Newsletter of
The Black River Astronomical Society
Guidescope

Lorain County, Ohio **May 2015**

Club Website: blackriverastro.org **Newsletter submissions: Editor**

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Sunday, May 3, 8:30-10 p.m.: Full Moon Hike, Wellington Reservation

Wednesday, May 6, 7 p.m.: Regular monthly meeting, Carlisle Visitors Center. Program: Guest Speaker - Matthew Dolloff, Project Lead Engineer with NASA's Electrical Power Systems

Friday, May 8, 9-11 p.m.: Public observing, Nielsen Observatory

Saturday, May 9, 9-11 p.m.: Backup date, public observing

Sunday, May 10, 1-4 p.m.: Solar observing, Sandy Ridge Reservation

Thursday, May 14, 7 p.m.: Board Meeting, Blue Sky Restaurant, Amherst, Ohio *

Friday, May 15, 10-midnight: Public observing, Nielsen Observatory

Saturday, May 16, 10-midnight: Backup date, public observing

Sunday, May 17, 11 a.m.-3 p.m.: Solar observing at Kayak Symposium, Lakeview Park

Sunday, May 24, 9:30-11 p.m.: Starlight Hike, Wellington Reservation

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Last Call for
Artwork Submissions

The Black River Astronomical Society is planning an astounding array of activities to celebrate The Worldwide Solstice Festival on Sunday, June 21, 2015. In addition to fabulous food, great music, solar-system tours, and a formidable lineup of sun-seeking telescopes, we'll also be showing off the remarkable creative talents of our members. For one day, the summer kitchen of the Benjamin Bacon House will be transformed into an astronomical art gallery showcasing pieces in any style and medium, all united in celebration of our Sun, its influence on our planet, and its place in the celestial cornucopia of the universe.

If you would like your work to be included in the gallery, please email photos and descriptions of up to three pieces to kellyalenericks@gmail.com for consideration. All media are accepted: photography, painting, drawing, sculpture, pottery, textiles, etc. Works will need to be display ready—framed or otherwise supported and protected—prior to the festival. And make sure all submissions relate to the spirit and intent of the Worldwide Solstice Festival. Though the imagination and expressive prowess of our members is considerable, space in the gallery is unfortunately limited. Be assured that we will include as many member submissions as possible.

The deadline for submission is May 31, 2015. You may contact me at the above email address with any further questions.

~Kelly Ricks

For more information about the World Wide Solstice Festival, check out our event page on Facebook: https://www.facebook.com/groups/worldwidesolsticefestival/

Matt Dolloff, NASA Glenn Research Center, To Speak

The guest speaker at our regular monthly meeting on Wednesday, May 6 is Matthew Dolloff, Project Lead Engineer with NASA's Electrical Power Systems. He has given several outstanding talks at CVAS.

BOARD SUMMARY APRIL 9, 2015

The meeting was called to order at 6:55 p.m. with eight Directors present. Minutes were read and unanimously approved, as was the Treasurer's report. Committee reports followed with the *Guidescope* editor Bill Ruth reporting that all was well. The Website Committee head Lee Lumpkin reported that he had the roster of members ready to send to Bill, who would distribute it to all members. Under Instrumentation, John Reising and Greg Cox reported that the black C-14 needed to be moved forward on its mount a little as it was tail heavy. The bolts that hold the Losmandy mount to the pier are also loose and Greg will fix this. The OTAA committee had nothing to report. The Metro Parks Liaison reported that the LCMP had been contacted again about the red lights not working in the observatory, and that Tim Fairweather had been sent a copy of the repair request. Programming is set for the year and is as follows:

May	NASA speaker Matt Dolloff	This is new...Kelly Ricks and Jeff Walsh who were to do the May program were kind enough to postpone their program to accommodate Mr. Dolloff.
June	Dave Lengyel	Slide show of old BRAS events
July	Dan Walker	The Equation of Time.
Aug.	Len Jezior	Optical Filters: why, how and when?
Sept.	John O'Neal	Review of the Worldwide Solstice Festival
Oct.	staff	Elections and a video. The Annual Meeting of the Members.
Nov.	Jim Walker	A physics topic TBA
Dec.	staff	Annual Christmas Pot Luck at Amherst Beaver Creek Reservation

Under Old Business, the first topic was a brief discussion of the Member Directory that Lee Lumpkin was getting ready to disseminate. Next was a brief discussion of club jackets. Greg Cox reports that we have five people who have expressed interest in buying one. We will mention them again at the next General Meeting. Next came a follow-up report from John Reising about the Lorain Horse Council annual overnight camp-out at the Equestrian Center at Carlisle. We usually open the observatory for them, and John reported that their next camp was Saturday May 16th. We have Public Observing that weekend, so accommodating them will be easy, and we agreed that we would open the Nielsen as usual for them (and the public).

The most time was spent on final plans for Astronomy Day on April 12th at Sandy Ridge. Kelly Ricks would bring a Dobsonian reflector to set up inside to demonstrate this type of scope and she will also bring her Milky Way display. Dave Lengyel volunteered to bring his PST to set up outside for solar observing. Also outside, Mike Harkey will bring the club's Lunt Hydrogen Alpha scope, Greg Zmina will bring his PST, Jeff Walsh will bring his white light filtered scope and Tim Kreja will also

bring a solar scope. Inside, Len Jezior will bring an astrophotography display, Dan Walker will do the Birthday Star program as well as the "Your Weight on Other Worlds" program. We will have Sky & Telescope handouts, club handouts and brochures and we will sell eclipse glasses for $1.00. Schauer will bring a refractor, a Schmidt-Cassegrain, and a spotting scope and a pair of big binoculars to display as telescope types. Greg Z. will also bring a large scale atlas to display. Dan Walker will bring his Meter Sun display as well.

Under New Business, there was some discussion as to whether it would benefit the club to become a tax- exempt nonprofit organization. Schauer will discuss the matter with an accountant to see what the advantages would be and how involved the paperwork is.

The next topic was a new discussion about moving the club's archives from John O'Neals property before John retires and moves to North Carolina next year. This material consists of books, papers, photo albums and slides and other materials that need to be stored somewhere climate controlled rather that in a rented storage building or a garage. Jeff Walsh may have room. We will follow up on this after John O'Neal gets back from vacation. Next was one of the more pleasant tasks the Board performs: we got to vote in two new members. We welcome Nelson Cleary and David Zedella to the club!

Dates were set, and the meeting was adjourned at 8:45 p.m.

~Steve Schauer

NEW OUTREACH OPPORTUNITY—KAYAK* SYMPOSIUM

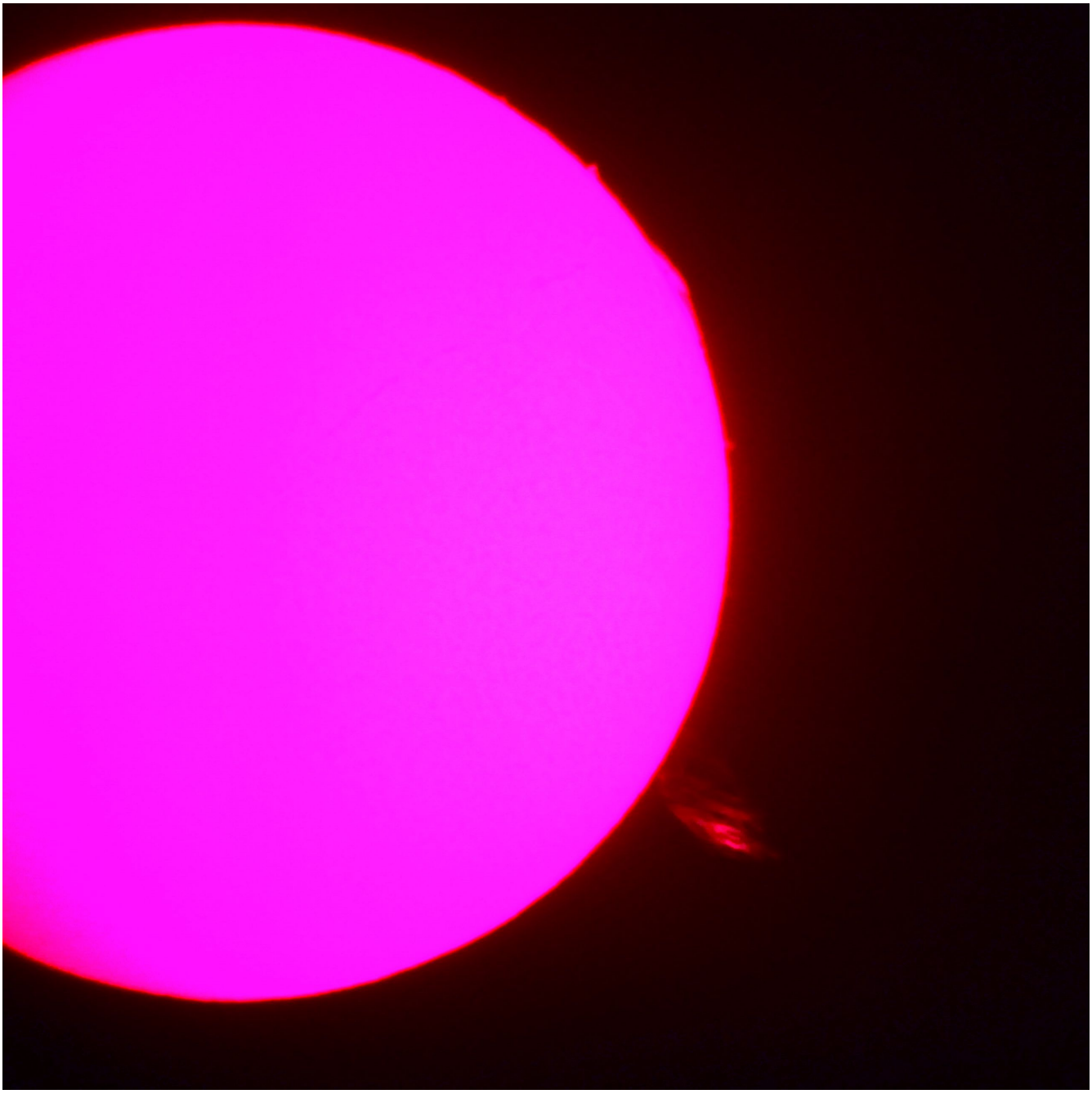
The club has been offered a new outreach opportunity that should be fun for us, a service to the community, and an opportunity to gain new members. The Lorain County Metro Parks holds a Kayak Symposium every year in conjunction with a local kayak club. We have been asked to set up our solar telescopes while the event is proceeding. We will offer solar viewing, exhibits on the Sun and we will have a table where we can hand out information on the club and sell eclipse glasses. The event is at Lakeview Park in Lorain (1800 West Erie Ave) and runs from 11:00 a.m. to 3:00 p.m.

We will need help to run this event. If you have a solar telescope or a scope with a white light filter, please bring it. If you don't have a scope, we still need help staffing the displays, distributing handouts, club brochures and business cards, and selling solar glasses.

These events are fun, give us a chance to interact with the public and also give us a chance to get to know each other and new members. Please join us, if you can. One of our biggest events of the year will be the Worldwide Solstice Festival coming up on June 21st, and the Kayak Symposium will be a bit of a rehearsal for that event, so please join us!

~Steve Schauer

(*"kayak" looks the same forward or backward, just like a kayak. –ed.)



Solar prominence, possible erupting filament 4/28/15. PST and eyepiece projection. Photo by Dave Lengyel

Starting My Astronomical Journey

I suppose, like so many of us, the cosmos caught my attention early on. As a child, I watched every TV program on "space" my parents would allow. I was riveted to Disney's version of how we'd explore space in the future. As a youngster, I remember thinking I'd be in my 30s when Halley's Comet would next visit Earth... how "OLD" I would be. (What a disappointment that was!) Then there were the promos for Celestron Newtonians next to the "Sea Monkey" ads in the back pages of my favorite magazines, now called "Graphic Novels".

My interest in "space" was there for as long as I can remember. One night while on patrol in Viet Nam, we were down for the night. I found myself staring into a night sky without any light pollution whatsoever. For the first time in my life, this city-boy got a vision of the Milky Way, not to mention the billions of stars. What an epiphany! I found myself drawn up, thinking how small and insignificant I and the rest of this planet really was. I'd heard there's at least 50 "shooting stars" a night. You just can't see 'em for the polluted sky. I didn't know about 50, but there they were. My realization of the night sky would never be the same again.

Returning home and growing older, astronomy took a back seat to getting married and raising a family but that spark of that experience never died. Then one year, my wife gifted me with the very Celestron I drooled over so many years prior. I was hooked as I launched myself into this avocation. While I knew my sciences, I knew little about the tools. My education began in the school of hard knocks. Photography was also an intense hobby and marrying it to astronomy seemed like a match made in heaven (pun not intended). I was so wrong. Film was expensive and exposure was unpredictable. 90 black frames prompted the processing company to suggest I remove the lens cap when using my camera. That began my real journey into astronomy and astrophotography.

My eyes being what they are today, camera and scope compensate for my deficient eyesight. I'm rewarded in finding the hidden treasures to be seen in the night sky. It continues to impact my deepest, most inner self. For that, I am both grateful and pleased. Astronomy and astrophotography are not exactly "social" endeavors, but it has taught me a lot and brought me closer to people as varied as the celestial objects I observe. I've learned economy, technique, patience and open-mindedness. It continues to spark my imagination and creativity.

I hear that this is the golden age of astronomy and I couldn't agree more. We've learned more about our universe in the last 20 years, than in all the other time we humans have peered into space. The last 100 years have seen absolutely astounding events with incredible discoveries and advancements previously unimagined. I am so glad to be a part of it. I think exploring the night sky may have been one of my smarter choices. It certainly has been a most rewarding one. Some guys carry around photos of their kids and grandkids. I have pictures of my telescopes. Go figure.

~Len Jezior

My astronomy story...

I started this adventure in the 60s and 70s thanks to Mom and Dad and a department store telescope. This led to further, bigger department store telescopes through the years, not knowing better. There was no Internet to teach be about REAL telescopes and I simply always walked past the magazine racks never ever seeing *Astronomy* or *Sky & Telescope*. Later in life after nine years of military service, I picked up, you know it, another department store telescope! That left me disappointed, still not knowing better. Again, now in my 30s in 1994 the Internet was here, for me at least, and I got bit by the bug again. This time, I searched and found Richard Berry's book *Build Your Own Telescope* and took off! I was taken by his 10" Dobsonian but knew that would have to wait. Ordered a 4-inch mirror and diagonal from Orion and built my first reflector, a REAL telescope. Made the tube from heavy-walled PVC tube and a ply Dob base just in time to see an incredible wonder! HALE-BOPP!!!! Joined this motley group of telescope nuts known as the BRAS and started to learn! Unfortunately, job changes and family strife forced me to drop out of that great group after four years and hang up astronomy...'til last year. Rebuilt the 4" this time with an old Meade 2130 steel tube and then bought a dream come true: an Apertura 10" reflector! Now we're talking REAL telescopes! Joined the BRAS again...some old familiar faces, but some are gone. Planning on even more aperture soon! This time I think I'll stick with it, life has gotten settled so why not!
~Mike Snodgrass

My astronomy spark

My astronomy spark was first ignited when I was in 4th or 5th grade. A local astronomy club set up their telescopes in Freedom Park in Charlotte, North Carolina where we lived at that time, and one of their members showed me Saturn. We had studied Saturn in school, of course, but seeing it live was much different than seeing a photo in a textbook. It was truly one of those "WOW!" moments that happen all too infrequently in life. Like Marty, the spark never seemed to develop much farther until I was an adult living in Ohio. With all the hype about the coming of Comet Halley in 1986, my wife bought me a 4-1/2" Tasco reflector for Christmas and the spark really caught. I used the Tasco for several years, then sold it to a friend and bought a Celestron C-8. Shortly after that, I discovered the Black River Astronomical Society which has helped me become involved to the point that I currently have the pleasure of serving as President. I am struck by how similar my experience is to Marty's, and I am grateful to the person in the Charlotte astronomy club who brought his telescopes out to the park so many years ago. I sincerely hope our outreach projects inspire the same spark in a new generation of astronomers.
~Steve Schauer

The Cosmic Zoo

Look at any sky atlas and, guaranteed, there will always be animal-inspired constellations in the sky in any season. However, spring has by far the most, ranging from winter leftovers to the heralds of fall. So, what's to see at the cosmic zoo?

Starting at dusk, one should look low in the West to spot Sirius, the brightest star in the night sky, which just also happens to be alpha star of Canis Major, the Big Dog. Looking up from Canis Major, one comes to another bright star shimmering in a large void of rather dim stars. This stellar beacon is Procyon, alpha Canis Minor, the Small Dog. Before dallying any longer, look to the left to come upon Orion the hunter. Seeing the belt stars, follow them to a bright orange star, Aldebaran, alpha Taurus the bull. Winter sky done, it's time to move into spring. Animal count: 3.

Look very high in the Southern sky to find a first magnitude blue star, Regulus, the heart of Leo the lion. Staying with Leo, look right to find Castor and Pollux, the twins. In between the bright stars, though, is a slightly twisted 'Y' shape of dim stars in the 3rd magnitude. These stars constitute Cancer the crab. Having found Cancer, look right below it for a circle of dim stars, the head of Hydra, the sky's largest constellation, which snakes (sorry) its way through over 100 degrees of sky. Following Hydra and approaching its tail, one comes to a small trapezoid of second magnitude stars, Corvus the crow. Running total of animals: 7.

For anyone who wants to stay up really late (or get up really early), there are more animals inhabiting the sky. Looking straight up at about 5 a.m., just ahead of the coming dawn, one should see the 'H' shaped constellation of Hercules. Using the cosmic strong man as the starting point, drop down and to the right to come across the rather dim, small constellation of Serpens the snake. From Serpens, drop straight down to a brilliant red star low in the southern sky, Antares, alpha Scorpius the scorpion. That done, look high in the east to find the Summer Triangle. The bottom left star is Deneb, alpha Cygnus the swan. The bottom right? That's Altair, alpha star of Aquila the eagle. In between these two giant birds lies diminutive Delphinus, the dolphin. Animal count: 12.

Racing twilight, there are more animals to spot in this cosmic wildlife watch. Looking east, there is an unmistakable square of second magnitude stars just coming over the horizon: the Great Square of Pegasus, the flying horse. Looking to the Southeast, there is another, but far less conspicuous geometrical shape, a twisted triangle of stars that is Capricorn the sea goat. Looking to the north (and visible at any time) are the Dippers, asterisms within the constellations Ursa Major and Minor, the Great and Little Bears. Last but not least, just below the Big Dipper's handle is a pair of brightish stars, the two-star constellation Canes Venatici, the hunting dogs. Final animal count: 17.

Needless to say, the spring stars make for quite a zoo. The best part: 'admission' is free!

~Denny Bodzash