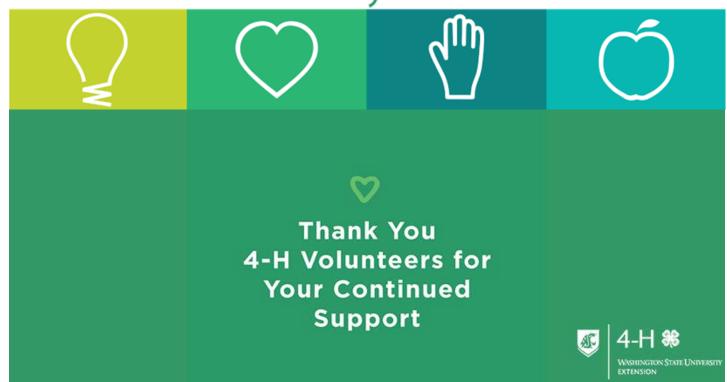
Tuesday News



Tuesday News - October 3, 2023
CONTENTS

FEATURES

- Celebrate 2023 National 4 H Week October 1st through 7th!
- Save The Date! Washington State 4-H Volunteer Recognition Luncheon October 28th!
- Table Sponsorship Packages Are Available for the 2023 4-H Washington State Volunteer Recognition Luncheon
- TSC Fall Paper Clover Campaign Kicks Off on October 4th!
- State 4-H Fair Board Seeks Qualified Candidates For State 4-H Fair Manager Position Opening
- Ask Dr. Universe: Besides Telescopes and Spaceships, How Do We Really Know That There Are Other Planets? > NEW!
- Ask Dr. Universe: Why Do Cats Purr?
- Q and A Sessions for the Washington 4-H Horse Program Continue Now On First Wednesdays!

Features

Celebrate 2023 National 4 H Week - October 1st through 7th!

Denise Echelbarger



2023 National 4-H Week is October 1 - 7!

Every year, National 4-H Week sees millions of youth, parents, volunteers and alumni come together to celebrate the many positive youth development opportunities offered by 4-H. The theme for this year's National 4-H Week, is a campaign that was created by National 4-H Council to rally support for Cooperative Extension's 4-H program and identify solutions to eliminate the opportunity gap that affects 55 million kids across America.

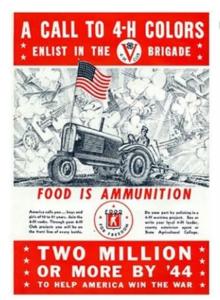
With so many children struggling to reach their full potential, 4-H believes that young people, in partnership with adults, can play a key role in creating a more promising and equitable future for youth, families and communities across the country. In 4-H, we believe every child should have an equal opportunity to succeed. We believe every child should have the skills they need to make a difference in the world.







To learn more about how you can get involved, visit extension.wsu.edu/4h/



History:

National 4-H Week Then and Now

- National 4-H Week began as an outgrowth of World War II
- Following Pearl Harbor, National 4-H Camp in Washington, D.C. was postponed until the cessation of hostilities.
- The State 4-H Leader in Ohio announced plans for a State 4-H Mobilization Week as a means of focusing the attention of 4-H members on what they might do for national defense.
- Other states responded favorably and followed suit. The Federal Extension Service initiated National 4-H Mobilization Week which was observed annually in 1942, 1943 and 1944. The following year and each year since, it has been observed as National 4-H Week.





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Save The Date! Washington State 4-H Volunteer Recognition Luncheon - October 28th!

Jana Ferris



Please join us in honoring our volunteers! Our 2023/2022 Volunteer Recognition Luncheon will be held Saturday, October 28 at 12:30 p.m. at The Armory in Ellensburg, WA. All state awardees (Alumni Award, Salute to Excellence Ten Year and Lifetime, Heather Rider Award, Volunteer Staff Award, [state] Friend of 4-H AND Hall of Fame) for years 2020, 2021, 2022, and 2023 will be honored. Volunteers of the Year and Teen Leaders of the Year for 2022 and 2023 will be honored through narrated video during the program.

All state awardees will receive an invitation directly to reserve their space at the event and will RSVP as indicated on their invitations. Others may attend at a \$20/person cost; registration for non-awardees opens on Friday, September 22, and can be found at: https://www.eventbrite.com/e/722452523947

Contact Jana Ferris at ferrisj@wsu.edu or 360-548-3301



Table Sponsorship Packages Are Available for the 2023 4-H Washington State Volunteer Recognition Luncheon

Denise Echelbarger

TABLE SPONSORSHIP PACKAGES ARE AVAILABLE FOR THE 2023 4-H WASHINGTON STATE VOLUNTEER RECOGNITION LUNCHEON

VOLUNTEERS...



Your sponsorship is a \$250.00 investment that will help the 4-H Washington State Volunteer Recognition Luncheon celebrate the contributions of volunteers who promote the positive development of youth in communities.

Sponsorship includes your logo and recognition on-screen and signage during the event. To sponsor (\$250), go to our direct donation link for Washington State 4-H Excellence Fund at: https://bit.ly/WA4H

or scan the QR code. Under Other, type in \$250, and at proceed to checkout, under Additional Comments please type "Volunteer Luncheon"



If you would like to purchase tickets to attend the luncheon please visit https://www.eventbrite.com/e/722452523947

TSC Fall Paper Clover Campaign Kicks Off on October 4th!

Denise Echelbarger

The Fall 2023 <u>Tractor Supply</u> 4-H Clover Campaign is coming soon!. Tractor Supply campaign funds are to support 4-H camp and leadership experiences.

Planning to work with your local Tractor Supply Store? The store managers and cashiers have a lot on their plate, so it's usually helpful if the local 4-H clubs/program can reach out

(https://www.tsceventpartners.com/events/signup/1).

That interaction can look different, depending on the situation. The clubs can ask to set up a table or display featuring the 4-H program in the store. It could also be as simple as telling them "thank you," or having a foods member bring them a plate of cookies for the breakroom. Anything we can do to stay top of mind is helpful. The campaign will happen either way – because it's programmed into the pin pad now – but when you've got employees who care about the 4-H program and are physically asking, it's always going to be more successful.

Best wishes for a successful Fall Paper Clover Campaign!



State 4-H Fair Board Seeks Qualified Candidates For State 4-H Fair Manager Position Opening

The State 4-H Fair Manager Position Is Now Open!

The job description for the State 4-H Fair Manager position is available for download by clicking <u>HERE</u>.

The State 4-H Fair Manager is not a WSU position, but reports directly to the State 4-H Fair Board. The salary is \$32,500, paid in twelve monthly installments. There are no benefits associated with this position.

This is a part time position of about 1,000 hours annually, with extended hours during August and September, during the fair cycle in Puyallup, Washington.

The position will remain open until filled.

Please forward your cover letter and resume to:

Washington State 4-H Fair Board PO Box 1225 Puyallup, Washington, 98371-0233

or by email to the Fair Board at st4hfair@gmail.com.



Ask Dr. Universe: Besides Telescopes and Spaceships, How Do We Really Know That There Are Other Planets? — Ia, 12, Montana



Check out the latest episode of the <u>Ask Dr. Universe podcast</u> and meet 17-year-old Adah Crandall, a youth climate organizer. She got started as a middle schooler!

Dr. Universe: Besides telescopes and spaceships, how do we really know that there are other planets? - Ia, 12, Montana

Dear Ia,

I looked through a high-power telescope for the first time in college. I couldn't believe how many stars I saw. It's hard to imagine all the planets orbiting all those stars.

I talked about how we know those planets are out there with my friend **Jose Vazquez**. He's an astronomer at Washington State University. He told me that scientists look for planets outside our solar system using a number of instruments—like a photometer. That's a tool that attaches to a telescope and measures light.

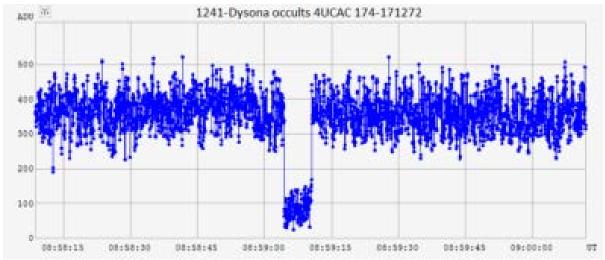
The sun and eight major planets make up <u>our solar system</u>. All the planets outside our solar system are called <u>extrasolar planets</u> or exoplanets. Some of them are called hot Jupiters. Exoplanets orbit other stars—just like we orbit the sun.

The closest exoplanet is nearly 25 trillion miles away. Scientists can't point a telescope and look directly at a planet that distant. They can't send a rover that far. Instead, they look for clues that a planet is there.

One clue is called a <u>light curve</u>. Imagine you're facing a distant star with a planet. As the planet orbits its star, sometimes it will pass between you and the star. The star's light will get dimmer as the planet passes by. Then it will get brighter again.

Scientists measure a star's light using a photometer. They take lots of measurements over time. Then they plot them into a graph called a light curve. Any time the light dims, there's a dip in the graph. The dip shows when the planet passed in front of the star. Generally, the deeper the dip, the bigger the planet.

Scientists also use a light curve to tell how long it takes the planet to orbit its star. They can even tell how hot the planet is and how thick its atmosphere is.



Here's what a light curve looks like, credit: KuriwaObs

In 2009, NASA wanted to see how many Earth-sized exoplanets they could find. They wanted to learn more about the universe. They wanted to see if there were other planets that could support life.

So, they launched a giant space telescope called <u>Kepler</u>. Its main instrument was a photometer. It zoomed around measuring the light from different stars. Then, scientists made light curves and looked for exoplanets.

So far, scientists have found <u>more than 5,500 exoplanets</u>. They've found many more possible exoplanets. Scientists are still combing through the Kepler data. Plus, another space telescope called <u>TESS</u> took over when Kepler ran out of fuel.

You don't have to be an astronomer to hunt for exoplanets. Anybody can use robot-powered telescopes online to look for planets and other objects in space. Or you can look through the **data from Kepler** yourself.

"The <u>MicroObservatory Telescope Network</u> is for anybody who's interested in extrasolar systems," Vazquez said. "With just a few clicks, students can take pictures and try to make contributions to finding these planets."

That's an invitation to do community science that's out of this world.

Sincerely, Dr. Universe

Dr. Universe: Why do cats purr? - Kaylee, 11, Kentucky

Dear Kaylee,

I purr all. the. time. I purr when I get a good question like yours. I purr when I finish answering a question. I even purr when I'm struggling to find an answer. Luckily, **Dr. Sarah Guess** says that's normal. She's a veterinarian at Washington State University. She told me that cats purr when they're content and when they're stressed out. It can be a little confusing for humans.

Scientists have two ideas about why cats purr. It could have come from the way mother cats care for kittens. Or it could keep their bones and tissues healthy. But experts don't agree on the answer yet.

"This is a hotly debated topic among scientists," Guess said. "Purring is something unique to cats, and when it comes to cat communication, we're just starting to scratch the surface."



We do know how cats purr. A cat's brain sends a message to muscles in the cat's throat. Those muscles begin to twitch. As the cat breathes, air whooshes over the muscle, bone and tissue in the throat. They vibrate, and that makes the rumbling sound we call a purr.

A cat's purr can be <u>low or high frequency</u>. That means the sounds move through the air at different speeds. Low purrs and high purrs sound slightly different. Some scientists think purring evolved as a way for moms and kittens to understand each other. Maybe low purrs and high purrs mean different things.

"One thought is that the different frequencies of purring relate to whether the cat is more content or more stressed," Guess said. "That offers feedback from kitten to mother or mother to kitten."

So, mother cats might learn how their kittens feel based on their purrs. Then, they know which kitten needs help. They might purr back to help soothe the kittens. Maybe grownup cats purr to soothe themselves. Maybe they purr to tell you that you're making them feel safe and happy like their mother. Or to ask you to fix something that's stressful like a slightly empty food bowl.

We know some cats **knead while purring**. That's for sure a throwback to when they were kittens. Kneading on their mothers' tummies while nursing helped the kittens get more milk.

The other idea for why cats purr is that the frequency of the purr vibration may be healing.

"Cats tend to be inactive for a lot of the day with <u>sudden bursts of</u> <u>activity</u> surrounding feedings," Guess said. "So, maybe purring creates vibrations that help maintain bone and tissue structure while the cats are in those inactive periods."

So, it's possible cats purr to heal themselves and stay strong. There's even some research that shows that vibrations at the precise frequencies that house cats purr at can help heal human bones and tissues. Maybe your cat purrs to heal its own body or to heal you.

Only a few kinds of cats purr at those frequencies—including <u>cougars</u>. Since I'm a house cat and a coug, maybe I should spend more time aiming my extra-powerful purrs at my human friends.

Sincerely, Dr. Universe

Get more questions and answers here!



Know a kid with a science question?

Help them submit it for a chance to be featured in a future Q&A.

Submit a question!

Q and A Sessions for the Washington 4-H Horse Program Continue – Now On First Wednesdays!

Have questions about the Washington 4-H horse program? Our monthly Q and A for leaders, parents, members, and staff will now be meeting on the first Wednesday of each month via Zoom from 6:30 to 7:30 pm. beginning June 7th.

Zooms are structured around the theme/parameters of horses and youth development. They are more than "what are the rules." There is also time set aside for input on future topics for subsequent Zooms. **The Zoom meeting ID is 452-082-9765 with no passcode**. You must have a zoom account to participate.

The meetings are facilitated by Kim Baker, State 4-H Equine Coordinator.

Feel free to contact Kim with any questions at kim.baker@wsu.edu.

