

Star Stuff

This newsletter is published eleven times per year by:

Ford Amateur Astronomy Club P.O. Box 7527 Dearborn, MI 48121-7527

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Departments

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Webmaster:	Liam Finn
Membership:	Doug Bauer
Newsletter:	Tim Campbell
Equipment:	Jeff Gorman
Speakers:	Sandra Macika

Club Information

The Ford Amateur Astronomy Club meets on the fourth Thursday of each month, except for the combined November/ December meeting which meets on the first Thursday of December – at Henry Ford College Administration Services and Conference Center in Dearborn.

STAR STUFF

Ford Amateur Astronomy Club Newsletter

Secretary's Report

by Jesse Godsey

FAAC Board Meeting Summary – March 3, 2022

Meeting called to order at 7:02 p.m. All board members present. Ten other members attended, for a total of 14 people.

Observatory

Tim Campbell & Tim Dey went to the Lincoln Park Observatory to test boot-up processes and ensure everything is working correctly and identify any maintenance needs. All equipment is working. The telescope mount needs to have polar alignment performed.

Lincoln Park Schools

Tim Campbell reports that Lincoln Park Schools 8th Grade Science classes have requested a solar observing outreach. Tim will work to find a date with appropriate weather and will seek volunteers. Tim annually presents in-class to students based on their 'Space' curriculum (Solar System & Gravity) and will schedule a date for that.

Lake Erie Metropark & Humbug Marsh

Tim Dey will reach out to Lake Erie Metropark regarding the possibility of getting access to using the park as an observing site. Tim has also established a relationship with the management of Humbug Marsh — a new park located just north of Lake Erie Metropark. Humbug Marsh is very receptive to having astronomy events at their park.

Henry Ford Museum

Tim Campbell & Liam Finn have been asked to do presentations at the museum related to their current Apollo exhibit "When we went to the Moon." They are especially interested in topics related to NASA "Spin-

Club Information

Refer to our website for a map and directions:

www.fordastronomyclub.com

Observing

The FAAC primary observing location is Spring Mill Pond located within the Island Lake State Recreation Area near Brighton, Michigan. The Club maintains an after-hours permit. Club members can contact any club officer for procedures to enter or exit the park when the main gate is locked.

The club also has use of a private observing site near Gregory Michigan. See the FAAC Groups.io Group for more information.

Inquiries can be directed to info@fordastronomyclub.com

Membership

Membership is open to anyone with an interest in amateur astronomy. The FAAC is an affiliate of the Ford Employees Recreation Association (FERA).

Fees

Annual - New Members: \$30 Annual - Renewals: \$25 (\$30 if not renewed by Jan 31)

Benefits

Membership includes the Star Stuff newsletter, discounts on magazines, discounts at selected Offs" (Editor's note: NASA Spin-offs are technologies developed for the space program that have applications outside the space program including industry and everyday-life.) Proposed dates are for the Saturdays in April (excluding the Saturday preceding Easter Sunday).

Henry Ford College

The college is now meeting in-person. The planetarium is in the planning & preparation process to allow for planetarium shows. There was some discussion about the club being able to resume in-person meetings in the auditorium. Tim Campbell will look into plans and requirements.

Island Lake State Park & Beginner's Nights

Mike Bruno discussed our observing nights / beginner night and publicizing those to the general public, the board agreed that this would be fine pending parks approval beginning in April.

Liam Finn will work with the park management to renew our observing permit — which grants club members access to use the park for observing outside normal park hours.

Sirius Award

Mike Bruno is accepting nominations for the Sirius Award. This award is presented annual to one club member who stands out for their contributions to the club and astronomy outreach. You may nominate any club member *except* current officers or past winners of this award. Send your nominations to president@fordastronomyclub.com.

Club Banquet & Picnic

Discussion was held regarding the idea of merging this year's Club Banquet with the annual Club Picnic — making this an outdoor event.

Other Business

Arica Flores reported the treasury balance and that the club treasury is healthy.

The club is low on id card badge-holders and lanyards and plans to order more.

area equipment retailers, and afterhours access to the Island Lake observing site and private observing sites.

Astronomy or Sky & Telescope magazine discounts are available by contacting the FAAC club treasurer <u>treasurer@fordastronomyclub.com</u> for the discount form. The form should be sent to the respective publisher with your subscription request and payment. Do not send money directly to FAAC.

The FAAC has a pool of equipment including telescopes, cameras, and other gear used for outreach. Much of the gear can be borrowed for personal use in the interest of furthering your knowledge and experience in astronomy.

Please see the equipment list for further information.

Club Wear

Club logo-wear (embroidered with club logo) can be ordered directly through <u>LLBeanBusiness.com</u>

See the <u>groups.io</u> files section for ordering information and instructions on how to request the correct logo.

Communication

The FAAC uses Groups.io for our email distribution list (both formal and informal discussion.)

Observing nights & locations (scheduled and unscheduled as weather permits), equipment

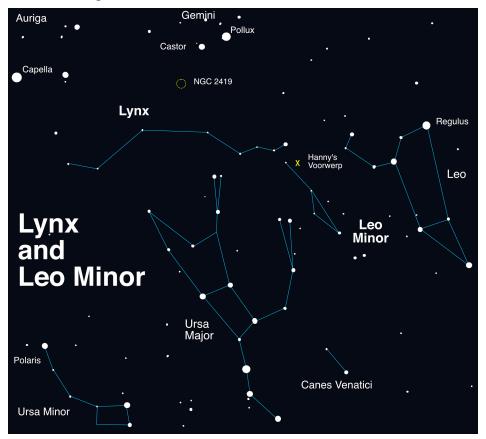
Springtime Catspotting: Lynx and Leo Minor

by David Prosper



Many constellations are bright, big, and fairly easy to spot. Others can be surprisingly small and faint, but with practice even these challenging star patterns become easier to discern. A couple of fun fainter constellations can be found in

between the brighter stars of Ursa Major, Leo, and Gemini: Lynx and Leo **Minor**, two wild cats hunting among the menagerie of animal-themed northern star patterns!



Map of the sky around Lynx and Leo Minor. Notice the prevalence of animal-themed constellations in this area, making it a sort of celestial menagerie. If you are having difficulty locating the fainter stars of Leo Minor and Lynx, don't fret; they are indeed a challenge. Hevelius even named the constellation as reference to the quality of eyesight one needs in order to discern these faint stars, since supposedly one would need eyes as sharp as a Lynx to see it! Darker skies will indeed make your search easier; light pollution, even a relatively bright Moon, will overwhelm the faint stars for both of these celestial wildcats. While you will be able to see NGC 2419 with a backyard telescope, Hanny's Voorwerp is far too faint, but its location is still marked. A few fainter constellation labels and diagrams in this region have been omitted for clarity. Image created with assistance from Stellarium

questions, events, outreaches, etc. are normally discussed via this list.

Join by visiting <u>https://groups.io/g/</u> <u>FordAstronomyClub</u> to request membership.

Articles & Submissions

Your submissions to Star Stuff are welcome! Send your story and/or images to the editor at: <u>starstuff@fordastronomyclub.com</u>

Observatory

The FAAC maintains and operates the Hector J Robinson Observatory (HJRO) at Lincoln Park Schools.

The observatory houses a 14" Celestron C14 Schmidt Cassegrain Telescope as well as other instruments and can be used by club members.

The observatory is adjacent to the athletic field situated between the Lincoln Park Middle School and High School buildings near

1701 Champaign Rd. Lincoln Park, MI 48146

The school system has designated four "key-holders" within the club who have the ability to open the observatory.

Call (313) 444-5850 to learn when the observatory is opening (or request an opening). **Lynx**, named for the species of wild cat, is seen as a faint zigzag pattern found between Ursa Major, Gemini, and Auriga. Grab a telescope and try to spot the remote starry orb of globular cluster NGC 2419. As it is so distant compared to other globular clusters - 300,000 light years from both our solar system and the center of the Milky Way - it was thought that this cluster may be the remnants of a dwarf galaxy consumed by our own. Additional studies have muddied the waters concerning its possible origins, revealing two distinct populations of stars residing in NGC 2419, which is unusual for normally-homogenous globular clusters and marks it as a fascinating object for further research.



Hanny's Voorwerp and the neighboring galaxy IC 2497, as imaged by Hubble. Credits: NASA, ESA, W. Keel (University of Alabama), and the Galaxy Zoo Team Source: hubblesite.org/contents/news-releases/2011/ news-2011-01.html

Leo Minor is a faint and diminutive set of stars. Its "triangle" is most noticeable, tucked in between Leo and Ursa Major. Leo Minor is the cub of Leo the Lion, similar to Ursa Minor being the cub to the Great Bear of Ursa Major. While home to some interesting galaxies that can be observed from large amateur scopes under dark skies, perhaps the most intriguing object found within Leo Minor's borders is Hanny's Voorwerp. This unusual deep-space object is thought to be a possible "light echo" of a quasar in neighboring galaxy IC 2497 that has recently "switched off."

It was found by Hanny van Arkel, a Dutch schoolteacher, via her participation in the Galaxy Zoo citizen science project. Since then a few more intriguing objects similar to Hanny's discovery have been found, called "Voorwerpjes."

Planetarium

FAAC members are volunteer operators for the Hammond Planetarium at Henry Ford College.

Planetarium shows are free and open to the public.

Four seasonal planetarium shows are offered per year with the stars and constellations of the current season as well as a multi-media presentation featuring select planets.

Public planetarium shows are normally offered each Wednesday at 7:30pm and every 2nd Saturday at 3:00pm – however there are some exceptions. Please see the planetarium schedule for specific times. It is posted here:

fordastronomyclub.com/hfcplanetarium

Social Media

The FAAC has several social media accounts. Members are encouraged to join and follow them.

Facebook

facebook.com/FordAstronomyClub

Twitter twitter.com/Ford Astro

MeetUp meetup.com/Ford-Amateur-Astronomy-Club

Scheduled Club Events

Month	Date	Sunset	Location
April	9th	8:08pm	Spring Mill Pond
May	7th	8:39pm	Spring Mill Pond
June	4th	9:05pm	Spring Mill Pond
July	9th	9:11pm	Spring Mill Pond
August	13th Perseid Meteors & Club Picnic	8:46pm	Spring Mill Pond
September	16 & 17th AatB	7:40pm	Kent Lake Beach
October	1st	7:14pm	Spring Mill Pond

Upcoming Club Meeting Topics & Speakers

Meeting	Speaker	Торіс
March 24th	Gerald Dunifer	A Look at Two Very Different Stars: Banard's Star & Pulsar 1913+16
April 28th	Ed Cackett	Science with the JWST: Searching of the First Stars

March Talk Details

A Look at Two Very Different Stars: Barnard's Star and Pulsar 1913+16

Jerry Dunnifer, Prof. Emeritus at Wayne State University

Barnard's Star is the second-closest star to the Sun at a distance of about 6 light years. It is a red-dwarf star with a mass and size considerably less than our own Sun. At least one planet has been detected in orbit around Barnard's Star. Pulsar 1913+16 is actually a double star with two neutron stars in orbit around their common center of mass. A close study of the orbital motion has resulted in the first indirect detection of gravitational waves, resulting in a Nobel Prize in Physics in 1993.

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Leo Minor & Lynx (Con't from page 4)

Lynx and Leo Minor are relatively "new" constellations, as they were both created by the legendarily sharp-eyed European astronomer Johannes Hevelius in the late 1600s. A few other constellations originated by Hevelius are still in official use: Canes Venatici, Lacerta, Scutum, Sextans, and Vulpecula. What if your eyes aren't quite as sharp as Johannes Hevelius – or if your weather and light pollution make searching for fainter stars more difficult than enjoyable? See if you can spot the next Voorwerp by participating in one of the many citizen science programs offered by NASA at science.nasa.gov/citizenscience! And of course, you can find the latest updates and observations of even more dim and distant objects at nasa.gov.

Speaker Info (Cont'd from Page 5)

Bio:

Jerry Dunifer is a Professor Emeritus at Wayne State University. He was a member of the faculty in the Department of Physics & Astronomy for 35 years. Since retirement, one of Jerry's hobbies has been visiting a number of the major and historic astronomy observatories around the World.

Equipment

The FAAC maintain an equipment pool of telescopes, binoculars, cameras, and other equipment used for special events. Much of this equipment is available to members.

Each piece of equipment is either stored by a club volunteer who offers to be the caretaker of the item, or by the person who last borrowed the item. Most equipment can be borrowed for one-month durations. At the end of the month, the borrower can extend the loan if no other members have requested it.

Some items are reserved for special events use and are not normally available to be borrowed.

If you are interested in borrowing an item, please contact either the current holder of the equipment, or contact the club equipment manager, Jeff Gorman, at <u>equipment@fordastronomyclub.com</u>

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Telescopes		Display Items	
TK1 Coronado Personal Solar Telescope (Doublestack) w/Meade Autostar Goto Mount	Jessica Edwards	Astronomy Event Sign (3' x 6')	Gordon Hansen
TK5 4.5" Reflector on Fitz GEM mount	Bob MacFarland	Astronomy Event Signs 18x24" (x8)	Liam Finn
TK6 8" Orion XT8i Dobsonian	Sean Pickard	PVC Display Board - Folding	Sandra Macika
TK7 TPO 8″ f/4 Newtownian Astrograph (OTA Only - no mount)	Bhru Patel	Banner - Small (24" x 32")	George Korody
TK8 20" f/5 Obsession Dob, Ladder & EP Kit	Liam Finn	Banner - Medium (24" x 72")	Sandra Macika
Presentation Tools		Banner - Large (32" x 16')	George Korody
Projector (older)	Jim Frisbie	Tri-Fold Presentation Boards	George Korody
Projector (newer)	Gordon Hansen	Other	
Projection Screen 8'	John McGill	Canopy (10' x 10')	Liam Finn
Projection Screen 6'	Liam Finn	Pop Cooler	Sean Pickard
Bullhorn	George Korody	TA Sky Quality Meter	Liam Finn
Speaker System w/Wireless Mic	Liam Finn	Demonstration Tools	
DVD Player	Dennis Salliotte	Weigh on Planets Scale	George Korody
		Lunar Phase Kit	Bob MacFarland
		100' Scale Model Solar System Kit	Bob MacFarland
		NSN Meteorite (Outreach) kit	Sandra Macika

ltem	Held by
Imaging Cameras	
C2 Meade Deep Sky Imager Pro III w/Autostar Suite	Gordon Hansen
C6 Canon 60Da Astrophotography DSLR and accessories	Tim Dey
Other Imaging Equipment	
CA1 Rigel Systems Spectrascope	Gordon Hansen
C7 Canon EOS EF 70-200mm f/1.4L IS USM lens & tripod mounting ring (for Canon EOS cameras)	Gordon Hansen
Rokinon 8mm f/3.5 Fish-Eye Lens (Canon EOS Mount)	John McGill
Special Event Items - Not available for Loan Out	
BK2 Zhumell 25x100 Binoculars, hard case, & Zhumell TRH-16 tripod w/soft fabric bag	Sandra Macika
TAK1 Night Vision Image Intensifier for telescopes (2" barrel size)	Tim Dey