observatory to house them all that's about 12 feet wide and 32 feet long.

With such a massive telescope collection, what has he discovered with them? It's been six years since he found a comet. But before that six years, he had discovered 21 comets. He also discovered a nova while he was doing research for his biography of Clyde Tombaugh. And he found out while going through his observing notes that, in fact, he had observed a nova and never reported it. Later, while working with some Harvard Observatory photographs, David was able to find his nova again, and discovered that there were 10 other outbursts of it over the years. Then, when he went ahead and started observing that field for about 6 months, he found the star in outburst again. So he then reported his results as a long series of observations. This recurring nova is now called TV Corvae, in the constellation Corvus. He says this was one of the most satisfying things that he's been involved with.

What about that question that pops into all our minds, "How can I fight light pollution in my community?" David has done so by becoming a member of the IDA, or the International Dark-Sky Association. He has also written a lot about dark skies and how to save them in *Sky & Telescope* magazine, including one article about the Stellafane problem.

Should an astronomy club be affiliated with the Astronomical League? His club in Tucson is not affiliated. David says he has been trying to get it affiliated for years and it

has not worked. There's a lot of politics involved. The best thing to do is to write to one of the officers of the League. Get information on how a club could join, then present it to the board. Say why you think this is a good idea, and that it's not that expensive. But the main thing membership in the AL gives your club is a national presence. A little club in a little city can now be a part of a national league / organization. That is the best reason for joining the Astronomical League.

What has astronomy done for David? Everything! Before he got married to his wife Wendee, astronomy was his whole life. And he still finds it a very satisfying life. There is not a whole lot of time that he's not doing something related to astronomy.

What in astronomy has David found fun? Just about every aspect of it, he says. He enjoys going to conventions like Stellafane. It's a way of enjoying the sky with other people. He doesn't get to enough conferences because he's so busy right now, and he has to limit it to just a couple of events a year. But David says he loves going to them. He finds it fun to observe with his telescopes and hunt for comets.

How can a teenager make a difference in Astronomy today? David says teenagers have an enthusiasm that's furthered by experience. In his astronomical career, David has seen decades of both disappointment and pleasure. But most teenagers haven't yet felt the disappointments of astronomy. So they tend to be enthusiastic. As David says,

when you get to be older you'll find staying up all night is more difficult. A teenager can miss a whole night's sleep.

What has David been doing in the last year? He has written three books, including a biography of Gene Shoemaker, his co-discovered of the comet that impacted Jupiter in 1994, a scientific book of the cosmos, and a book of last summer's eclipse. And he's done a lot of hours of comet hunting and yet made no discovery. Mr. Levy did discover a ring of stars while comet hunting. He calls them Wendee's Ring, named after his wife. But David is enjoying astronomy as much as ever. The most important thing is that he expanded the observatory that he uses.

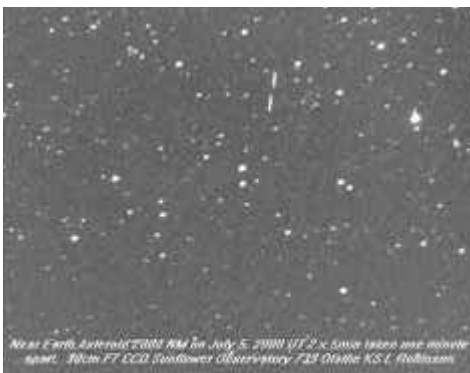
David is one of the nicest persons you will ever meet. I have the honor in saying, "Astronomy is one of the very view hobbies in which one can sit with their heroes and discuss the heavens."

Mr. Levy and I sit on a committee of which the goals are to promote "Youth in Astronomy". You can see what that committee is doing on our web site at <http://www.geocities.com/hstinst/yac.html>.

You can contact me at HSTINST@aol.com. If you don't have a computer or email, you can contact me via telephone at (610) 926-6638. My mailing address is: Ryan Hannahoe, 1056 Mahlon Drive, Leesport, Pa. 19533

Always in Astronomy,

Ryan M. Hannahoe
Youth Activities Chairman
for the Astronomical League



CCD Images from Kansas

- LEFT: Near Earth Asteroid 2000 NM, July 5, 2000 UT, 8x5 minute taken one minute apart. http://www.geocities.com/larry_739/2000nm.jpg.
- RIGHT: Comet S/4 LINEAR, July 2, 2000, 8x60 seconds. http://www.geocities.com/larry_739/s4-8raw.jpg.

CCD Images by AAAA member Larry Robinson, Olathe, KS, using 30 cm f/7 telescope at Sunflower Observatory 739, Olathe, KS

Helpful Observing Hints

- Make sure your equipment is working before you attempt to record an astronomical event.
- Make sure you have all the pieces of equipment you need before you attempt to record an astronomical event.
- Don't hurry through setting up equipment to record an astronomical event.
- Don't worry about not getting a successful recording of an astronomical event.
- Words of wisdom are usually obtained through bad experiences.

Brenda Culbertson

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 PMB

175, Plano, Tx. 75075

WWW.CORVUS.COM

Autumn Observing

by Brenda Culbertson
stargazr@holtonks.net

www.geocities.com/ksstargazer/

Has this been the summer from some bad dream, or what?!!!! Heat! Drought! Floods! Heat! Smoke! Heat! Clouds (no rain)! Heat! And now we are going into the cooler season, still with heat!

It is a bit difficult to write about cool season observing when I am sitting in the computer room at home in 95 degree temps. Actually, I turned on the AC a few minutes ago and am beginning to cool off now. Wouldn't it be good to be able to turn on the AC outside? Well, we can't do that, only God can, and I think He has other plans for a while.

Don't worry, the seasons will bring cooler weather and we will have many nights of comfort in which to observe our favorite objects, as well as a few new ones. Our favorite Fall objects are appearing earlier in the night, too. Our skies have been void of the giant planets for a while, but they are back now, and the Pleiades are ushering in the winter group of constellations.

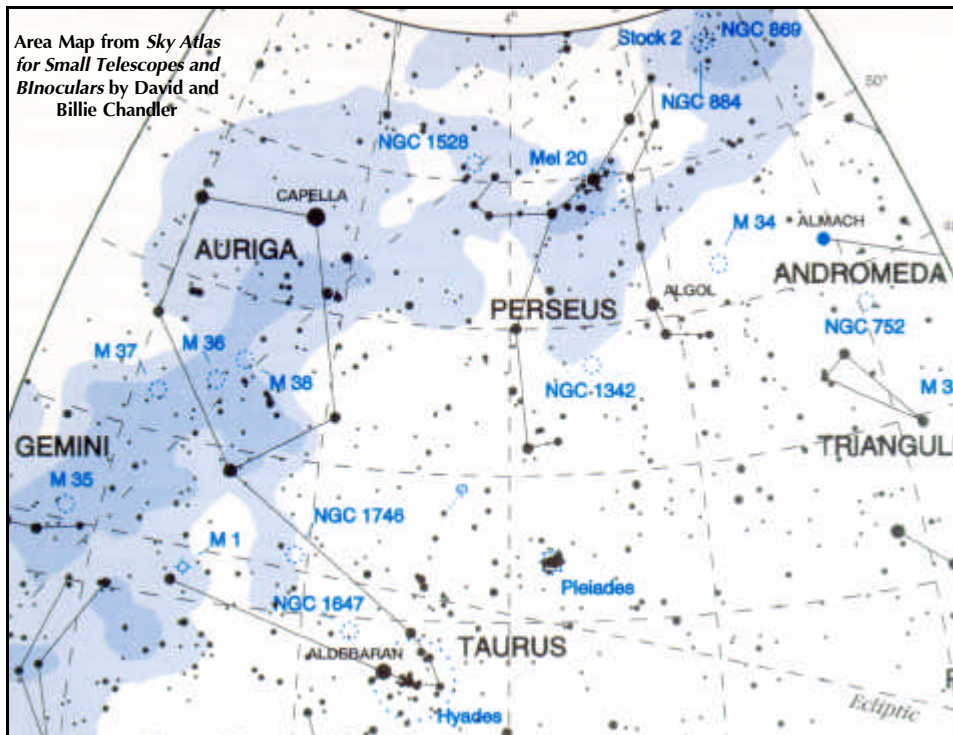
We have had some great auroral displays this summer, as well as a pretty cool Perseid shower. Many of us hope that those were just tastes of what is to come this autumn season with the Leonids and Geminids, and, of course, with even more spectacular aurorae. Someone (initials John Wagoner) requested that I schedule an auroral storm on a weekend New Moon night with no clouds and a week's notice. All I can do is ask the Big Guy, and I don't mean Ed Flaspoebler!

There are several links to aurora sites on my personal web page if any of you want to check them out. I'm not very good at keeping my page updated, but with the help of Paul Greenhalgh, Canada, it is cleaned up and running fine. Paul has been quite a wonderful help and knows his stuff when it comes to astronomy.

Knowing about astronomy is why we are all into the hobby of observing. Also, learning more and sharing what we know are other reasons. I have learned much from many of you this past year, and I hope I have reciprocated with my share. Here is more from me to you:

Easy Objects to Observe

The Pleiades (M-45) is almost always the easiest object in the sky this time of year. As Taurus rises earlier and earlier, the weather gets colder and colder. Some people mistake the Pleiades for the Little Dipper, but it



is not that asterism at all. It is commonly called the Seven Sisters. On a good, clear night people with good eyesight can count many more members of that group than the seven. With binoculars even more members can be seen, and if scanned with a telescope, the number of members is nearly countless.

Before the Pleiades rises we can find another easy object in the constellation Pegasus. **M-15** is a rather large globular cluster of 6.0 magnitude. Scan the area which is about 2 degrees north and 3.5 degrees west from Epsilon Peg. You should come across it. Inside this globular cluster is a planetary nebula for the difficult category.

There are several easy to find objects in Auriga. Three Messier objects can be found either with the unaided eye or with binoculars. **M-36, M-37, and M-38** are open clusters and lie between Taurus and Auriga.

Perseus holds a couple of objects that are easily found. They lie in the band of the Milky Way Galaxy as it extends from Cassiopeia. **NGC 869 and 884** are the famous Double Cluster, both 4.5 magnitude open clusters. These are observable for unaided viewing but binoculars will bring in more detail. A wide angle eyepiece in a telescope provides a great view of this duo as well.

Moderately Difficult Objects to Find and/or Observe

M-1, the Crab Nebula, may be considered easy by many observers, but for those others who are just approaching this level of experience, it may prove to be moderately difficult to observe. Look up to the point of the southern horn of Taurus and it will be located just southeast of the star. It will appear as a hazy oval in small aperture

scopes, but 8-inch or larger scopes will start to show some detail.

Do you want to see the twin of the Milky Way Galaxy? **NGC 7331** in Pegasus is what has commonly been used to show what scientists think our home galaxy looks like. Locate Eta Pegasi, then scan about 4 degrees north and slightly west. **NGC 7331** is a very nice spiral galaxy. Look SSW from **NGC 7331** only about half a degree and you will come across **Stephan's Quintet, NGC 7317, 7318A, 7318B, 7319, and 7320**.

Those of you with a more southern view might find it fairly easy to find **M-79**, a globular cluster in Lepus. It is about 8th magnitude and is fairly small. If you make a line between Alpha and Beta Leporis, continue the line to the SSW another 4 degrees and you should come across it.

Difficult Objects to Find and/or Observe

Look inside M-15 for the planetary nebula **K648**. It is very small and very faint at about 14 mag. M-15 is in Pegasus.

Difficult to observe for many of us is the **Veil Nebula** in Cygnus. This constellation has many nebulae, clusters and other objects to view, but the Veil is one of the most popular. Look for the star **52 Cygni**, and you are in the right area.

The last thing I will mention in the difficult category is the **Horsehead Nebula** in Orion. I have seen it visually only once and that took a 16-inch reflector, a perfect night, and the expertise of an observer who was far more familiar with the field than I. This was many years ago, and I have not seen it visually since. Go to the field of Zeta Orionis. You may see **NGC 2024**, a bright nebulosity nearby. The Horsehead is just below Zeta.

M15

Globular Cluster in Pegasus

Image copyright Mark Cunningham, Craig, Colorado



NGC 869/884

Double Cluster in Perseus

Image copyright Mark Cunningham, Craig, Colorado



M1

The Crab Nebula in Taurus

Image copyright Mark Cunningham, Craig, Colorado



NGC 7331

Spiral Galaxy in Pegasus

Image copyright Mark Cunningham, Craig, Colorado



M 37

Open Cluster in Auriga

Image copyright Mark Cunningham, Craig, Colorado



Dates to Remember

Meteor Showers for the Fall Season

| | |
|------------|---------------|
| Oct. 08-09 | Draconid peak |
| Oct. 21-22 | Orionid peak |
| Nov. 02-04 | Taurid Peak |
| Nov. 16-18 | Leonid Peak |
| Dec. 12-14 | Geminid Peak |

September

| | |
|----|----------------------|
| 13 | Full Moon |
| 22 | Autumnal Equinox |
| 29 | Rosh Hashanah begins |
| 27 | New Moon |

October

| | |
|----|--|
| 08 | Yom Kippur begins |
| 13 | Full Moon |
| 27 | New Moon |
| 29 | Daylight Saving Time Ends (Fall back 1 hour) |
| 31 | Halloween |

November

| | |
|----|--------------------------------|
| 07 | Election Day (Go out and vote) |
| 11 | Full Moon |
| 23 | Thanksgiving Day |
| 25 | New Moon |

December

| | |
|----|-----------------|
| 11 | Full Moon |
| 21 | Hanukkah begins |
| 21 | Winter Solstice |
| 25 | Christmas Day |
| 25 | New Moon |
| 25 | Partial Eclipse |

Planetary and Lunar Observing

Planetary observers should look for the Great Red Spot on Jupiter as well as the moon crossings. High power views can also show festoons and other atmospheric phenomena on Jupiter. Saturn has features too, and they can be followed with great excitement for planetary observers. Let's not forget to find Mars, Uranus, Neptune, and tiny Pluto. Mercury and Venus will play hide and seek with us over the next few months, but observers can see them easily when they know where they are.

Lunar observers can see occultations of stars from time to time. These are kind of fun, but short. If you see a star near the lunar limb, keep an eye on it for a while and see if it gets closer or farther from the limb. If it gets closer, you may be in for a treat by seeing our Moon pass between us and that star. As you watch, the star will blip out of view.

*Brenda Clubertson
stargazr@holtonks.net*



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>

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