

Strings, Stars and Spirits Ferdinand National Forest – October 29, 2016



Photo by Dave Kube

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The EAS newsletter, Observer, is published monthly. Anyone wishing to contribute articles or photos may mail them to the club's PO Box: EAS, PO Box 3474, Evansville, IN 47733, or e-mail them to the editor at:

dasiceman@yahoo.com

The **Evansville Astronomical Society (EAS)** is a non-profit organization fully incorporated in the state of Indiana. It has, as its primary goal, the advancement of amateur astronomy. Founded in 1952, the society seeks to:

- 1... maintain adequate facilities for its members and the public in order to extensively study the skies and
- 2... promote an educational program for those who wish to learn more about the science of Astronomy.

Meetings are held the third Friday of each month, except June, when the annual EAS picnic is held. The society also sponsors monthly Open House events during the warmer seasons that afford the public an opportunity to tour the observatory.

EAS 2016 Officers and Contacts

President – Scott Conner
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Vice President – Tony Bryan

Secretary – David M Kube
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Treasurer – Ted Ubelhor

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Tony Bryan

News editor – David Kube
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For more information about the EAS or directions to the Observatory, please visit the club's web page:

www.evansvilleastro.org



Local Events and Information

EAS Schedule Update:

Please Note that we have a Regular Meeting scheduled for Friday, November 18th, 2016 at the Observatory, beginning at 7:30pm. Presentation scheduled to be a 35 minute video narrated by Morgan Freeman entitled "Cosmic Voyage". Prior to the presentation we will recap the year.

EAS Update:

Please Note that we have our Christmas Potluck and Astronomy Quiz scheduled for Friday, December 16th, 2016 at the Downtown Museum, beginning at 7:30pm. Location is Tentative and should be announced in next meeting.

EAS Update:

Please Note that we have a Regular Meeting scheduled for Friday, January 20th, 2017, beginning at 7:30pm. Location is tentative.

EAS Update:

Please Note

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Please Note

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Telescopes and accessories for sale...

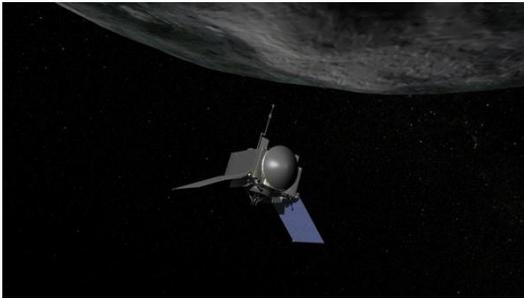
As mentioned in last month's issue, Mike Borman still has some excellent telescope equipment and imaging accessories for sale. Some of the gear has already been sold. If interested, go to Mike's web page. Here is the link: <http://www.mborman.org/forsale1.htm>

SETI Tunes Into Tabby's Star with Radio Telescopes.



Robert C. Byrd Green Bank Telescope at the National Radio Astronomy Observatory (NRAO), Green Bank, West Virginia Flickr/ Jiuguang Wang

Hunting for the Origins of Life on a Possibly Dangerous Asteroid.



This artist's concept shows the OSIRIS-REx spacecraft approaching the asteroid Bennu. NASA

The Exoplanet Closest to Home has a New Observer.



ESA/Hubble & NASA

Even though SETI Berkeley chief scientist Dan Werthimer called it a billion to one shot, Tabby's Star may offer an intriguing (if remote) chance at finding evidence for intelligent alien life if it exists, and a large radio telescope may offer the best shot we have at detecting it.

The data collected on West Virginia's Green Bank Telescope Wednesday night, along with two more nights of observation scheduled to happen over the next two months, could add a little more fuel to the debate about what's causing the star's light to dim and brighten at irregular intervals. If, as some astronomers have suggested, the culprit is a massive alien construction project, that civilization may also be sending radio waves out into space. That's what SETI researchers hope to find with a new instrument mounted on one of the world's largest radio telescopes as part of the Breakthrough Listen Initiative.

On September 8, 2016, NASA deployed its OSIRIS-REx spacecraft on an extraterrestrial mission: to track down an asteroid hurtling towards earth.

The asteroid, nicknamed Bennu, isn't projected to hit until the 22nd century, and even then it has a less-than-one-percent chance of doing so. But scientists are taking no chances: the spacecraft will travel for two years to reach the surface of the asteroid, collect a sample of surface material, and return to Earth by 2023. Scientists plan to analyze the trajectory of Bennu and calculate the risk it poses to the planet—which, at an impact size of 500 meters across, could end up making a crater on Earth's surface about 3 miles wide. "That would really be bad news for a few congressional districts," said Richard Binzel, professor of Planetary Sciences at MIT and a co-investigator on the OSIRIS-REx mission, at a recent talk on the mission hosted by the Kavli Foundation.

The Parkes Radio Telescope in southeastern Australia is trained on Proxima Centauri, the star closest to our sun, and the planet recently discovered there. After two weeks of commissioning work, the Parkes telescope aimed its giant radio dish toward the star Monday in the hopes — however scant — that the planet known as Proxima B hosts life, of the sort that can communicate using radio waves.

"Nearby stars are naturally very interesting to us, and of course nearby planets by extension," Andrew Siemion, director of the Berkeley SETI Research Center and member of the Breakthrough Listen team, said in an interview. "That's why knowing there's a potentially habitable planet around our nearest neighbor is such an exciting thing."

December 2016

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16 Potluck 7:30 @ Museum	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

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Up and Coming Events 2016

Regular Meeting, Potluck and Quiz – Friday, December 16th @ 7:30pm @ Museum - Tentative

Regular Meeting – Friday, January 20th @ 7:30pm, Location to be Determined

Regular Meeting – Friday, February 17th @ 7:30pm, Location to be Determined

Moon Phases

New Moon	First Quarter	Full Moon	Third Quarter
December 29 th , 2016	December 7 th , 2016	December 13 th , 2016	December 20 th , 2016

Moon Phases courtesy of Time and Date.com

2017 Calendar Specials

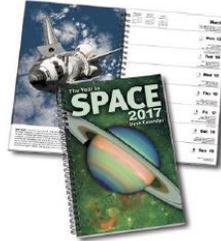


Wall Calendar

Retail Price - \$12.99

EAS Special Price - \$8.00

Wall Calendars available in October



C:\Users\Family Computer\D

Desk Calendar

Retail Price - \$19.95

EAS Special Price - \$15.00

Desk Calendars available in November

Strings, Stars and Spirits Ferdinand National Forest – October 29, 2016 Continued



Photos by Dave Kube

An evening in the Forest with Members of the Ferdinand A.C.O.R.N group and EAS club members Dave Kube and Don Schenk. There was some song, food, wine and an evening topped off with observations of many astronomical targets. This was a great event and location for observing.

EAS MEETING for October 21st, 2016

CALL TO ORDER - by Vice President Tony Bryan @ 7:34pm with 15 members present and 1 guest

READING OF MINUTES - Motion to accept the minutes from August 2016, as published in the October Newsletter was carried by the attending membership.

UPCOMING EAS EVENTS

V. Pres., are there any up-coming special functions, Open Houses, (recent or soon)

Ferdinand A.C.O.R.N.	Saturday, October 29th.	6:30pm EDT
PSW (Public Star Watch)	Saturday, November 5th	7:30pm
Regular Meeting	Friday, November 18th	7:30pm
Regular Meeting	Friday, December 16th	7:30pm @ Museum - tentative
Regular Meeting	Friday, January 20th	7:30pm @ Museum - tentative

VISITOR INTRODUCTION - 1 guest

TREASURER'S REPORT -

Ted had a family emergency and not present - Ted sent email with basic information.

We have 49 Paid memberships - Calendars should be available by next meeting.

Check for the mower has cleared so we have less than last month.

SPECIAL PROJECTS -

Scott Conner is machining a plate for the attachment of the focuser for the Astro-Tech AT8RC 8" f/8 Richey-Cretien astrographic reflector. This will save us a load of money (parts are very expensive). Scott is currently waiting for a specific job to finish that leaves room for our parts to be ran at no cost.

OLD BUSINESS

Ferdinand Folkfest - Held on September 17th - Dave Kube reported that it was a cloudy day and Solar viewing was very spotty at best. Mark Miller, Don Schenk and Dave Kube were able to setup and see through some pot holes and talked with about 50-75 guests. Rock Emmert reported that there wer many good reviews and the festival is grateful and enjoys that we take part in this event.

LAS Star Party - Originally scheduled for October 1st was postponed due to poor weather. New possible dates are October 22nd or 29th. It was updated the 29th would be the new date.

Tree Cutting - On October 7th, Tony Bryan came up and cut down the two trees that were inside the fence area. He removed the majority of the cuttings to the area where we have been piling branches but run out of steam prior to getting everything thrown in the gully. He also mowed the grass inside the fenced area, as well, noting that the new mower requires no steam to operate.

PSW October 8th - Dave Kube reported that we had 13 guests - 2 of which were from the college. Observing was good. Mount was not issue but difficulties with the dome binding in rotation.

Fall Cleanup October 15th - We had a nice turn-out of members to help with cleanup and maintenance activities. To name a few tasks completed; Floors were cleaned, Dome area was vacuumed and picked up, gutters were cleaned out, residual material from the two tress was removed, the lawn was mowed and the

EAS OBSERVER NEWSLETTER

mower was winterized. Thanks to Don Schenk, Mark Miller, Mitch and Loraine Luman, Dave Kube, Ken Harris, Scott Conner, Santiago Arrufat, Tony Bryan.. did I miss anyone – Thanks to all.

Don't forget Dues were due July 1st. If you have not had a chance to pay them please send a check payable to the EAS PO Box 3474 Evansville, IN 47733.

Dave Kube reported that the Rebate for the mower came in and was better than expected. Final numbers is we paid \$1984.93 for the 50" Gravely Zero Turn Mower.

NEW BUSINESS

Election of Officers – At the November meeting, will elect EAS officers for 2017. The current slate of officers is; President – Scott Conner, Vice President – Tony Bryan, Secretary – Dave Kube, Treasurer – Ted Ubelhor, Counselors – Michael Borman, Kent Brenton and Ken Harris. Our current board has agreed to run for office again, with reversing of roles for Scott and Tony. The counselor position up for election x _____, Mitch Lumin expressed an interest in serving as a counselor. If any member in good standing desires to run for office, they can announce that either this meeting or prior to elections at the November meeting.

PSW - We have our next PSW on Saturday November 5th at 7:30 pm. It is always great to see members show up for these events.

Vogel School – Kim Elpers from Vogel School contacted Scott and asked if we could bring telescopes to Vogel School in Evansville at 1500 Oak Hill Rd from 5:00-7:00 on Tuesday, November 8th. She stated that there is a large field on the back side of the school and thought it would be great for viewing. The students at Vogel are high poverty (80%) and this would be a huge experience for them. She is also arranging to have the lunar and asteroid samples that same night. There are about 600 students plus their families that could possibly attend, so the greater the number of telescopes the better. Dave Kube reminded us that November, 8th is Election Day. Don Schenk said he could help.

Troop 397 – Jeremy Gorman, Scoutmaster for Troop 397 on the Westside of Evansville contacted Scott. . The scouts mentioned interest in astronomy and Jeremy recalled a time he, as a scout, attended a camporee at Lynnville Park with a theme of astronomy. He said he still has the patch that resembles EAS logo. He thought about having the troop camp at Lynnville Park Campground. Then was hoping that EAS would assist or we the leaders of the troop assist EAS in providing some star glazing with our equipment and cover merit badge merit material. Jeremy was thinking of the weekend of November 12th or 19th, and he noticed PSW on the 5th of November, and thought maybe that would be better. He attached Astronomy merit badge requirements to the email he sent Scott. His contact info: jeremygorman@outlook.com 812-746-5055 – No Final Day has been set

Project Acorn of Ferdinand – As stated last meeting, Dave Kube is coordinating with Rock Emmert from the Project ACORN committee for a fun stargazing night this fall in the Ferdinand State Forest. "We're really looking forward to it--combining music while its daylight with stargazing in the dark with possibly a little homemade wine to share." The evening will likely be called "Strings, Stars, and Spirits". Project ACORN is an acronym for Art, Community, Originality, Rhythm, and Nature. The date has been set for Saturday, October 29th. Dave will be attending the event and all are invited to come help with event starting at dusk.

Annual Christmas Party/Astronomy Quiz - The Annual Christmas Party/Astronomy Quiz will be during the December meeting Friday, December 16, 2016 at the museum in Evansville. Everyone is asked to bring a small dessert or snack to share. The Quiz Master will be Mitch Luman. Prizes for different levels will be awarded to the winners. Please NOTE that also the JANUARY & FEBURARY, 2017 meetings will tentatively be held at the MUSEUM.

A total solar eclipse will take place one year and two days from today (on August 21st, 2017). Don't pass this up.

Storage Room Remodel - There is a great need to remodel the back storage room by removing cabinets, replacing ceiling, retrofitting a sink, repairing drywall, and adding sturdy shelves. Tony and Scott, along with others who might sync up with us will do the work. A budget of \$300 is estimated to complete the work. Completion of the effort will allow us to put the room to good use. If you feel a worthy project, a motion is requested to proceed. Motion was made and Seconded. Motion Carried by attending membership to proceed with this project.

PROGRAM

The program for Tonight: "Adventures at Pennyrile Stargaze" presented by Mark Miller.

ADJOURN MEETING-8:10pm