

Tuesday News



**Thank You
4-H Volunteers for
Your Continued
Support**



4-H 

WASHINGTON STATE UNIVERSITY
EXTENSION

Tuesday News – September 19, 2023

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Features

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



Facilitate the Awesome Modules Coming In-Person to Everett and Via Zoom!



Michael Wallace

Now presenting an opportunity for Westside Parents and Leaders of 4-H Teens! **To register, click on the live link below the flyer!**

Teen Adviser Modules:

Facilitate the Awesome!

Register Now!
Limited Seats
Available

Westside 4-H Teen Adviser Series

🖥️ Zoom: Sept 27 & 29, 7-9PM

🏠 In-person: WSU Everett, WA Sept 30, 10AM-4PM

**Do you want your work with teens to be impactful?
Are you looking for knowledge and skills to build your teen club?**

The WSU 4-H "Facilitate the Awesome" modules are designed to increase adults skill at successfully guiding teen-led projects.

- 📖 **Adolescent Development:** implications of current research
- 📖 **Empowering Teens:** motivating teens through positive youth development models
- 🏠 **Key Elements of Teen Leadership:** how to support strength-based programming
- 🏠 **Creating Safe and Inclusive Programs for Teens:** decision making and risk management

(First two meetings via Zoom, last meeting in-person at WSU Everett.)

Join and interact with other westside 4-H volunteers and parents interested in supporting teen programs through this nationally recognized, fun and informative series. (Followed by a tour of WSU Everett!)

Register Here: <https://tinyurl.com/WestsideFTA>

For more info or ARA request contact: mlwallace@wsu.edu or (360) 778-5813

Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your extension office. Reasonable accommodations will be made for persons with disabilities and special needs who contact the Whatcom Extension office at least 2 weeks prior to the event.

Live Link: Register Here: <https://tinyurl.com/WestsideFTA>

**For more info or ARA request contact: mlwallace@wsu.edu
or (360) 778-5813**

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

Denise Echelbarger

The Fall 2023 **Tractor Supply** 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!



Visit Pullman to Celebrate 4-H Day With Cougar Football On September 23rd!

Denise Echelbarger

Save the date! Celebrate 4-H Day with the Cougs in Pullman on September 23rd vs. the Oregon State University Beavers at Martin Stadium. Game time is yet to be determined. Discounted tickets are available!



4-H Day with the Cougs!
Discounted Tickets Available
[PURCHASE HERE](#)



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 **[HERE](#)**.

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: What Do Robots Eat? Why Do They Have Mouths If They Don't Eat Food? — Oliver, 4, Virginia



Looking for a fun way to share science with kids in your life? Check out the latest episode of the [Ask Dr. Universe podcast](#).

If you'd like to do a student-led podcast with your class or student group, reach out!

Dr. Universe: What do robots eat? Why do they have mouths if they don't eat food? – Oliver, 4, Virginia

Dear Oliver,

I just scarfed down tuna with a side of kibble. That's how I get the energy I need to investigate your questions.

To do that, I talked with [Ming Luo](#). He's a robotics scientist at Washington State University.

He told me that robots don't eat like we do.

"A human has a digestive system," Luo said. "That's how food can be converted to energy. But a robot can't do that. The robot can just take in energy directly."

When you eat, your [digestive system](#) breaks down food into sugars, fats and proteins. They're full of energy. Your cells use oxygen from breathing to release that energy. Then, you can use it.

A robot needs energy, too. But it doesn't have organs to break down food or cells to turn it into energy. It doesn't breathe in oxygen either.

Instead, a robot taps into a source of energy directly. It might get electricity by being plugged into an outlet to charge. It could use a battery that stores electricity. A very large robot might have a system that uses fuel and pressure to inject the robot with energy. That's called [hydraulic power](#).

So, why do some robots have mouths if they don't eat or breathe? Many robots designed to interact with people have faces. That's because people feel more comfortable when robots look a little human.

“For human-robot interactions, it’s better to develop something that looks like the human face,” Luo said. “Many people are afraid of robots. We must figure out the best way for robots to look and behave, so people feel less anxiety.”

It’s a challenge because a robot that looks too human also freaks people out. That’s especially important for scientists designing **robot caregivers**. These robots could live with elderly people. They could help them take medicine or care for their pets.



Luo builds soft robots that are safe for people to touch—like this one that looks like an elephant’s trunk.

Have you heard of artificial intelligence or AI? It’s different from a robot. A robot is a machine designed to do physical tasks—like your body does. AI is a system designed to make decisions or learn—like your brain does. Some robots have AI built in.

I thought it would be fun to ask an **AI chatbot** what food it would like to try. An AI chatbot is a program that can have conversations with people.

“I don’t experience interest in the same way humans do,” ChatGPT said. “However, I find human food fascinating from a knowledge and information perspective.” It told me some of the most interesting foods are spices, **chocolate**, tomatoes, potatoes, sushi and pasta.

Maybe someday we’ll invent chocolate-flavored electricity for our robot and AI friends.

Sincerely,
Dr. Universe

Dr. Universe: Why do dolphins and beluga whales have echolocation and what is it? – Carolyn Grace, 8, Virginia

Dear Carolyn Grace,

Toothed whales—like **dolphins** and belugas—might live in the ocean, but they have some big things in common with cave-dwelling bats. They're all mammals that live in dark places and use echolocation.

That's why I talked about your question with my friend **Christine Portfors**. She's a biologist at Washington State University. Her lab keeps a colony of bats.

Many bats sleep in caves and zoom around at night. Their world is dark, so they use sounds and their echoes to perceive the world around them, which is called echolocation. **Toothed whales** live in dark oceans or **murky rivers** and lakes. That's why they use echolocation, too.

"Whenever there isn't enough light for an animal to do the things that it needs to do like navigate, collect food and find mates, then it has to use some other sensory system besides vision," Portfors said. "So, they send out sound. That sound bounces off objects in their environment and comes back as an echo. They use those echoes to identify objects and navigate."

A bat sends out squeaks from its mouth or nose. A toothed whale sends out clicks from a fatty lump on its forehead. The lump is called the melon.



Photo Credit: Roland Seitre

One of my favorite animals is the **river dolphin**. It lives in rivers so dark and cloudy that its eyes are useless. Instead of looking where it's swimming, a river dolphin uses its melon to shoot out clicks. It can tell a lot from the echoes that return.

"An object is going to produce different types of echoes when a sound hits it depending on where that object is in space," Portfors said. "Is it off to the right or left? Is it straight ahead? Is it up or down? An animal that uses echolocation can

figure those things out all because of the way that the sound comes back as an echo.”

Plus, the sounds don’t hit the object in just one spot. If a river dolphin’s clicks bounce off a tasty fish, the sounds hit a bunch of different parts of the fish. When all those echoes bounce back, the dolphin’s brain forms something like a map or image of the fish and what’s around it. It’s a little bit like how we see—but using sound instead of light.

The sounds bats and toothed whales use for **echolocation** are special, too. Those squeaks and clicks are very high frequency. They’re usually so high that humans can’t hear them at all.

That’s important because **sound travels** in the air or water as waves. The waves from low frequency sounds are far apart. If a river dolphin used low frequency sounds for echolocation, the sound waves might bounce off big things—like a giant underwater rock. But those waves might go around a little fish. That means no echo. The dolphin would have no idea the fish was there.

The waves from high frequency sounds are close together. They’ll definitely hit the fish and bounce back, so the river dolphin can find its meal.

You could say that echolocation using very high frequency sounds works “very whale.”

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.

