The American Astronomer

THE QUARTERLY NEWSLETTER OF
THE AMERICAN ASSOCIATION OF AMATEUR ASTRONOMERS

Volume IV, No. 2, March 2000

Ryan Hannahoe Wins Lunar Eclipse Photo Contest

On the evening of January 20, 2000, astronomers in North America witnessed a total eclipse of the moon. Lunar eclipses occur when the full moon passes through the Earth's shadow. During a lunar eclipse, an eerie reddish color crosses the face of the moon, caused by refraction of sunlight through the . Earth's atmosphere

The American Association of Amateur Astronomers ran a contest on the internet for the best photograph of the eclipse. 14 year old Ryan Hannahoe s photo was judged as the winning entry. Ryan is a member of the Berks County Amateur Astronomical Society in Pennsylvania.

For submitting the winning entry, Ryan will receive a one year subscription to either *Astronomy Magazine* or *Sky & Telescope* Magazine, and a one year individual membership to the American Association of Amateur Astronomers. This is what Ryan says about his photograph.

I took a Barlow eyepiece and hooked it up to the telescope (eyepiece and the Digital camera). On the telescope, I have a locking mechanism that allows about a 5 lb. leeway, so the tube cannot drift. So I locked the telescope and took the picture. Afterwards, I edited it on the computer to bring out more colors. That's why my picture came up so bright.

The pictures I took leading up to the eclipse were taken with a 35-mm camera with a 1000-mm zoom lens. The lens was hooked on by a T-mount. To hold the camera in place I used a mono pod.

Ryan s e-mail address is HSTINST@aol.com.

Keith Davidson Earns Urban Club Certificate

Keith R. Davidson from Grayson, Georgia, recently earned his Urban Club certificate using a 10-inch Newtonian reflector. A hearty congratulations goes out to Keith.

William Domino Acquires Urban Club Certificate

William Domino of Yorba Linda, California, just received his Urban Club certificate using an 8-inch Schmidt/Cassegrain telescope. William did this from Southern California which must be one of the heaviest light polluted areas on the planet. Way to go, William, for a job well done. If William can do it, then I think anyone anywhere can do it as well.

David Bushard Receives Double Star Club Certificate

David Bushard of River Falls, Wisconsin, just completed his Double Star Club certificate using a 10-inch Schmidt/Cassigrain telescope. Nice job, David. We are proud of you. I was particularly impressed with your observing logs and sketches, along with your database. Nice, very nice.

John Wagoner, AAAA President

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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

As usual, AAAA members have been out observing in full force. In this issue of *The American Astronomer*, we congratulate Keith Davidson of Grayson, Georgia, and William Domino of Yorba Linda, California, for earning their Urban Club certificates, as well as David Bushard of River Falls, Wisconsin, for acquiring the Astronomical League's Double Star Club certificate. A hearty congratulations to all of these fine observers. I hope to see your name here soon.

Brenda Culbertson of Mayetta, Kansas, and I just can't get enough sun. No, we aren't out sun bathing and trying to get rid of those awful tan lines. Instead, we have been corresponding on an almost daily basis about the sunspot activity now occurring on our nearest star. It is quite a wonder to follow large sunspot groupings as they make their way across the sun's surface.

We are witnessing some of the largest, most active solar activity in this century. Many sunspots are visible to the naked eye with the proper protection. And the chance of an aurora coming as far south as Texas is quite good now. So if you don't have a solar filter for your telescope, by all means get one, and take advantage of what is happening on our sun.

For the fifty new AAAA members who purchased the Astromax Introductory Astronomy Kit (with Bushnell binoculars) since Christmas, please know that you don't have to miss out on the action. You can purchase binocular solar filters from a company like Thousand Oaks Optical, put your binoculars on a tripod with a tripod adapter, and then see what all the commotion is about. You won't be disappointed, and you will find that the binocular/tripod setup is quite portable. And you can share your experiences with friends and family. Or just check out the sun each day after work.

Good luck and tell us how you fare. 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.

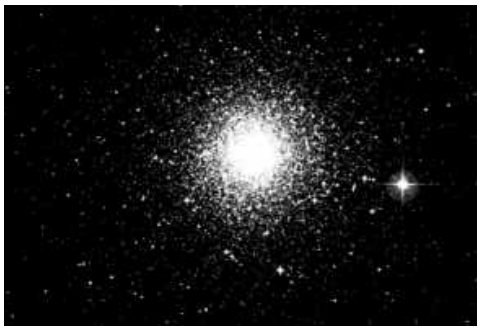
www.corvus.com/aa01006.htm

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

Start with Galaxy M77 in Cetus at Sunset



End with Globular Cluster M30 in Capricornus at Sunrise

Real Sky CD Images from Astronomical Society of the Pacific

Messier Marathon 2000

Primary Date: April 1, 2000

Based on the
Messier Marathon Observer s Guide
by Don Machholz

Download Maps and Recording Sheets from the AAAA Web Site
WWW.CORVUS.COM/MARATHON.HTM

The Messier Marathon presents an opportunity to view the entire Messier List in one night. Each Spring, the period around the Spring Equinox on March 21 allows observers to view all 110 of the Messier objects in one observing session. In 2000, the new moon weekends fall on March 3-4 and April 1-2, allowing for a full night of observing. During other weekends in March and April, the appearance of the moon during part of the night will hinder observers from viewing the whole list.

To help you pursue the Messier Marathon project, AAAA has created a PDF of the Messier Catalog in the optimum viewing order, as established by well know California amateur astronomer Don Macholz. You can download this file from the AAAA web page, www.corvus.com.

You may use any size telescope or binoculars for the Marathon, since the object is to SEE the object, rather than to OBSERVE and LOG it. For this reason, it is OK to use setting circles and other electronic devices, even though such observations would not qualify you for the Astronomical League s Messier Certificate.

The AAAA s packet contains a check list and observing sheet for you to use to keep track of your observations. This is intended to be a fun project, so observing and recording on the checklist is done on the honor system. Finding objects and sharing observations with other observers is OK.

The map contained in the packet is intended to help you find the relative positions of the Messier Objects across the sky and in the constellations in which they are located. Start with M77 right after sunset, and continue on to M30 just before dawn. Use your own star charts and maps to help you find the individual objects if you do not already know where they are. You will find there will be periods of inactivity while you wait for the next object to come up, and periods of frantic activity trying to find that one last object before it sets. While the objective is to see all 110 objects, a very difficult project, whatever total number of objects you observe will be a successful night. And if you do not see all of the objects in one night, you can always try again next year!

You do not have to conduct you own Messier Marathon on the dates indicated. These are just the ideal weekend dates for 2000. But you can observe anytime during March or April that you have an opportunity to be out. The objects will be up!

This is a great project for any astronomer. Get your friends together and get out and observe!

BRINGING ASTRONOMY TO THE PEOPLE
ASTRONOMY DAY

National Astronomy Day is April 8, 2000

All astronomers, whether or not you are a member of a club, can participate in Astronomy Day. All you need to do is to set up a display of photos, equipment and/or publications to show how cool astronomy is. Most libraries will allow a display of this sort. Some restaurants, malls, and park areas allow it as well. You don t have to do anything elaborate, just talk with people and get them involved in looking at what God put in the sky for us to see.

Astronomy Day activities have been coordinated in Topeka, Ks, between the local astronomy club, NEKAAL, and Washburn University. Observing sessions from Crane Observatory (urban) and Farpoint Observatory (rural) will provide participants with views from both locales on the evening of April 7, just to get them warmed up. There will be photo displays, research projects, planetarium programs, open house in Crane Observatory and equipment displays during the day on April 8.

Astronomy Day is a time to get new people interested, interested people to participate, and participating people to lead the way for more new people. Show them how fun it is, but also show them how important it is for them to be involved with the oldest science in history.

Brenda Clubertson
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Astronomy Day Handbook

To receive your copy of the Astronomy Day Handbook, 4th edition, revised and published by *Sky and Telescope* magazine, send a check made out to the Astronomical League for $3.00, $4.00 outside North America, to:

Gary Tomlinson,
Astronomy Day Headquarters,
Public Museum of Grand Rapids,
272 Pearl NW,
Grand Rapids, MI 49504 USA
(616) 456-3532,
(616) 456-3873 FAX
gtomlins@triton.net
www.astroleague.org/astroday.html

AAAA Attends All-Arizona Star Party

by AAAA Member Isaac M. Kikawada of Mountain View, California
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Isaac Kikawada with Hazel s 17-inch Dobsonian at the All-Arizona Star Party - October 1999. Photo by Mary Ellen Tatro.

From Tucson, Arizona, my girl friend Mary Ellen, a fellow pre-Med of 40 some years ago in a small college in Ohio, called to invite me to the All Arizona Star Party in the night of October 9-10, 1999. I was overjoyed, and Heidi my wife immediately got me a well earned, free, frequent-flyer-mileage UA ticket. Bill Tatro, who married my girlfriend, drove us on a dirt road about 30 miles off I-10 somewhere between Phoenix and Tucson, near the Indian Reservation.

As sunset approached, I saw more than 100 telescopes, mostly Meade amongst the large custom made DOBs, and one Miyauchi 20x100, set up in about 10 acres of open area in the cactus field behind a weird looking hill on the East. There was a nice breeze but not enough to kick up the fine orange dust from the ground, but it, too, died down as mosquitoes went away. The stars came out in this beautiful shirtsleeve night. There were too many stars and I was utterly confounded the familiar are not familiar any more! Overwhelmed, I spent most of the time till midnight meeting people, including the coworker of Bill, Glenn Nishimoto, a serious amateur astronomer, without whom neither Bill nor I would have been able to participate in this Party. I met Hazel with her smooth 17 DOB, which she kindly let me use for about half an hour to go up and down the familiar center of our Galaxy Yummy!

After midnight when Mary Ellen and Bill went to bed and I put on a sweater, I began playing with Hazel, who had done her meticulous homework to observe Galaxies in the Constellation Cetus area. She let me stay with her more than three hours to sketch Galaxies, NGC 157 (10:40), NGC 628 = M-79 (9:40), NGC 720 (10.19), NGC 779 (11.20) and NGC 7640 (11.30). We pointed to Comet Lee as well (very faint: no wonder I could not see it from my backyard!) and, we believe, we saw the Horse-head Nebula through a Hydrogen beta filter Wow! Even the Great Nebula, M-41, looked different Hazel and I concurred that the wings were snow white, narrow and distinct with thin feathers extending into the ghostly nebulosity below. When we were on M-36, I had to make a quick drawing of the core stars for I could see a nice triangular pattern, which I had not seen so clearly before.

Of course, we saw Jupiter and Saturn in their majesty. Jupiter seems to have five moons, but the nearest and faintest was a 7.8 star, which was occulted around midnight a special treat! Saturn, too, seems to have four moons this night!

After Hazel went to bed and I drank all the hot coffee Glenn had made, and I gobbled up four big chocolate chip cookies Mary Ellen made, I returned to my faithful Pronto Venus started to shine brightly. I heard snoring from the nearby camper, very loud indeed, but not as resounding and ominous as the coyote calls of a few hours before. I could not resist looking toward very low in the South though the low horizon haze. I finally put on my heavy jacket noticing a cold breeze on my nose, when I sighted a globular, NGC1851 in Columba. Then, I saw a bright star just above the horizon and, behold; it was Canopus my first encounter! The open cluster NGC 2547 in Vela was my last attempt to see the Southern faint object and it was already past 5 o clock in the morning. Very slowly and quietly I packed up my equipment, often looking up, wondering how all the California stars could migrate to Arizona. As I crawled into my bed with my jacket and all, the corner of my left eye caught Venus and the right eye Jupiter. It seems the stars are fading away as quickly as I am then I heard Bill firmly declaring, It s about time for breakfast!

We had a big and hearty break fast at a truck stop and came home only to take a quick shower and we were off to Kitt Peak, because I had to see the McMath-Pierce Solar Telescope and new Wiyn 3.5 meter s rotating house. I slept very well that night, but the following two nights were the real bonus. I just sat at my friends poolside and was luxuriously bombarded by the starlight, imagining Genghis Khan s mother, as a legend has it, who was seduced and impregnated by the desert stars. On October 12th, Jupiter appeared to have six moons, all lined up in a row, four on the one side and two on the other. Besides, I had never seen so many stars around Jupiter in my Pronto field of view before! Earlier in the afternoon of Oct 12th, moreover, there seem to have been a lot more sun spots visible in the outskirts of Tucson than in Mountain View! Is this fair?

These were the most perfect observing nights I had ever had. The true highlight of my trip, however, was when Mary Ellen took me to her hospital, where she had worked in the lab for 28 years. She led me to the three panels of three-story-high, brilliantly painted murals, which surround the courtyard into which the hospital cafeteria opens up. She had struggled for 6 years to find the artists, to raise money and to have the relevant hospital people get interested in creating the panoramic history of Arizona and the Kino Hospital on these three gigantic walls and it was just completed this spring! I was so happy and proud of what my girlfriend has accomplished, something so wonderful as to be able to give many, many people much joy and hope for many, many years to come. I was almost in tears.

Such notables as Prof. E. Karkoschka, David Levy, Thomas Bopp and the like, I heard afterward, often attend this Star Party. I had a nice chat with Mike Spooner, who, I learned, is an expert mirror grinder. Perhaps I will try for two nights of observation in the desert next year!

The All-Arizona Star Party is sponsored each year by the East Valley Astronomy Club of Scottsdale, AZ. The All-Arizona Star Party is held at a remote site near Arizona City, midway between Tucson and Phoenix. The date of AASP 2000 is Saturday, October 28, 2000.

F or information about AASP 2000, contact EVAS Vice President Chuck Crawford at astroc@mindspring.com.

The EVAS website is http://www.eastvalleyastronomy.org.

Getting Articles Published

An Article by Brenda Culbertson, Mayetta, KS

stargazr@holtonks.net

Readers of articles can also be writers of articles: not only articles, but reports and editorials as well. Articles are written by people who have a thorough flow of information on a particular subject. Reports are generally shorter than articles and may be less formal than articles. Editorials are opinion pieces which are usually one-sided and are oftentimes negative, but are better received if they are written in a positive attitude.

Those who are reading this article are most likely people who go out and look at the sky. People who go out and look at the sky usually see something they would like to show someone else. This can be done through writing an article or report. BUt just writing the article or report will not guarantee that someone else will read it and share the same excitement the writer experienced. The article or report must be published and read by others before they can share the experience. To get the article or report published, it must be submitted for publication. Opinion pieces follow the same path. From now on articles, reports and opinion pieces will be referred to as articles.

Most people are hesitant to submit a written piece for publication, especially if the publication goes out to a large number of readers. Many of the writers feel that no one would be interested in what they have to say; or that their work is not of good enough quality; or that they just do not know how to go about writing an article and submitting it.

Readers like to read about other people s experiences and ideas. This is one of the ways we learn. Newsletters are a great way to begin getting published. Newsletters are received by people in the same circle the writer is in. Things observed in the sky, ways of observing them, equipment used, and sites observed from are topics usually covered in astronomy articles in newsletters. Club events, future events and people stories are also good topics for newsletters. Questions, opinions and ideas are short pieces that go in the newsletter as well. Less common, but equally interesting, are poems, cartoons and recipes.

Short reports can be fit into the small space that needs to be filled in newsletters. Longer articles take up a page or two, but there is often a portion of a page that needs something put into it just to fill it up, and a short article is just the thing.

Beginning writers often are not sure if they have written in a good style or that their grammar is correct. This should not be a major concern, since newsletters are put together by editors who can check all that. A good editor can do wonders with articles containing bad grammar, without losing the idea and content. Editors often check with writers if there are questions about any information. There is always space for new writers in any club s newsletter.

If the writer knows someone who will be objective without being a critic about the article, showing it to the other person for a review before submitting it might be a good idea. Feedback from someone else can offer new questions that can be answered in the article, or suggest that a sentence be rewritten for more accuracy.

Using jargon, the language of the hobby, is not necessary, although we often fall into using it. Writers often wonder if they are using the correct terms to describe something. The adage If in doubt, throw it out can be applied to more things than spoiled food. Using accurate terms that say what the writer wants to describe is more important than trying to use the correct jargon.

After the piece is written, it has to be submitted before it can be published. Contact the editor, or read the guidelines in the publication and see how the article should be sent. If it can be e-mailed, the editor will mostly likely be very happy to get it that way since it will go into a computer. If the article is already digital, it can be brought into the computer and worked on very easily. Submit the article before the deadline, otherwise it will have to be held for the next publication.

When submitting an article, the writer might include a short bio. The bio should have as minimum information the author s name, city and state, and e-mail address if there is one. Some editors will put in a short paragraph on the writer if space allows. It does not hurt to send the paragraph since the editor can pull for space at the end of an article.

Most writers are happy to see their names in print and the first time is a real rush. Starting a scrapbook is a tool to help the writer progress. Going back and looking at previously written works can be beneficial in many ways, such as providing ideas for future articles or to show how much the writing style has advanced. It is also good to have around for self confidence.

Steps in getting articles published:

Step 1: write down your thoughts, then go back and revise them into a paragraph or longer piece.
Step 2: submit the article with a short bio.
Step 3: don t worry about it.
Step 4: keep a copy in your scrap book.

If you are a writer and would like my feedback, I am willing to read materials and make suggestions. I can be contacted at the e-mail address below, or materials can be sent to me through *The American Astronomer*. I hope to see some new names in future issues of this newsletter.

(*The American Astronomer* is published quarterly. The editor is Ed Flaspoehler. Submit articles to Ed via e-mail to eflaspo@aol.com, or send to 5027 W. Stanford, Dallas, TX 75209-3319.)

A Time of Rejuvenation

S p r i n g

by Brenda Clubertson
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Spring is a time of rejuvenation.

In Spring, when skies are good they are very, very good; but when they are bad they are horrid.

Lately, I have had a few very, very good skies, but most have been horrid. One of the good nights was only half good and several observers shared it while it lasted. (Or rather while the observers lasted.)

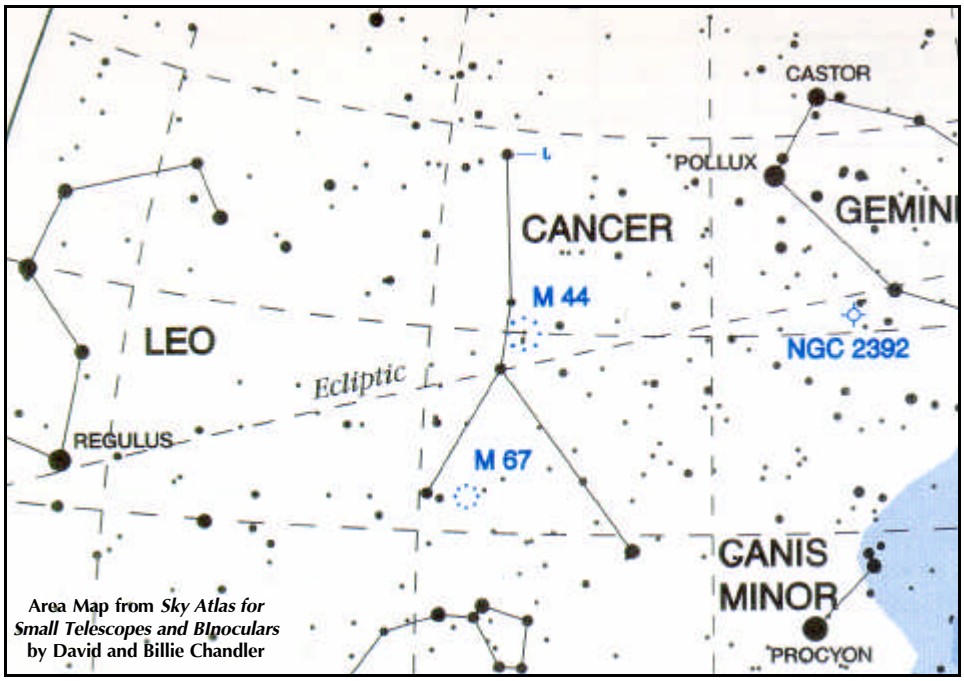
Mike and I led a caravan to Farpoint Observatory for dark site viewing. Farpoint is owned and operated by the local Topeka astronomy club, Northeast Kansas Amateur Astronomers League, Inc. (NEKAAL). By the time everyone arrived, the number of people added up to seven, not a big group, but a good group. A couple of the guys stayed inside in the comforts of a computer room to hunt down more asteroids or comets. They have racked up many asteroid discoveries and one comet. The rest of us endured the not-so-cold night outside.

The outside group talked about constellations and objects up there. I suppose I was the most advanced observer outside, but we had two scopes set up. Janelle, NEKAAL president, recently bought an 8-inch Dob, and I had my C-8. Janelle was not accustomed to finding things in her scope yet since she has been a naked-eye & binocular observer for many years. She showed the others some of the easy stuff to find, though, like the Moon, Orion Nebula, Jupiter and Saturn, but she had difficulty in finding other objects.

After Mike and I got my C-8 set up, I took requests of things to look at. Someone wanted to see some galaxies, so I went to Leo and picked a couple out. Everyone thought it was cool that they could see them. Then we talked about stuff in Ursa Major, so I went to the Owl Nebula. Again, everyone wanted to see. Janelle then asked if I could get it in her scope, but I had a hard time with the Dob mount and did not get it. (Note: I really don t like Dob mounts!) We came to the conclusion that the Owl Nebula could not be seen in her scope and it had nothing to do with my inability to use Dobs.

We looked at some other stuff and then I went for the Whirlpool Galaxy. I tried and tried, to no avail. Finally I gave up the eyepiece, backed off and looked up. The reason I couldn t find it was that a heavy bank of clouds had moved in and I didn t notice it. I was beginning to think the Whirlpool Galaxy had moved.

We observed until around midnight, then packed it in. Mike and I have to drive through three counties to get from Farpoint Observatory to our home. That is one reason we have our own backyard observatory we use. We also use Crane Observatory in Topeka, since it is where I work, but home is closer since we are already there.



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

Most backyards provide adequate skies for at least some sort of observing. Even in urban areas, the Moon can be seen, as well as the brighter planets. The Sun is easy to find and see if you have adequate filters and observe it appropriately. There is much to see if you only give it a try.

Here are some of the things you might try. The easy objects should be able to be seen either naked-eye or with binoculars. They can usually be seen from urban areas also. The moderate objects might take a darker site or larger aperture if you are in a town. You should look for the difficult objects from a dark site.

Easy Objects

If you go to a dark site and look in the center of the triangular field with the points represented by Castor, Regulus and Procyon, you will see a large, faint patch. What you see is a portion of Cancer the Crab. The portion is most likely **Praesepe**, or the **Beehive Cluster (M-44)**.

Later in the spring when Corona Borealis and Hercules are high enough to be seen easily, you can locate the **Hercules Star Cluster (M-13)**. This globular cluster is a naked-eye object for those in dark, rural areas. If you are looking south, follow the arc of Corona Borealis from the northern-most end to the southern end. Keep going along that direction and you will come to the Keystone area of Hercules. Once in the Keystone area, look under the western shoulder (Eta) for a bright patch. This should be the Hercules Cluster. Look where Hercules head should be to find another cluster M-92. It is very similar to M-13.

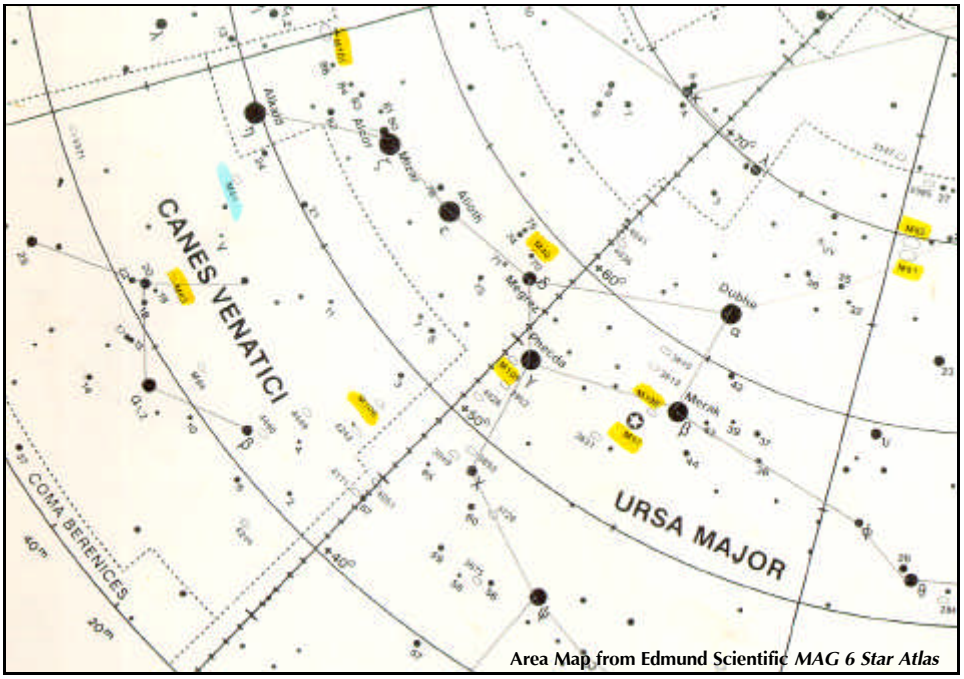
If you like big, try **M-33**. This is one of the largest galaxies we can easily see. It is best viewed in binoculars for an overall effect. Look about 14 degrees southeast from **M-31**, and about 7 degrees southeast from Beta Andromedae. M-33 is in Triangulum and the galaxy is a great pinwheel. It is in the western part of the constellation. Most people have a hard time seeing it because it is so large and fairly faint. Don t be discouraged if you miss it.

Moderate Objects

You can find the Owl Nebula in your scope (don t ask me to find it for you in a Dob mounted scope) early in the evening. The **Owl Nebula (M-97)** can be found along the line of Merak and Phad in the Big Dipper. These are the two stars that make up the bottom of the pan in the dipper. The Owl Nebula is about 12th magnitude. It is about two-thirds closer to Merak than it is to Phad, and slightly outside of the line, but not by much.

The Virgo galaxy field is one to view. No matter where you look you will run into several galaxies of various types. The hardest part of traveling through this area is knowing which galaxy is which. There are several charts to help you through it, though, and several of the galaxies are Messier objects.

Another field that holds many Messier objects is the Coma Cluster. These are galaxies that range from 7th to 11th magnitude. Coma is located between Alkaid (the end star



Area Map from Edmund Scientific *MAG 6 Star Atlas*

in the Big Dipper) and Denebola in Leo. It appears as a large, fuzzy patch naked-eye, but there is much to be seen in this area.

Difficult Objects

Another object of interest is the Corona Borealis Galaxy Cluster. It is in the southwest corner of the constellation and holds more than 400 galaxies. The area of the cluster is about half a degree wide and are no galaxy is brighter than 16th magnitude.

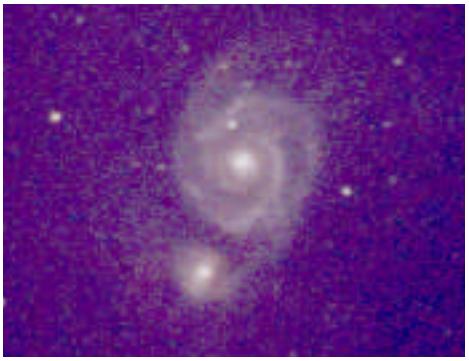
Corvus has one of the most intriguing objects in the sky: **NGC 4038**, the **Ring-Tail Galaxy**. This is an example of colliding galaxies and it shows nicely in a long exposure photograph. This galaxy is about 4 degrees west-southwest from Gamma Corvi.

There are so many things to see in the spring sky you need to consult a seasonal chart. Many books with seasonal charts and things to observe every night of the year are in the book stores. Easy to difficult to nearly impossible objects are in the night sky for us to view. A good star chart comes in handy, too.

Don t forget to watch the planets, the Moon, and especially the Sun this season. Some of us have been keeping track of monster spots, flares and coronal mass ejections. Heads up for more great solar activity and possibly some very nice aurora.

M97 - Owl Nebula in Ursa Major

Real Sky CD Image
from Astronomical Society of the Pacific



M101 - Pinwheel Galaxy in Ursa Major

M51 - Whirlpool Galaxy in Canes Venatici

Dates to Remember

April

1	A good time for the Messier Marathon
2	Daylight Saving Time begins (Spring ahead 1 hour)
4	New Moon
6	Mars-Jupiter-Saturn-Moon alignment
8	National Astronomy Day
18	Full Moon
19	Passover begins
21	Good Friday
21-23	Lyrid Meteor Shower
23	Easter

May

4	New Moon
4-6	Eta Aquarid Meteor Shower
14	Mother s Day (Send an astronomy present)
18	Full Moon
29	Memorial Day

June

2	New Moon
14	Flag Day
16	Full Moon
18	Father s Day (Send an astronomy present to him, too)
20	Summer Solstice

July

1	New Moon (Partial eclipse)

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 at Glance** will give specific information. You can e-mail me with your geographical coordinates and I ll check into any for you.

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AAAA Web Page Updated

The AAAA web site has undergone several changes in the last three months. The most important one is that we have moved from CyberRamp in Dallas to ProHosting in Utah. Not only do we now get better service, but the new server has allowed us to update and standardize the look and feel of the site using MS FrontPage 2000.

We have also added some new pages we hope you will find of interest. For example, we now have a new *Overview of Astronomy* page, a Concise Guide to the Universe that will perhaps answer some of those burning questions. It is also time to update the *Constellation Home Page.* Several correspondents have requested that we add mythological stories and images, and we plan to do so soon.

So come take a look and tell us what you think. And be sure to send us your photos and stories to post on the site. It is your web page, too.

Ed Flaspoehler, AAAA Webmaster
http://www.corvus.com

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