



# ASTROFILES

## Auburn Astronomical Society Newsletter

June 2018

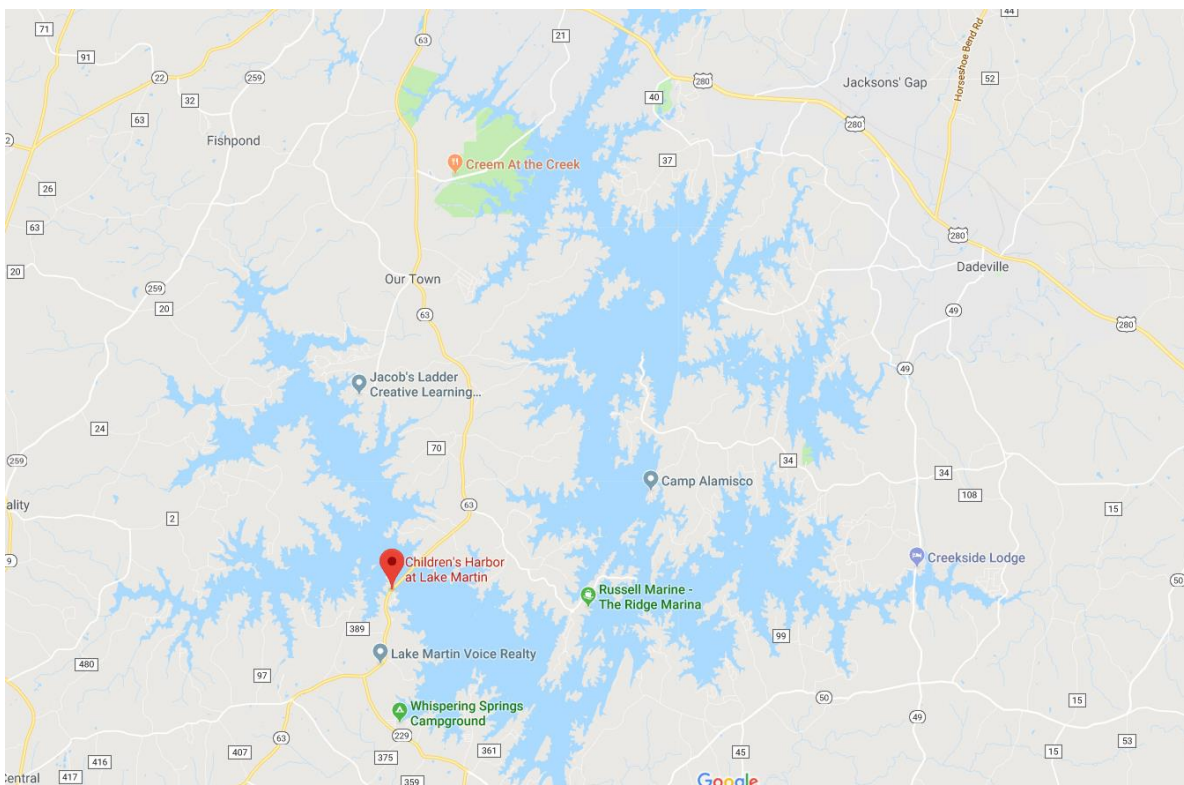
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John Wingard - Secretary/Treasurer - Auburn Astronomical Society - [jwin1048@gmail.com](mailto:jwin1048@gmail.com)

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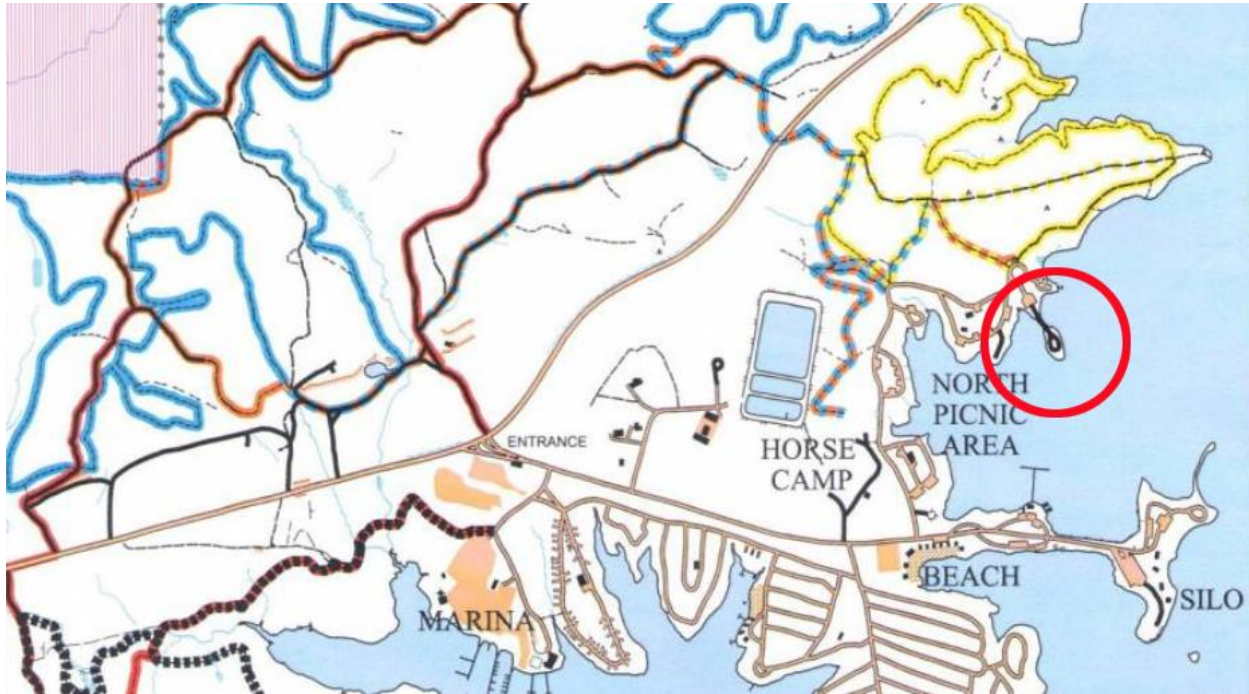
### Upcoming Events

The AAS has been asked if we would conduct a star gaze at Children's Harbor on Lake Martin on Saturday, July 7, 2018. This will be a group from the Lee County Autism and Advocacy organization. We did a star gaze for them at this same location last year and they really enjoyed it. This facility is located on Lake Martin just a few miles southwest of Wind Creek State Park, on Highway 63. As usual, AAS members should try to arrive before dark to set up their scopes. A map showing the location is provided below. **After entering the complex, AAS members should follow the signs to the Harbor Lodge as this will be the viewing area location.**



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A star gaze is planned for Saturday, July 14<sup>th</sup> at Wind Creek State Park near Alexander City, AL. This event is a planned event for park visitors and campers. The location for this event will be the same as the event that was held for the 4-H group back on June 2<sup>nd</sup>. This a small peninsula near the North Picnic Area. A map of the park is included here with the observing site circled in red. As usual, members plan to arrive before dark to set up scopes. If you tell someone at the entrance that you are with the astronomy club, they can direct you to the site.



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### **Additional Scheduled Events at Wind Creek State Park**

- Saturday, July 14, 2018 – Star Gaze/Club Meeting – Wind Creek State Park
- Saturday, August 18, 2018 – Star Gaze/Club Meeting – Wind Creek State Park
- Saturday, September 15, 2018 – Star Gaze/Club Meeting – Wind Creek State Park

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### **Report on Star Gaze for 4-H Group at Wind Creek**

The AAS assisted with a star gaze at Wind Creek State Park on Saturday, June 2, 2018. AAS members Allen Screws, Mike Lewis and his son David, and David Blake provided the scopes and expertise. Here's Mike's report and photos of the event:

*The June 2<sup>th</sup> stargaze at WCSP was successful. The Tallapoosa County 4-H club brought out about 25 persons, most of them middle school age kids, to look through the club's telescopes and talk with members. For the first time in 3 years, the club returned to the point known by the park as "Snake Island" next to the North Picnic area to conduct the stargaze. There were 4 from the club, including Allen Screws, David Blake, and my son David and myself. Telescopes were 10" SCT, 10" Dob, 5" refractor and 3.5" refractor.*

*At dusk, skies were mostly clear and through the trees we were able to view Venus setting in the west and Jupiter rising in the southeast. We closed down by 9PM.*

Allen also reported that they were able to view M13 and M65/66.



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### **A Potential Donation to the AAS**

We recently received an e-mail from Major (RET) J W. Stewart offering the AAS a vintage Tinsley 6" Cassegrain telescope. Since the club has no centralized storage space, most of our club scopes and other equipment are kept by various members at their homes. Major Stewart is offering the scope at no cost but it will require some restoration. If anyone is interested in acquiring this scope, please let us know and we will be glad to put you in contact with him.



Here are his comments on the scope:

I have an antique (circa 1928) Tinsley 6" Cassegrain with mount & pedestal that I'd like to donate to the AAS if y'all are interested in having and/or restoring it. I spent several years collecting parts to make it functional, but it's simply too massive to move when my wife retires from federal civil service next year and we leave Alabama.

I'm a member of the ATS, and we know of no other 6" Tinsley Saturn Cass, which is why I'd like to save this one. I'm hoping someone in the AAS or known to y'all has the experience to restore it to original glory.

I've attached a photo, and you can read about my restoration effort on the Cloudy Nights forum: <https://www.cloudynights.com/topic/495313-6-tinsley-saturn-cassegrain-restore/>

This is a no strings attached donation, and I don't mind hauling the scope over to Auburn for the new owner(s).

At this point, the restoration is primarily cosmetic. The Tinsley is usable and provides excellent views when collimated & temperature adapted. Before I found the massive mount, it rode well on a vintage Meade StarFinder EQ. I'd like to keep the rig intact, but if no one wants it, I'll keep the OTA, and proceed with having the tube professionally powder-coated (not happy with my own paint job!).

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## Jupiter is now in prime viewing position

The giant planet Jupiter just recently passed opposition and is now ideally located for evening viewing. Recently, I took advantage of a clear night to bring out my 3.5" Questar and camera and see if I could have any success. The photo below is one of the better results after processing a number of video files.



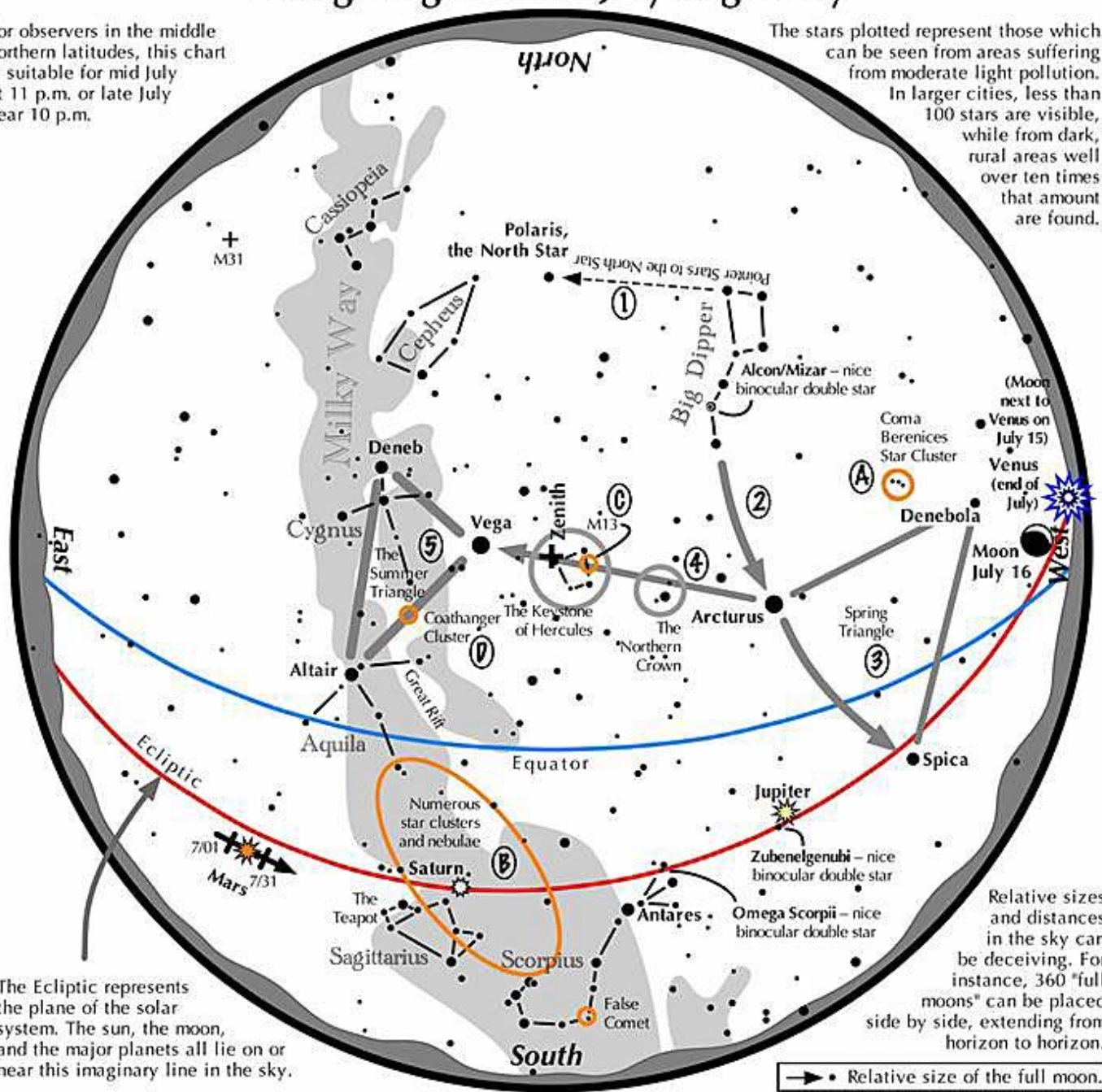
In addition to the 3.5" Questar, I used a 3X focal extender and ASI 174MC camera. I mostly shot 1,000-frame AVI video files which were then processed in Autostakkert!3 software. The final composite file was then sharpened using the wavelet tools in Registax 6.0 and some final touchups were done in Photoshop CC. As you can see in the photo, I caught one of Jupiter's moons (Europa) just before it went behind the planet. In fact, later in the evening while I was still out it did in fact disappear behind Jupiter.

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# Navigating the mid July Night Sky

For observers in the middle northern latitudes, this chart is suitable for mid July at 11 p.m. or late July 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.



The Ecliptic represents the plane of the solar system. The sun, the moon, and the major planets all lie on or near this imaginary line in the sky.

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 mid July night sky: Simply start with what you know or with what you can easily find.

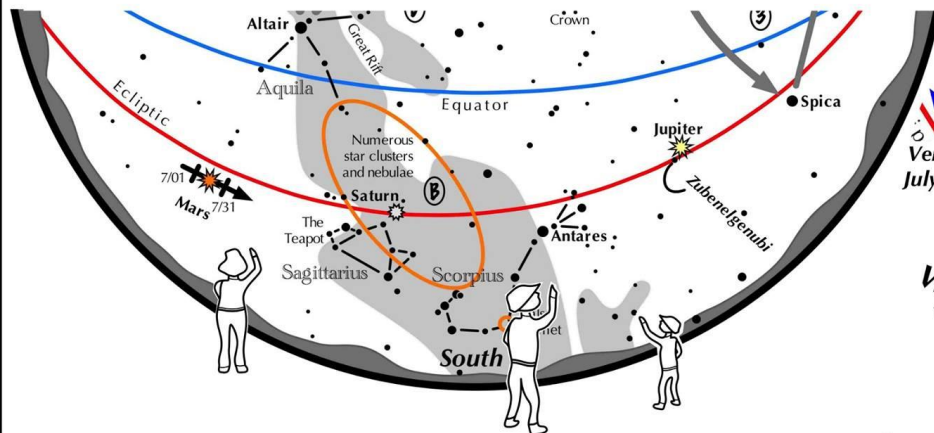
- 1 Extend a line north from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
- 2 Follow the arc of the Dipper's handle. It first intersects Arcturus, the brightest star in the July evening sky, then continues to Spica.
- 3 Arcturus, Spica, and Denebola form the Spring Triangle, a large equilateral triangle.
- 4 To the northeast of Arcturus shines another star of similar brightness, Vega. Draw a line from Arcturus to Vega. It first meets "The Northern Crown," then the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.
- 5 High in the East lies the Summer Triangle stars of Vega, Altair, and Deneb.

### Binocular Highlights

- A: Between Denebola and the tip of the Big Dipper's handle, lie the stars of the Coma Berenices Star Cluster.
- B: Between the bright stars Antares and Altair, hides an area containing many star clusters and nebulae.
- C: On the western side of the Keystone glows the Great Hercules Cluster, containing nearly 1 million stars.
- D: 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
- E: Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.



**If you can observe only one celestial event this month, consider this one:  
See all five bright planets in an early evening in early July**

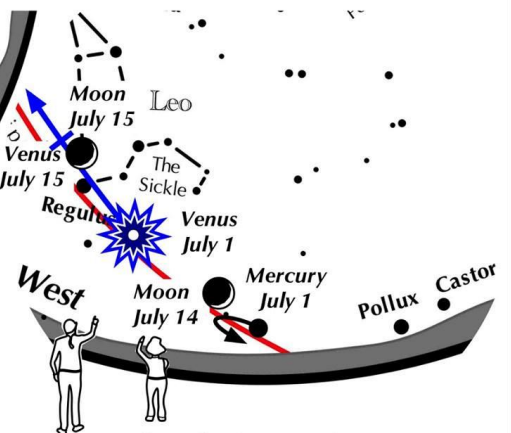


**View from the east to the south to the west  
75 minutes after sunset**

- Jupiter appears high in the southwest close to the binocular double star Zubenelgenubi.
- Saturn shines in south just above the Teapot of Sagittarius. Look through binoculars at the many nebulae and star clusters that inhabit this region. Just to its lower left glows the large globular cluster M22 containing 500,000 stars.



- Mars rises in the southeast, the brightest it has been in fifteen years. It should be outshining mighty Jupiter. What color is the "Red Planet?" Each evening it appears to move slightly westward.



**In the western sky, the inner planets move**

Look to the west-northwest 40 minutes after sunset.

- During the last few evenings in June and the first few in July, Mercury will be low above the horizon, and to the left of Pollux and Castor. Binoculars will help pick out the smallest planet in the bright sky. On July 14, the thin crescent Moon will be directly above Mercury, which will have dimmed significantly since July 1.
- Venus will be easily seen shining above the western horizon in the darkening twilight. It passes Regulus on July 9. Use binoculars to better see this.
- The crescent Moon hangs between Venus and Regulus on the evening of July 15.

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For additional information about the club and our activities, check out the following links:

The Auburn Astronomical Society web page: <http://www.auburnastro.org>

The AAS Facebook page: <http://www.facebook.com/groups/7986423351/>

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## Auburn Astronomical Society Membership Application Form

Name:

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Address:

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City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

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

E-mail:

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Telescope(s):

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Area(s) of special interest:

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Enclose: \$20.00 for regular membership, payable in January. *Full-Time* student membership is half the Regular rate.

If you are a **NEW** member joining after the first of the year, refer to the prorated table below

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

Make checks payable to: Auburn Astronomical Society and return this application to:

Auburn Astronomical Society  
c/o John Wingard, Secretary/Treasurer  
#5 Wexton Court  
Columbus, GA 31907

For questions about your dues or membership status, contact: [jwin1048@gmail.com](mailto:jwin1048@gmail.com)

**Thank you for supporting the Auburn Astronomical Society!**