STAR TRAK

Look for close encounter of the planet kind

The two brightest planets, Venus and Jupiter, will have a close encounter in evening twilight late in November. They will be less than 2 degrees apart on Nov. 22-24. Observers around latitude 40 degrees north will see brilliant white Venus about 10 degrees above the southwest horizon a half hour after sunset, with fainter Jupiter about 2 degrees above it.

Saturn will be 25 degrees high in the south-southwest an hour after sunset at the start of November and 15 degrees high an hour earlier by month's end. The ringed planet will glow bright yellow near the Teapot formation of the constellation Sagittarius. Its largest moon, Titan, will be visible with any telescope. The best views of Saturn with a telescope will be when it is highest soon after nightfall. Its ring system will be tilted 25 degrees to our line of sight.

Hal Kibbey
INDIANA UNIVERSITY

The outer planet Uranus will be just past opposition at the start of November, visible all night among the background stars of the constellation Aries. It will reach peak altitude of 60 degrees due south around midnight local time. By month's end the planet will be highest in the south around 9:30 p.m., but there will be no bright star nearby to help in finding it. Its distinctive blue-green color will be a pretty sight in binoculars or a telescope.

Mars will rise just before the start of morning twilight in early November but about two hours before the sun by month's end. The golden-orange planet will pass less than 3 degrees to the upper left (north) of the bright white star Spica on Nov. 8-12.

Mercury will cross the face of the sun on Nov. 11 and then have its best morning appearance of the year. On Nov. 28 it will be conspicuous in the brightening twilight, gleaming 10 degrees high in the east-southeast 45 minutes before sunrise.

Meteor shower

The annual Leonid meteor shower will peak on the night of Nov. 17-18. Moonlight will cut into the maximum rate, which would otherwise be about 15 meteors per hour before the start of morning twilight. The shower's radiant, the point from which the meteors appear to come, will be in the constellation Leo. The bright star Regulus is part of Leo and can serve as a marker for the radiant. The farther sickle-shaped Leo climbs above the southeastern horizon, the more meteors there will be all over the sky.

The Leonid meteors are caused by streams of dust particles from Comet Tempel-Tuttle. They strike Earth's atmosphere at 44 miles per second, the fastest of any meteors, so they produce more fireballs than most showers. More information about meteor showers is available from the American Meteor Society at https://www.amsmeteors.org/meteor-showers/.

Moon phases

The moon will be at first quarter on Nov. 4, full on Nov. 12, at third quarter on Nov. 19 and new on Nov. 26.

Hal Kibbey is a retired science writer for Indiana University and is an amateur astronomer. Email him at hkibbey@indiana.edu or see Star Trak at http://newsinfo.iu.edu.

OUTDOOR BRIEFS

REEL Rock film tour tonight at BCT

The REEL ROCK film tour, which features rock climbing and outdoor adventure films, will begin at 6 p.m. today at the Buskirk-Chumley Theater, 114 E. Kirkwood Ave., Bloomington. Tickets are $15 general admission and $10 for students with ID or who are younger than age 18. This is the third year that Sycamore Land Trust has hosted the film tour in Bloomington. Proceeds will go to the land trust's work.

Project FeederWatch begins Nov. 9

Cornell Lab of Ornithology's Project FeederWatch will being on Nov. 9. The long-running, citizen scientist project detects shifts in bird populations and helps build long-term databases that help scientists deal with challenges birds may be facing.

Participants make two-day counts each week from November through early April. They can spend as much or as little time as they like collecting data. Even counting birds once or twice all winter has value. Project FeederWatch is a joint research and education project of Cornell Lab of Ornithology and Bird Studies Canada. To join the project, sign up online at FeederWatch.org or call 866-989-2473. In return for a participation fee of $18 participants receive the FeederWatch Handbook and Instructions with tips on how to successfully attract birds to feeders, an identification poster of common feeder birds and more.

Channel catfish to be stocked

This fall, staff with the Indiana Department of Natural Resources will stock more than 80,000 channel catfish across Indiana by November. Stocked catfish will be 8-10 inches in length. District fisheries biologists determine the number of fish to be stocked by the size of the lake and management strategy. These stockings occur annually or every other year based on expected harvest rates and how many catfish are available. For information on where to fish for catfish, go to the Where to Fish map at wildlife.IN.gov/3591.htm. For channel catfish regulations, go to eregulations.com/indiana/fishing/fishing-regulations/. For fish stocking locations, go online to wildlife.IN.gov/5457.htm.

District forester receives national award

On Friday, Indiana Department of Natural Resources district forester Janet Eger received the National Office of the Society of American Foresters 2019 Presidential Field Forester Award at the SAF Conference in Louisville. In Indiana, Eger covers District 7, which includes Lawrence and Orange counties. She is being recognized nationally in District 9, which covers the northeast area of the United States. Eger joined the Indiana Division of Forestry in 1981 and has been a district forester since 1993.

SAF noted Eger's innovative methods and record of excellence, especially her work with landowners. This is the second national award Eger has received. She was elected as an SAF fellow in 2006. SAF Fellows are recognized for exemplary action, sustained leadership and advancement of the forestry profession.

Submit news for the Outdoors briefs by noon Wednesday by emailing outdoor@heraldt.com. For more information, call 812-331-4359.

Janet Eger, district forester for District 7 in Indiana, received the National Office of the Society of American Foresters 2019 Presidential Field Forester Award at the forester conference on Friday, Nov. 1. (Courtesy photo)

FRIENDS DON'T SHARE
INVASIVE PLANTS WITH FRIENDS

ADVENTURE Outdoors

We all care about the loss of wildlife, insects, birds and other flora and fauna in our incredibly beautiful and diverse Hoosier landscape. We can learn about the damage invasive plants have on our remaining natural areas, understand the solutions and take action.

It's simple, remove invasive plants and replace them with the plants native to our region.

You can make a difference on your land, with your friends, your family, your neighbors, your church group, your book club, your business, your park, your schools, your

A branch of invasive callery pear with flower clusters and leaves.

your church group, your book club, your business, your park, your schools, your apartment building and on ANY small area of space within your influence.

And remember:
Don't sell invasive plants
Don't buy invasive plants
Don't grow invasive plants
Don't accept invasive plants from friends

Your assignment is to learn more and take action. Reach out to www.mc-iris.org (Monroe County Identify and Reduce Invasive Species) for information.

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Take Control: Controlling Invasive Plants and Planting Natives

A workshop to learn how to identify and control invasive plants of Monroe County. The class will be held on Saturday November 16, 1 to 4 pm at Southeast Monroe County YMCA, Room Fit 1 (2125 S. Highland Ave.)

Invasive plants are one of the biggest threats to Monroe County's forests. Help fight them by learning how to identify and control them! Attendees must register at http:/evite.me/ymmrR37js2
Hosted by Ellen Jacquart MC-IRIS.org

MC-IRIS Monroe County Identify and Reduce Invasive Species