



Flagstaff Festival of Science: Inspiring Discovery for 20 Years!

# TO THE MOON AND BEYOND

## PASSPORT

# Sept. 20 – 29

The Best Ten Days of The Year

- Astronaut Charlie Duke
- Science in the Park
- Open Houses
- Star Parties
- Field Trips
- SCI Talks



The Festival is a Flagstaff Unified School District sanctioned event.

## MORE THAN 100 ACTIVITIES – ALL FREE!

Did you know **every astronaut** who walked on the Moon **trained in Flagstaff?**

### Flagstaff's Lunar Landmarks Trail Map & Passport

Flagstaff Visitor Center, One E. Route 66

**FREE**





**MONDAY, SEPT. 16**  
**Pre-Festival Bonus Event!**  
**Lunar Lecture: Meet an Astronaut in Training**  
**7 - 8 p.m.**  
**CCC Lone Tree Campus**  
NASA astronaut candidate Jessica Watkins and senior astronaut Donald Pettit will discuss the training involved for space travel!



**Friday, Sept. 20 • 7 p.m.**

**W. L. Gore & Associates Keynote Presentation:**  
**To the Moon and Beyond with Apollo 16 Astronaut Charlie Duke**



Free tickets are available online or in person at the NAU Central Ticket Office ([nau.edu/cto](http://nau.edu/cto); 928-523-5661)

**Science in the Park**  
10 a.m. - 2 p.m.  
Wheeler Park  
Check out the Lunar Rover replica robot created and demonstrated by local teen CocoNuts! Explore other worlds in 3D with planetary geologists, get muddy with archaeologists, fix holes in hearts with engineers in the Gore tent and count down to a rocket launch at 1 p.m. Today you're a scientist!

**NAU Science and Engineering Day**  
Noon - 3 p.m.  
NAU Science and Health Building  
Dueling robots, hissing cockroaches and the latest technological inventions will surprise you! Free parking behind Cline Library.

**Tynkertopia Open House**  
3 - 6 p.m.  
2152 N. Fourth Street  
Suites 106-109  
Visit Flagstaff's STEM/STEAM Community Center. Bring your curiosity, playfulness and creativity!

**John Wesley Powell's River Trip and the 1869 Eclipse**  
Richard Quarteroli, Historian  
7 p.m.  
Riordan Mansion State Historic Park  
Find out why the solar eclipse and other astronomical events were important to John Wesley Powell and his crew on their first Colorado River expedition.

**BONUS EVENT**  
**Wednesday, Sept. 18**  
**Ocean Plastic**  
Maria Campbell, Azulita Project  
Trey Highton  
Save the Waves Film Festival  
5:30 p.m.  
Mountain Sports Flagstaff  
Join a local marine biologist and Save The Waves Coalition for a discussion about our oceans, climate and plastic pollution.

**To the Moon and Beyond Ballet Preceding the Keynote Presentation**  
7 p.m., NAU Ardrey Auditorium  
Performers from the NAU Community Dance Academy will prepare you for an other-worldly journey!

**W. L. Gore & Associates Keynote Presentation:**  
**To the Moon and Beyond with Apollo 16 Astronaut Charlie Duke**  
7 p.m., NAU Ardrey Auditorium  
General Charlie Duke trained in Flagstaff before becoming the 10th man to walk on the Moon! Hear about his lunar experience and the future of space travel from this pioneering rocket man! Get free tickets at NAU Central Ticket Office, or view live on YouTube: <https://m.youtube.com/c/flagstafffestivalofscience>



**Campus Sky Viewing**  
7:30 - 10 p.m.  
NAU Campus Observatory  
On a clear night, let the Barry Lutz telescope be your window into the universe!

**SATURDAY, SEPT. 21**

**Sea of Tranquility Hike**  
9 a.m. - 1 p.m.  
Flagstaff Ranger Station  
Hike in a crater field, Flagstaff's version of the Moon's Sea of Tranquility, where Apollo 11 astronauts trained. Prepare for a 4-5 mile walk over uneven terrain, dress appropriately, bring water and snacks. We'll watch a short film, then drive to the site. Reservations required, 928-527-8259 or [jeannestevens@fs.fed.us](mailto:jeannestevens@fs.fed.us)

Visit [scifest.org](http://scifest.org) for information about the Lunar Legacy Lecture Series!

A circular logo celebrating the 50th anniversary of the Flagstaff AZ Lunar Legacy. It features a stylized moon and the text '50th Anniversary FLAGSTAFF AZ LUNAR LEGACY'.

**Campus Sky Viewing**  
7:30 - 10 p.m.  
NAU Campus Observatory  
On a clear night, explore the universe!

**FRIDAY, SEPT. 20**

**Joy Cone Tours**  
Register for a refreshing tour showcasing high-altitude ice cream cone technology! Participants must be older than 5, at least one adult for every two children. Reservations required, [flag.tours@joycone.com](mailto:flag.tours@joycone.com)

**For program updates and changes, visit us on Facebook and [scifest.org](http://scifest.org)**

Free parking behind Cline Library in lot P13; \$2/hr. parking in the garage nearest Ardrey Auditorium

# SUNDAY, SEPT. 22

## Tagging Monarch Butterflies

8:30 - 11 a.m.

*Bubbling Ponds*

*Fish Hatchery*

Become a field biologist and tag colorful migrating Monarch butterflies as they refuel on sunflower nectar! Find out more at <https://swmonarchs.org/upcoming-events.php> and make your reservation at [info@swmonarchs.org](mailto:info@swmonarchs.org)

## Hart Prairie Preserve

### Nature Walk

10 - 11: 30 a.m.

*Meet at the Fort Valley Plaza*

*Shopping Center*

*1000 N. Humphreys Street*

*(SW corner near the guardrail)*

Learn about birds, wildflowers, forest ecology and The Nature Conservancy's efforts to restore the alpine meadow on this 90-minute walk! No dogs please.

## Elden Pueblo Public Day

10 a.m. - 4 p.m.

*West side of Hwy 89 at*

*Townsend-Winona Road*

Explore excavations, analyze artifacts, play primitive hunting games and learn about the lives of prehistoric people before they left the Flagstaff area. Tours at 10 a.m., noon and 2 p.m.

## Walk on Mars

Noon - 4 p.m.

*Sinagua Middle School*

*Main Gymnasium*

Learn from planetary scientists about Mars' land formations as you walk across a giant, gym-sized landscape map of Mars. Explorers of all ages are welcome!

## Grand Canyon Science:

### The Next 100 Years

3 - 4:30 p.m.

*USGS Building 3*

*Conference Room*

Join in the conversation as scientists look back, discuss what we know today and predict what we may see in the next 100 years!

## Swear Not By the Moon: Myths and the Moon in Shakespeare's Plays

5:30 - 7 p.m.

*Museum of Northern Arizona*

*Branigar Hall*

Enjoy a live performance and lecture reflecting on the role the Moon played in science and psychology from the Renaissance to modern day.

## First Man in the Northland

*Kevin Schindler, Lowell*

7 - 8 p.m.

*Riordan Mansion*

*State Historic Park*

The first man to walk on the Moon, walked here first! Retrace Neil Armstrong's steps before he made one giant leap for mankind.

## Campus Sky Viewing

7:30 - 10 p.m.

*NAU Campus Observatory*

Let campus astronomers be your guides to the universe on a cloudless night!

**For program updates and changes, visit us on Facebook and [scifest.org](http://scifest.org)**

# MONDAY, SEPT. 23

## Overtime Otaku

(AW)

3 - 4:30 p.m.

*East Flagstaff*

*Community Library*

Explore science in Japanese comic books. Ages 10 and up.

## Science in Stacks

(AW)

3:30 - 4:30 p.m.

*Flagstaff Downtown Library*

Join in as librarians share their favorite science books and experiments. Ages 8 - 12.

## Small Satellites

### Looking for Life

(AT)

*Evgenya Shkolnik, ASU*

4 - 5 p.m.

*Lowell Observatory*

Scientists may be on the verge of something big with something small: a space satellite called SPARCS (Star-Planet Activity Research CubeSat) that is looking for Earth-like planets.

## Ants of the Colorado

### Plateau

(AW)

4 - 5 p.m.

*Museum of Northern Arizona*

*Colton Research Center*

*Center for Biocultural Diversity*

*Schaefer Building #35*

Children are invited to join an interactive program with microscopes and live specimens! Observe ants in their colonies!

## Exploring Martian Caves for Life, Shelter, Storage

(AT)

*Jut Wynne, Ph.D., NAU*

5 - 6 p.m.

*Lowell Observatory*

Scientists are looking at Martian caves for future robotic and human exploration. They may also serve as shelter and storage, and could contain microscopic life!

## Lowell Open House

5 - 10 p.m.

*Lowell Observatory*

View the stars and listen to engaging presentations. Free admission begins at 5 p.m.

## Plotting the Plateau

5:30 - 6:30 p.m.

*Flagstaff Downtown Library*

Join this book club that features the Colorado Plateau and NAU Career. Pick up a copy of "Dare to Lead" by Brene Brown at the Downtown Library Information Desk.

## Bacterial Genomes and Judo for Health

(RI)

*Talima Pearson, Ph.D., NAU*

6:30 - 7:30 p.m.

*NAU Applied Research &*

*Development Bldg. 56,*

*Large Pod Conference Room*

Technological advances have helped researchers understand the genetic content of bacteria. Find out how this helps us fight pathogens that are evading immune systems, vaccines and treatment. Find full event details and parking instructions at [scifest.org](http://scifest.org).

## What is Altitude Training?

(AW)

6:30 - 7:30 p.m.

*Hypo2 Conference Room*

*(NACET building)*

Thousands of elite athletes come to Flagstaff to train at high altitude. Learn about physiological changes and advantages visiting athletes are receiving.



(EC)

**Early Childhood** for preschool to 3rd grade

(AT)

**Afterschool Talk** for middle school and high school students

(AW)

**Afterschool Workshop** for ages noted in the event description

(TT)

**Twilight Talks** for high school students and adults

(RI)

**Research Innovations** for college students and life-long learners

## TUESDAY, SEPT. 24

### Toddler Tales EC

11 a.m. - 12:30 p.m.

*Flagstaff Downtown Library*  
Your toddler will delight in this special time for science-themed stories and songs.

### Astronomy for Preschoolers EC

1:30 - 3 p.m.

*Flagstaff Family Food Center*  
Lowell Observatory Camps for Kids (LOCKS) Preschool introduces young minds to features and phases of the Moon! Parent attendance and participation is required. Ages 3 - 6.

### Imagine, Create, Learn AW

3 - 6 p.m.

*Tynkertopia*  
Engineer your own creation using recycled materials. All ages welcome!

### Crafty Corner Science Edition

3:30 - 4:30 p.m.

*East Flagstaff Community Library*  
Join in a fun-filled afternoon of science-themed crafts. Ages 5 - 13.

### Catapults! AW

4 - 5 p.m.

*Coconino Community College, Fourth Street Campus*  
Test your skills at projectile motion. Build your own catapult to take home! For ages 6 - 12. Reservations required, melinda.mckinney@coconino.edu

### Into the Canyon AW

4 - 5 p.m.

*Museum of Northern Arizona*  
Join in a nature walk down the Rio de Flag Canyon. Become an ethnobotanist and search for native plants used by Native American cultures. Create a gourd craft to take home!

### Water in Our Solar System AT

4 - 5 p.m.

*Lowell Observatory*  
The Earth is sometimes called the water planet, but you might be surprised to find out how much water exists elsewhere in the solar system!

### Teen Café: Aeronautical Engineering & Flight Control AW

4:30 - 6 p.m.

*Bookmans*  
Learn about aeronautical engineering and flight control in paper airplanes. Explore different launching techniques!

### Sleeping at High Altitude AT

5 - 6 p.m.

*Lowell Observatory*  
Explore the effects that living in high altitude have on sleep.

### DNA Rewriting the Human Story

6 - 7 p.m.

*Flagstaff Downtown Library*  
Discuss "A Brief History of Everyone Who Ever Lived: The Human Story Retold Through Our Genes," by Adam Rutherford. Books available at the Flagstaff Downtown Library Information Desk.

### Meet William Henry Holmes: Artist, Geologist, Renaissance Man TT

6:30 - 7:30 p.m.

*Alan Petersen, MNA*  
*Museum of Northern Arizona Branigar Hall*  
After working on a geological survey of the Rocky Mountains, William Henry Holmes focused on the Grand Canyon. His 1880s artwork became iconic images.

### Animal Bone Artifacts & Tools AW

6:30 - 7:30 p.m.

*Willow Bend Environmental Education Center*  
Animal bones have been used to make needles, musical instruments and hair pins. Archaeologists have studied tool-making techniques used by prehistoric people and want to share them with you!

**For program updates and changes, visit us on Facebook and scifest.org**

### Stargazing at 9,000 Feet

6:30 - 9 p.m.

*Arizona Snowbowl*  
*Hart Prairie Lodge*  
Touch the sky from the Hart Prairie Deck with local astronomers! We'll start with a presentation inside and meet the stars as night falls.

### Movie Night: *First Man*

7 - 10 p.m.

*NAU Cline Library*  
Enjoy this showing from the NAU CAL Film Series about Neil Armstrong's historic steps on the Moon. Stay afterward to discuss the cinematography behind the biographical drama. The movie is rated PG-13. Find full event details and parking instructions at scifest.org.

## WEDNESDAY, SEPT. 25

### The Math in Dots EC

9 - 11 a.m.

*Association for Supportive Child Care*  
*2708 N Fourth Street*  
Join us in the courtyard to explore math books "Press Here" and "10 Black Dots." Families can engage in activities that promote creative thinking.

### Preschool Express EC

10:30 a.m. - 12:30 p.m.

*Flagstaff Downtown Library*  
Enjoy science-themed stories, songs, games and more. For ages 4-5.

### Downtown Geology Tour

1 - 2 p.m.

*Mountain Sports Flagstaff*  
Join Willow Bend and Mountain Sports on a walking tour through the eyes of a geologist. Discover the ancient history of stones used in buildings. Reservations required. Pick up your free ticket at Mountain Sports Flagstaff or sign up at Willow Bend <http://willowbendcenter.org/downtown-geology-sustainable-building/>

The best  
10 days  
of the year!  
**scifest.org**



### Astronomy for Preschoolers EC

1 - 2:30 p.m.

*East Flagstaff Community Library*  
Lowell Observatory Camps for Kids (LOCKS) Preschool introduces young minds to features and phases of the Moon! Parent attendance and participation is required. Ages 3 - 6.

### Planetary Science on Display

1 - 4 p.m.

*NAU du Bois Center*  
Learn about local research during the Northern Arizona Planetary Science Alliance Poster Session. Free parking pass available at NAU Walkup Sky Dome parking lot. Select special permit for Festival of Science at Sky Dome kiosk, print and place on dashboard. Take a short walk to du Bois.

### Imagine, Create, Learn AW

3 - 6 p.m.

*Tynkertopia*  
Engineer your own creation using recycled materials. All ages welcome!

**Creation Station** (EC)

3:30 - 4:30 p.m.

Flagstaff Downtown Library

Join us for science-themed stories and crafts. Ages 3 and up.

**Flaming Hot Wednesdays**

3:30 - 4:30 p.m.

East Flagstaff

Community Library

Explore science to the Moon and beyond! Ages 12 - 17.

**Has Flagstaff's**

**Climate Changed?** (AT)

Brian A. Klimowski, Ph.D.,

National Weather Service  
4 - 5 p.m.

Lowell Observatory

Is climate change already happening in Flagstaff? We'll take a look at the data and knock out a few myths.

**Metal Working** (AW)

4 - 6 p.m.

Artisan Metal Works

Learn about metal work through ironworking, welding, bending and plasma cutting. Take home your own creation! Recommended for 5th to 8th grades. Reservations required, 928-773-4959.

**Robots and Drones** (AW)

4 - 5 p.m.

Museum of Northern Arizona

Learn how fun and easy it is to fly a drone or program robot!

**Exploring Insects** (EC)

4 - 5 p.m.

Coconino Community College,  
Fourth Street Campus

Make insect masks and hear an insect-themed story from Marvelous Explorations through Science and Stories (MESS). Reservations required, loriegrissom@yahoo.com. Ages 2 and Up.

**Roving on Mars** (AT)

Ken Herkenhoff, Ph.D., USGS

5 - 6 p.m.

Lowell Observatory

With the recent loss of Opportunity, only the Mars Science Laboratory ventures on. Hear about these missions and plans for the next Mars rover!

**The Science & Engineering of Brewing**

5 - 6 p.m.

Wanderlust Brewery

Take a guided tour of the Wanderlust Brewery. Learn about the beer-making process and how beers get their distinctive flavors. Ages 21 and over.

**Fun with Worms** (AW)

6 - 7 p.m.

East Flagstaff

Community Library

Learn how to harvest, house, feed and care for your composting worms that produce great fertilizer!

**Bacteria as Cancer-Fighting Delivery Systems** (RI)

Jen Martinez, Ph.D., NAU

6:30 - 7:30 p.m.

NAU Applied Research & Development Bldg. 56, Large Pod Conference Room

Find out how bacterial cells can be genetically manipulated to create polymers that can perform tasks like delivering cancer-treating drugs. Find full event details and parking instructions at scifest.org.

**The Science Behind Wipe-Outs**

6:30 - 7:30 p.m.

Flagstaff Bicycle Revolution

We've all crashed on our bikes, and there's usually a scientific reason why we fell. Take a look at some spectacular crashes and learn how to become a better rider!

**THURSDAY, SEPT. 26**

**Preschool Express** (EC)

10:30 a.m - 12:30 p.m.

Flagstaff Downtown Library

Enjoy science-themed stories, songs, games, and more. Ages 4 - 5.

**Zumba Physiology**

Alice Gibb, Ph.D., NAU

12:15 - 1:15 p.m.

Murdoch Center

Join in an hour of cardio-dance. Learn about physiological changes that occur when we exercise. Wear sneakers and comfortable clothes. All ages and fitness levels welcome.

**Astronomy for Preschoolers** (EC)

1:30 - 3 p.m.

Flagstaff Downtown Library

Lowell Observatory Camps for Kids (LOCKS) Preschool introduces young minds to features and phases of the Moon! Parent attendance and participation is required. Ages 3 - 6.

**Imagine, Create, Learn** (AW)

3 - 6 p.m.

Tynkertopia

Engineer your own creation using a wide variety of recycled materials. All ages welcome!

**Lego Club** (EC)

3:30 - 4:30 p.m.

East Flagstaff

Community Library

Join the Lego Club for a special science-themed challenge. For grades K - 5.

**Build Your Own Wind-Powered Vehicle** (AW)

4 - 5 p.m.

Coconino Community College  
Fourth Street Campus

Build and take home your own wind-powered vehicle from the construction shop! Come early for the open house at 3 p.m. Reservations required, melinda.mckinney@coconino.edu. For grades K - 6.

**Anatomy of a Portrait** (AW)

4 - 5:30 p.m.

Coconino Center for the Arts

This drawing workshop invites middle and high school students to learn about skeletal structure in creating human portraits. Reservations required, shawnskabelundstudio@gmail.com.

**Experiencing the Apollo 11 Splashdown** (AT)

Captain Larry Duncan

Retired Navy

4 - 5 p.m.

Lowell Observatory

With a front-row seat to the Apollo 11 splashdown, Navy helicopter pilot Captain Larry Duncan flew in news photographers to capture history in the making. Feel the excitement through images!

**New Horizons Exploring the Kuiper Belt** (AT)

Will Grundy, Ph.D., Lowell

5 - 6 p.m.

Lowell Observatory

NASA's New Horizons spacecraft flew past an hourglass-shaped world earlier this year. Hear what this object can reveal about conditions in the outer solar system.

**Flagstaff Star Party**

6 - 10 p.m.

Buffalo Park

Explore Flagstaff's precious starry sky with professional and amateur astronomers hosting 30 telescopes! Arrive early for presentations. Bring your jacket!

**Mad About the Monsoon** (TT)

Flagstaff Cloud Appreciators

6:30 - 8 p.m.

Museum of Northern Arizona  
Branigar Hall

The North American Monsoon brings beautiful and sometimes violent storms. Take a look at the science behind Flagstaff's rainy season and see some amazing clouds that roam over the Northland.



**WE NEED YOUR FEEDBACK!**

Scan this code or go to our website, [www.scifest.org](http://www.scifest.org), to share your thoughts. Thank you!

**Women in STEM  
Networking Night**

*Julie Lancaster, Consultant  
Lisa Prato, Lowell  
7 - 9 p.m.*

*Firecreek Coffee*

Hear two, 30-minute presentations about how to become an innovative thinker and the search for Earth-like planets. Meet role models, build your network!

**FRIDAY, SEPT. 27**

**Recycling Center Tour**

*1 - 2 p.m.  
Materials Recovery Facility  
Join Willow Bend to see what goes on behind the scenes of recycling. Meet at the facility, northeast corner of Butler and Babbitt. Reservations required, <http://willowbendcenter.org/recycling-center/>*

**Pioneer Museum  
Open House**

*3 - 5 p.m.  
Pioneer Museum  
See the iron lung, learn about medical history, explore the science of blacksmithing and candle dipping, and check out the newest exhibit, Resilience: Women in Flagstaff's Past and Present.*

**Camels in the Sky:  
Our Arabian Astronomy  
Heritage**

*(AT)  
Danielle Adams, Lowell  
4 - 5 p.m.  
Lowell Observatory  
Most star names come from Arabic. Hear about the astronomy folklore behind the names of stars visible during the Festival!*

**Dissections**

*(AW)  
4 - 5 p.m.  
East Flagstaff  
Community Library  
Learn how species evolved to adapt to their environments. Use dissecting tools and take a look at the anatomy of worms, frogs and sharks! Reservations required, 928-606-6653.*

**Bringing Back the  
Black-Footed Ferret**

*(AT)  
Jennifer Cordova, Arizona  
Game and Fish Dept.  
5 - 6 p.m.  
Lowell Observatory  
Find out how wildlife biologists are reintroducing the rare black-footed ferret to the Northland. View skulls, skins and research tools.*

**CCC Science Night  
Celebration**

*5:30 - 7:30 p.m.  
Coconino Community College  
Lone Tree Campus  
2800 S. Lone Tree Road  
Launch water rockets, observe live organisms, participate in chemistry demonstrations, peer through microscopes, view the night sky and make your own catapult! Become a junior scientist and earn a prize! Free parking.*

**Flagstaff Star Party**

*6 - 10 p.m.  
Buffalo Park  
Explore Flagstaff's precious starry sky with professional and amateur astronomers hosting 30 telescopes! Arrive early for presentations. Bring your jacket!*

**Suddenlink Presents:  
SCI Talks**

*6:30 - 8:30 p.m.  
See schedule on  
opposite page.*

**Campus Sky Viewing**

*7:30 - 10 p.m.  
NAU Campus Observatory  
Explore Flagstaff's precious starry sky with professional and amateur astronomers hosting 30 telescopes! Arrive early for presentations.*



**Suddenlink Presents: SCI Talks**

*6:30 - 8:30 p.m.  
Coconino Center for the Arts  
Hear four TEDx-inspired, 15-minute Science, Communication, Innovation Talks. Doors open at 6 p.m., talks begin at 6:30 p.m. Refreshments available for purchase.*

**A River Reborn: The Restoration of Fossil Creek**

*Jane Marks, Ph.D., NAU  
After a century of disturbance, Fossil Creek was restored with its travertine formations, steep waterfalls, deep pools and native fish. Take a look at this ecological success story!*

**Accurate Passion: Fine Art in the Service of Science**

*Victor Leshyk, NAU  
Though sometimes seen as incompatible, science and art have a long history together. Hear how each field supports the other and how the unique field of "SciArt" helps create a well-rounded worldview.*

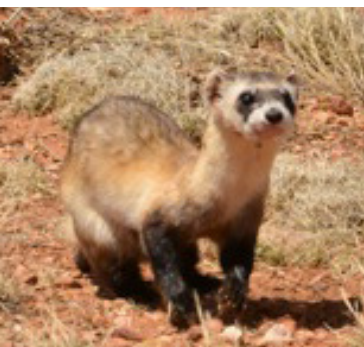
**Reimagining Creativity**

*Sara Abercrombie, Ph.D., NAU  
Learn about the science of creativity and how to harness your own curiosity and interest to live a more innovative life.*

**Tynkertopia: Learning by Doing**

*Veteran educator Alice Christie, Ph.D., shares the Tynkertopia journey, a story about connecting life's meaningful experiences into a culminating endeavor to create Flagstaff's STEM/STEAM Community Center.*

**Suddenlink is the lead Supernova Friend of the Festival supporting SCI Talks.**



# SATURDAY, SEPT. 28

## Tagging Monarch Butterflies

8:30 - 11 a.m.

Red Rock State Park

Tag colorful migrating Monarch butterflies as they refuel on sunflower nectar! Find out more at <https://swmonarchs.org/upcoming-events.php>. Make your reservation by calling Red Rock State Park, 928-282-6907.

## Picture Canyon Hike

9 a.m. - Noon

Picture Canyon

See petroglyphs, wildlife and Flagstaff's only waterfall on this three-mile hike! Bring hiking shoes, weather-appropriate clothes, sun protection, water and snacks. Reservations required, [robert.wallace@flgastaffaz.gov](mailto:robert.wallace@flgastaffaz.gov)

## Homolovi Pueblo Guided Tour

9 a.m. - Noon

Homolovi State Park  
Visitor Center

Take I-40 Exit 257,  
proceed north 1.5 miles

Tour a remote ancestral Hopi village within Homolovi State Park and Observatory. Reservations required, 928-289-4106.

## Walnut Canyon National Monument Open House

9 a.m. - 4 p.m.

Walnut National Monument  
Celebrate your National Park Service Public Lands Day by experiencing a National Park or National Monument near you!

## Wupatki National Monument Open House

9 a.m. - 4 p.m.

Wupatki National Monument  
Celebrate Public Lands Day by experiencing a Northland National Park or National Monument!

## Sunset Crater Volcano National Monument Open House

9 a.m. - 4 p.m.

Sunset Crater Volcano National Monument  
Celebrate your National Park Service Public Lands Day by experiencing a National Park or National Monument near you!

## Apollo Training Sites Hike

9:30 a.m. - Noon

Sunset Crater National Monument  
Meet in front of Visitor Center

Take this guided hike to sites where Apollo astronauts trained. Bring sturdy footwear, a daypack, water, sunscreen, hat and snacks. Reservations required, 928-526-0502.

## Tracking the Health of our National Parks

10 a.m. - 2 p.m.

Walnut Canyon National Monument

If you've ever made a list of all the birds you hear or the flowers you see, you are equipped to be a citizen scientist! Help National Park researchers collect information.

## Prehistoric Tool and Technology Demonstrations

10 a.m. - 2 p.m.

Walnut Canyon National Monument

Participate in hands-on activities featuring prehistoric tools and technology used to grind corn and hunt.

## Ponderosa Forest Ecology Hike

9:30 - 11 a.m.

Walnut Canyon National Monument

This guided hike to a historic ranger cabin will show evidence of wildfires dating to the 1500s and forest change since 1876. Meet in front of the Walnut Canyon Visitor Center. Bring sturdy footwear, a daypack, water, sunscreen, hat and snacks. Reservations required, 928-526-3367.

## Fort Valley Experimental Forest Open House

10 a.m. - Noon

Hwy 180, 1 mile west of  
Snowbowl Road

Join the Friends of Fort Valley as hosts lead tours of historic buildings and discuss ecological restoration and climate change research underway at the nation's first forest research site.

## Full STEAM Ahead

10 a.m. - 1 p.m.

Flagstaff High School

Join the Coconino Coalition for Children & Youth for the 9th annual Early Childhood Fair: Full STEAM Ahead with hands-on activities, movement, resources and healthy snacks. Ages 0 - 8.

## Explore TGen: Home of Flagstaff's Disease Detectives

10 a.m. - 2 p.m.

TGen

Go behind the scenes of the Translational Genomics Research Institute and find out how disease detectives chase down deadly outbreaks.

## Sustainable Building Tour

10 a.m. - 2 p.m.

Willow Bend Environmental  
Education Center

Join Willow Bend, Coconino County and others for the annual self-guided Sustainable Building Tour. See construction methods, rainwater harvesting demonstrations, xeriscape gardening, greywater systems and solar power. Tour packets are available at Willow Bend on the day of the tour.

## Back West Celebration of Stone Balancing

10 a.m. - 2 p.m.

Willow Bend Environmental  
Education Center

Participate in this annual celebration of stone balancing with hands-on activities, a kids area and demonstrations.

## Tynkertopia Open House

10 a.m. - 5 p.m.

Tynkertopia

Visit Flagstaff's STEM/STEAM Community Center. Develop creativity through curiosity, wonder, playfulness and problem solving.

## A Walk in the Woods: Exploring the Ponderosa Pine Forest

10:30 a.m. - Noon

Fort Tuthill County Park

See how the forest is responding to restoration treatments. Find out how researchers at NAU's Ecological Restoration Institute are working to prevent severe wildfires. Meet at the forest resiliency interpretive sign north of the Fort Tuthill Bike Park.

## Saturday Story Stop

10:30 a.m. - 12:30 p.m.

Flagstaff Downtown Library

This family time features science stories and a craft. For all ages.

## National Weather Service Open House

11 a.m. - 4 p.m.

Camp Navajo Army Depot  
Bellemont, I-40, Exit 185

Take a tour, visit with forecasters and technicians, and engage in interactive activities. Catch the weather balloon launch at noon, 2 p.m., and 4 p.m.!

## Fantastic Voyage

Noon - 4 p.m.

Flagstaff Medical Center

This child-sized health fair showcases fun displays and hands-on activities centered on healthcare and the mysteries of the human body.

## Museum of Northern Arizona Open House

2 - 4 p.m.

Museum of Northern Arizona

Check out the exhibits that feature life on the Colorado Plateau.

## Hot Topics Café: Who's in Charge of Space Travel?

3 - 4:30 p.m.

Museum of Northern Arizona  
Branigar Hall

Should space exploration be an international endeavor? Should it be privatized, financed with tax dollars or paid for by advertising? Hear from a panel of scientists and philosophers.

## BIG Event: Believing In Girls

3 - 6 p.m.

NAU Fieldhouse

See how STEM is woven into Girl Scout programming. Explore hands-on activities with other Girl Scouts from all over Northern Arizona.

## Saving the Ocean from Plastic

4 - 5:30 p.m.

Willow Bend Environmental  
Education Center

Find out how to reduce your use of plastic and keep waste out of the oceans. Dig through a mini beach and make a clay creation.

### Flagstaff Star Party

6 - 10 p.m.

Buffalo Park

Explore Flagstaff's precious starry sky with astronomers hosting 30 telescopes. Enjoy "Music Under the Stars" by the Dark Skies String Quartet. Bring your jacket!

### Moon: A World Away, Not a World Apart

Dan Foley, NAU

7 - 8 p.m.

Riordan Mansion State Historic Park

Learn about Arizona's connections to the exploration and understanding of the Moon, and the prospects of future space tourism!

### Homolovi Pueblo Star Party

7 - 10 p.m.

Homolovi State Park Visitor Center

Join in the star party at the new Winslow Homolovi Observatory (WHO). Listen to a program and gaze through the Moore Telescope and I-telescope inside the museum.

### U.S. Naval Observatory Open House

7 - 10 p.m.

U.S. Naval Observatory

The Navy uses the stars to set the world's clocks. Take a tour and find out why the Navy has an observatory so far away from an ocean!

### Campus Sky Viewing

7:30 - 10 p.m.

NAU Campus Observatory

Peer into the universe on a clear night!

## SUNDAY, SEPT. 29

### Lava River Cave Hike

8:30 a.m. - Noon

Coconino National Forest

Step back in time more than 500,000 years to explore lavacicles and splash downs in an ancient lava tube. This primitive, strenuous hike totals 1.5 miles. Reservations required, estephany@latinooutdoors.org

### The Arboretum at Flagstaff Fall Open House

9 a.m. - Noon

Bring the family for hands-on activities, educational exhibits, guided tours, hiking trails and fun in the forest!

### Space, 3D Printing and Design Workshop

10 - 11:30 a.m.

NAU Cline Library Maker Lab

Learn the basics of 3D printing and TinkerCAD to design your favorite space object. Free parking available behind the library. Reservations required, <https://nau.libcal.com/event/5487260>

### Scenic Science Chairlift

Starting at 10 a.m.

Arizona Snowbowl

Soar to the alpine tundra and meet a Ranger at the top to learn about the sky island ecosystem, forest wildlife and geologic formations of the San Francisco Peaks. Call to reserve one of 50 free tickets (limit two per party), [customerservice@snowbowl.ski](mailto:customerservice@snowbowl.ski)



### USGS Flagstaff Science Campus Open House

10 a.m. - 2 p.m.

USGS

Explore interactive displays and activities related to geology, geography, biology, hydrology, planetary science and mapping!

### Hart Prairie Preserve Nature Walk

10 - 11:30 a.m.

Meet at the Fort Valley

Plaza Shopping Center  
1000 N. Humphreys Street

SW corner near the guardrail

Learn about birds, wildflowers, forest ecology and The Nature Conservancy's efforts to restore the alpine meadow on this 90-minute walk! No dogs please.

### To the Moon

2:30 - 4 p.m.

USGS Building 3

Conference Room

Interact with a panel of lunar scientists as they discuss current and future Moon exploration.

### Science History Podcast Live Recording

Frank von Hippel, Ph.D., NAU

5 - 6:30 p.m.

Flagstaff Medical Center

McGee Auditorium

Experience a live podcast about human genetics. Learn about our evolutionary history revealed through the genetic code and our resistance to disease.

### The State of the Climate

7 - 8:30 p.m.

Riordan Mansion State Historic Park

Panelists will share climate science and solutions updates including the first year of implementing Flagstaff's Climate Action and Adaptation Plan.

### Campus Sky Viewing

7:30 - 10 p.m.

NAU Campus Observatory

Stargaze on a clear night!



## SUPERNOVA FRIENDS



## GALACTIC FRIENDS



## STELLAR FRIENDS

APS • Bonnie Stevens' Communication Station • Coconino Center for the Arts • Ecological Restoration Institute at NAU • Robert and Sheila Edgar • Joy Cone Flagstaff • Kevin and Gretchen Schindler • Little America • McCarthy & Weston • McClanahan Family Fund • Nestle Purina • NAU Center for Ecosystem Science and Society • NAU College of the Environment, Forestry, and Natural Sciences • Riordan Mansion State Historic Park • Rocky Mountain Research Station

## PLANETARY FRIENDS

Arizona Snowbowl • Arizona Space Grant • Byron and Jennifer Hayes • Bruce and Jane Hungate • Clear Aire Audio • Coconino Coalition for Children & Youth • David and Janet Gillette • Flagstaff Unified School District • KAFF Radio • Greg and Alicia Vaughan • Intel Benevity Fund • John and Sara Casciani • Karen Malis-Clark and Shannon Clark • KOLT Country/Rewind The Wolf/The Big Talker • Paul and Deborah Holbrook • Pepsi Cola Bottling Co. of Flagstaff • Pilkington Advertising • Pioneer Title • The Jim St. Leger Family • The Krueger Family • Yavapai Broadcasting

## COMETARY FRIENDS

Brandon and Mackenzie Lurie • Brian A. Klimowski • Cornerstone Environmental Consultants • Joelle and Roger Clark • Noah and Debi Stalvey • Richard and Nelda Vaughan • Tony Hannigan • Virginia Watahomigie



**For program updates and changes, visit us on Facebook and scifest.org**

