



# ASTROFILES

## Auburn Astronomical Society Newsletter

April 2023     Newsletter Editor — John Wingard — [jwin1048@gmail.com](mailto:jwin1048@gmail.com)

### Moon Phases

April 13 — Last Quarter  
April 20 — New Moon  
April 27 — First Quarter  
May 5 — Full Moon  
May 12 — Last Quarter  
May 19 — New Moon  
May 27 — First Quarter  
June 3 — Full Moon

### Stay in touch with us



<http://www.auburnastro.org>



[https://www.facebook.com/  
groups/79864233515/](https://www.facebook.com/groups/79864233515/)

### News and upcoming activities

Heads up AAS members in the Pike Road/Montgomery area! We have agreed to assist with a daytime event in Pike Road on Saturday, May 13th, 2023. The event is the Creation Care Festival at Grace Episcopal Church, 906 Pike Rd., AL. We assisted them last year with their event. The event is scheduled from 9:00 AM—Noon and since it will be during the daylight hours, the primary focus will be on solar observing as well as general outreach. We need any AAS members that have scopes that can be SAFELY equipped for solar observing. As we get a little closer to the event date we will send out a reminder e-mail to the members to get an idea of who will be able to assist.

The AAS has also requested assistance in setting up an observing event at Children's Harbor on Lake Martin near Dadeville/Alexander City, AL. The event is Wednesday evening, June 21, 2023 (weather permitting). The specific event is Camp-Clot-Not, for children with Hemophilia and bleeding disorders. The camp runs from June 17-22. About 50 campers and staff are expected. In addition to viewing celestial objects, they would like to learn how the stars can be used for navigation. The AAS has helped with several events at Children's Harbor in the past. This event is still a ways out, so as we get closer to the event date, more specific information and directions will be sent to the members via e-mail.

We would like to thank all of our members that have renewed their club dues for 2023. If you have not already done so, an application is at the end of this newsletter for your convenience. After filling out the form, mail it with your payment to the address indicated on the form. At this time we do not have the ability to accept payments online. Your AAS membership also includes membership in the Astronomical League, our national club organization. This entitles you to receive their quarterly magazine "Reflector."



The Auburn Astronomical Society would like to welcome our latest new member, Isaac Weaver from Opelika, AL. Isaac indicates that deep sky and lunar imaging are his primary interests. Welcome Isaac!

## Recent photos by our AAS members



*Above: The Seagull Nebula (IC2177) imaged by AAS member Chris Young with post-processing by AAS member Jay Hall. This nebula is located in the constellation of Monoceros at a distance of 3,650 light years. Total exposure 6 hours.*

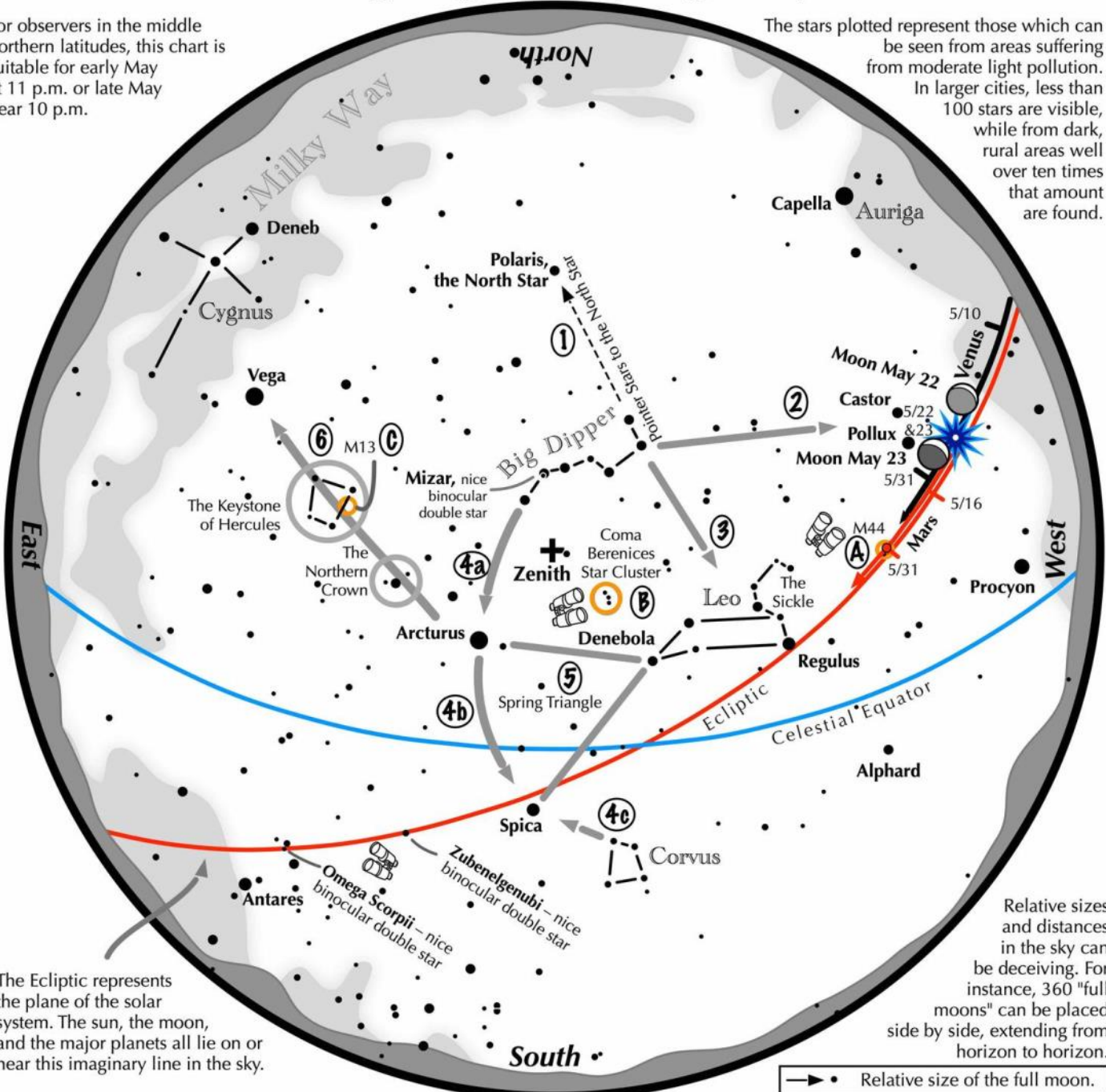


*Above: The Lagoon Nebula (M8), an emission nebula in the constellation of Sagittarius. Imaged by AAS member Chris Young and processing by Jay Hall. 8.35 hours of data. This nebula is approximately 4,100 light years away.*

# Navigating the May Night Sky

For observers in the middle northern latitudes, this chart is suitable for early May at 11 p.m. or late May near 10 p.m.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.



Relative sizes and distances in the sky can be deceiving. For instance, 360 "full moons" can be placed side by side, extending from horizon to horizon.

→ • Relative size of the full moon.

## Navigating the May night sky: Simply start with what you know or with what you can easily find.

- 1 Extend a line northward from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
- 2 Through the two diagonal stars of the Dipper's bowl, draw a line pointing to the twin stars of Castor and Pollux in Gemini.
- 3 Directly below the Dipper's bowl reclines the constellation Leo with its primary star, Regulus.
- 4 Follow the arc of the Dipper's handle. It first intersects Arcturus, then continues to Spica. Confirm Spica by noting that two moderately bright stars just to its southwest form a straight line with it.
- 5 Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.
- 6 Draw a line from Arcturus to Vega. One-third of the way sits "The Northern Crown." Two-thirds of the way hides the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.

### Binocular Highlights

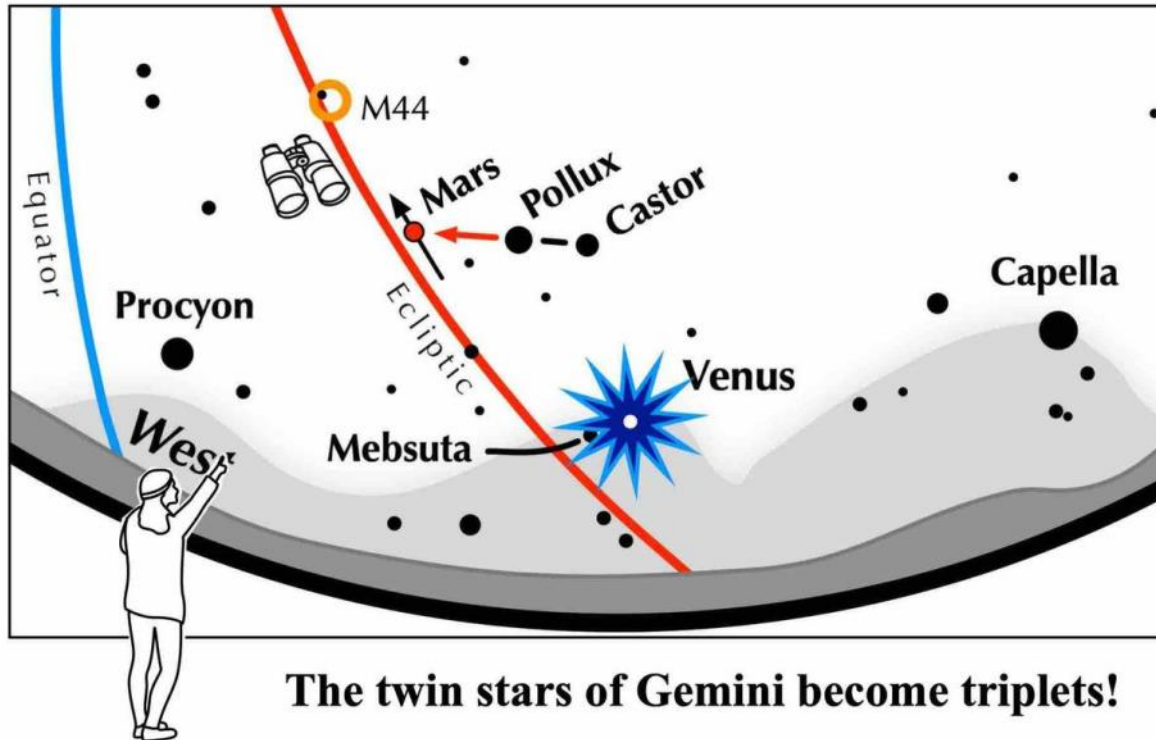
**A:** M44, a star cluster barely visible to the naked eye, lies to the southeast of Pollux. **B:** Look near the zenith for the loose star cluster of Coma Berenices. **C:** M13, a round glow from a cluster of over 500,000 stars.



Astronomical League [www.astroleague.org/outreach](http://www.astroleague.org/outreach); duplication is allowed and encouraged for all free distribution.



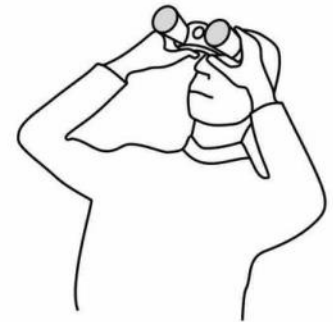
If you can see only one celestial event in the evening this May, see this one.



### The twin stars of Gemini become triplets!

Beginning in the second week of May, look to the west-northwest 90 minutes after sunset.

- The twin stars of Gemini, Castor and Pollux, will be found forming a horizontal bar.
- Red Mars, sporting a brightness mid way between those two stars, rises nightly, eventually sliding directly to their left.
- On **May 16**, the three luminaries form a straight line, effectively creating another member of Gemini, the Triplets!
- Look at Venus, brilliantly shining below them. Can you see the moderately bright star Mebsuta in the glare of Venus? Binoculars will certainly help.
- The bright stars Procyon and Capella act like opposing bookends for the scene.
- Over next two weeks, watch Mars approach M44, the Beehive cluster, and Venus move near Castor and Pollux.





# Observing Flat Galaxies

*Eerily fascinating are Flat Galaxies with their Cheshire Cat-like qualities of long, thin wisps suspended in the depths of space: Now you see them, now you don't.*



## The Silver Needle Galaxy

**NGC 4244 (Caldwell 26)**, lying 14 million light-years distant, is a prime example of a Flat Galaxy, one that is not on the minds of many observers.

### Navigate to NGC 4244:

1. Find Cor Caroli (Alpha Canum Venaticorum). It is the moderately bright star 1/3 between Zeta Ursae Majoris and Denebola.
2. Locate Beta CVn to the northwest.
3. Make a right triangle so that one leg is from Alpha to Beta and the other is of the same length but extends to the southwest.
4. It ends near the Silver Needle, NGC 4244.
5. Insert a low power, wide field eyepiece and slowly scan the area.

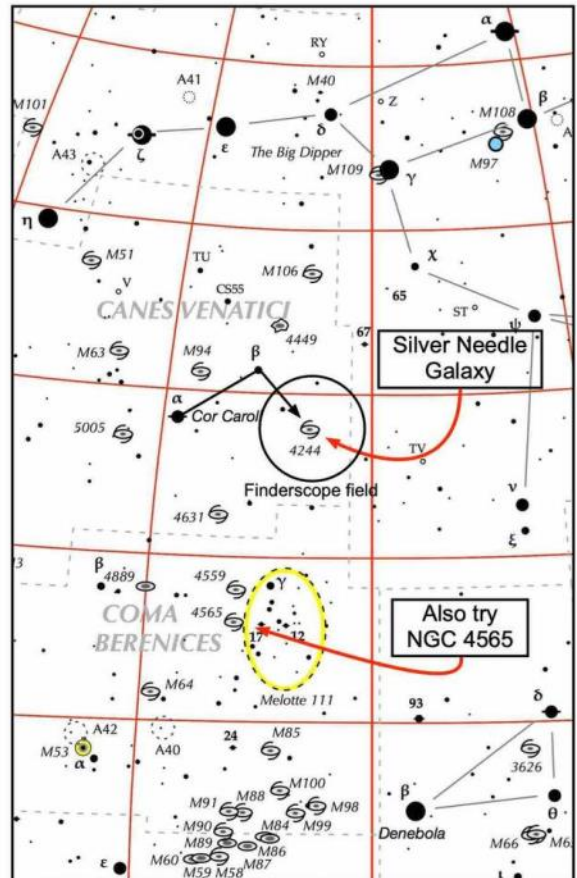
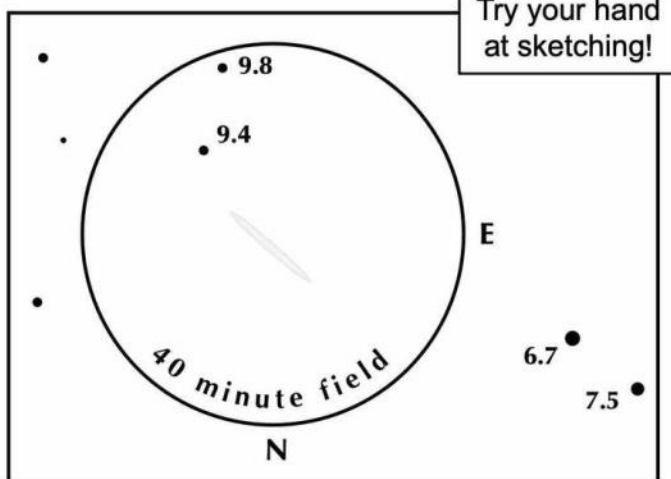
### Recommended Aperture:

Not less than 8 inches. The larger, the better.

Dark skies are a must!

### Published Characteristics:

Integrated magnitude: 10.2  
 Size: 17.0 min x 2.2 min  
 Surface brightness: 14.2 mag./min<sup>2</sup>, 23.2 mag./sec<sup>2</sup>  
 Axis ratio: 7.7  
 Position Angle: 47°



### Eyepiece Impressions:

- 10 inch, f/10, 100x: "SW-NE smudge about 10' x 2'. Center is slightly brighter. Low surface brightness." JG
- 12 inch, f/10, 113x: "Incredible galaxy; most extremely long and narrow; covers more than half a field; moderately bright; brighter small elongated nucleus; faint field star at NE tip." CA
- 13 inch, 70 & 130x: "Long and skinny. Slight bulge. Nice object to observe." AL
- 20 inch, 73 & 313x: "Very easy to see! Can actually measure the PA better when you can see the galaxy! PA: 45-50°. 18' long so it extends some distance." AL





# Auburn Astronomical Society

## Application for Membership

To insure that our records are accurate, please print information clearly

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_ Date of Application: \_\_\_\_/\_\_\_\_/\_\_\_\_

E-Mail: \_\_\_\_\_

Telescopes owned (if any): \_\_\_\_\_

Area(s) of special interest: \_\_\_\_\_

Enclose \$20.00 for regular annual membership, payable in January. *Full-time* student membership is \$10.00.

For *NEW* members joining after January, refer to the prorated dues table below for the month you are joining:

Jan \$20.00	Feb \$18.33	Mar \$16.66	Apr \$14.99	May \$13.33	Jun \$11.66
Jul \$10.00	Aug \$8.33	Sep \$6.66	Oct \$4.99	Nov \$2.33	Dec \$1.66

New—Just Joining

Renewal

Please make checks payable to: Auburn Astronomical Society and return this application with your payment to:

Auburn Astronomical Society  
c/o John Wingard, Sec/Treasurer  
5 Wexton Ct.  
Columbus, GA 31907

*Note: At this time we do not have an option for online payment of dues.*

The Auburn Astronomical Society is a member of the Astronomical League, the national organization representing astronomy clubs throughout the United States. As a club benefit, paid members of the Auburn Astronomical Society are eligible to received quarterly issues of *The Reflector*, the official publication of the Astronomical League. It will be mailed to the address that you provided above but could be delayed somewhat until their mailing lists are updated.

For additional information about our club, please go to our website [www.auburnastro.org](http://www.auburnastro.org) . You can also follow us on our Facebook page. Just search for "Auburn Astronomical Society."