Tuesday News – November 7, 2023

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WSU Thurston County Extension 4-H Hosts Rabbit Basics Workshop THIS SUNDAY!
Emily Killeen

Rabbit Basics Workshop
Hosted by the WSU Extension Thurston County 4-H Youth Development Program

Workshop Description: Rabbit Basics is an introduction to caring for and raising rabbits. Topics covered include: housing, feed and water, routine care such as nail trimming, handling, and transporting rabbits. The benefits of rabbits to the home garden and to home-scale permaculture design will also be discussed.

What: Rabbit Basics Workshop – second in the Youth in Agriculture series
When: Sunday, 11/12/23
Time: 1 to 3 p.m.
Who: K-12 grade youth, 4-H and FFA members and their adult mentors (Parents/guardians, advisors, and/or 4-H club leaders are encouraged to attend with youth participants to help supervise and support learning after the workshop.)

Where: Thurston County Fairgrounds, specific building and parking instructions will be shared with pre-registered participants.

Pre-Registration Required.
Please e-mail: tc4h@co.thurston.wa.us

Pre-register by 11/10/23 with youth and adult participant names, club or chapter name, and youth ages. Note: a 4-H parent permission form will be required at check-in for those not enrolled in Thurston County 4-H.

Suggested Donation of $5 per person or $10 per family

Download the workshop flyer HERE!

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Introducing the New State 4-H Fair Manager!
Kirk Gresham

Hello 4-H Families,

I’m excited to introduce myself, Kellian Whidden, to Washington State 4-H families as your new 4-H State Fair Manager.

I bring with me twenty-one years of military experience managing people and projects to the office. I have been involved with 4-H for a number of years – first as a parent volunteer for a couple of years, then spending four and a half years as the 4-H Program Coordinator for Clark County. As the Program Coordinator, I was responsible for managing clubs, editing the Clark County Fair Exhibitor Guide, working with all the Superintendents, and making sure all the 4-H projects entered into the County Fair were judged. The last two years, I participated at the State Fair as the 4-H Horse Superintendent for Senior and Intermediate Performance. I enjoyed working with all the State Fair employees and 4-H families.

I look forward to working with all the 4-H State Fair Superintendents to put on the State Fair in 2024.

Kellian Whidden

Kellian’s contact email is st4hfair@gmail.com.
Celebrate Giving Tuesday On November 28, 2023  
Denise Echelbarger

Dear Friends of 4-H,

#GivingTuesday is a global generosity movement unleashing the power of radical generosity and is a global day of giving fueled by the power of social media and collaboration. It is celebrated on the Tuesday following Thanksgiving, and kicks off the charitable season and end-of-year giving.

Join the movement to give whether it's some of your time, a donation, or the power of your voice in your local 4-H community. In the spirit of friendly competition, each Washington state county 4-H asks local donors to make donations on #Giving Tuesday—Nov. 28, with the goal of receiving at least four donations. The county with the most contributors receives a prize.

Everyone has something to give and every act of generosity counts. Join the #GivingTuesday movement and reimagine a world built upon shared humanity and radical generosity. Support your county 4-H by sharing bit.ly/give-to-4-h.

State 4-H Dog Committee Adopts New 4-H Curriculum  
Jennifer Leach

During the meeting of November 5, 2023, the Washington State 4-H Dog Leaders approved the replacement of The Complete Dog Book for Kids by AKC ©1996 with the 4-H Dog Project Manual (Facilitator Guide for Leaders and 4-H Members) by AKC ©2021 as a curriculum source. The manual will be used to create questions for Showmanship Care and Health Knowledge Topics, Dog Bowl, and any future skillathon event.

4-H Leaders can request one free copy per club by emailing mbo@akc.org. Additional copies can be purchased for $15.00.

The Curriculum Committee will be reviewing and revising the current Showmanship Knowledge Topics and Questions to be published January 1, 2024.

DISCLAIMER: The 4-H Dog Project Manual was a project of Florida 4-H with the cooperation of the American Kennel Club, therefore contains information specific to Florida 4-H, primarily found in Chapter 1 - Introduction. Any information pertaining to Florida 4-H should be disregarded by Washington State 4-H Dog Leaders, members, parents, and volunteers.

Dog parents and leaders—if you have questions, please contact Amie Adams, Chair of the State Dog Committee Curriculum Committee at adamsrus1@hotmail.com

Submitted by Jennifer Leach, WSU 4-H Faculty and 4-H staff liaison to State 4-H Dog Committee

State 4-H Ambassadors Present the 4-H Youth of the Month for November!
Berklie Sheppard

The Washington State 4-H Ambassadors recognize the 4-H Youth of the Month honoree for November, Chloe Clyburn of Kittitas County! The Ambassadors are proud to highlight 4-H youth monthly throughout the year!

Chloe Clyburn
Senior
Kittitas County

*Favorite Part About 4-H:* Chloe’s favorite part about 4-H is getting to help younger 4-H members.
*Years in 4-H:* She has been in 4-H for 11 years.
*Past Projects:* Some of Chloe’s past projects include Home Ec and Robotics.
*Favorite Hobby:* Band, Theater, Orchestra, and FFA.
*Favorite Book:* Harry Potter.
*Favorite 4-H Memories:* Chloe fondly remembers her first time going to the State Fair.
*Favorite Food:* Mashed Potatoes.
*Future Career:* Chloe is very passionate about wanting to be an Equine Veterinarian.
*Project Experience:* She has learned a lot from her horses.
* Biggest 4-H Achievement:* Chloe’s biggest achievement was attending nationals and being a part of the Washington High School Equestrian Team.
*Favorite Ice Cream:* Tillamook Mudslide.
*Interesting Facts:* She has 6 horses, 7 goats, 3 dogs, and 5 cats.
*Life Skills From 4-H:* Communication with members, temper control, and time management.
If you have any questions about the State Ambassadors, or are interested in joining, please email wa4hsa@gmail.com. We hope to hear from you!

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**Congratulations! 2023 Washington State 4-H Equestrian Team Competes at Louisville!**

Kim Baker

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**2023 WA State 4-H Equestrian Team**


Front row L to R: Alice C., Ellie J., Ayane S., Makena P., Vivian R., Charlotte P., Camille T.

Congratulations to the Washington State 4-H Equestrian Team who competed at the Eastern National 4-H Horse Round Up in Louisville, KY on November 4, 2023. 215 youth from 23 states completed this year! Placings are listed in the order they were announced in the awards ceremony.

**HIPPOLOGY**

In Hippology: Madison, Vivian, Ashleigh, and Hannah (Snohomish County) coached by Rianan Livingston placed Fifth Overall, and

Fourth in the Exam Phase

Sixth in the Judging Phase, with Hannah receiving Top Individual in Judging and Vivian placing Eighth High Individual in Judging

First in Team Problem
EQUINE COMMUNICATIONS

In Equine Communications, Dylan (Snohomish County) coached by Kimberly Priest placed Eighth Overall in Individual Presentation.

Charlotte and Camille (Thurston County) coached by Molly Pestinger took Top Honors as the ENRU Team Presentation Champions, each also earning a $500 scholarship and a trophy.

The trio also took Seventh – Overall Team.

HORSE BOWL

In Horse Bowl: Hunter, Alice, Katie, Lillie, and Eric (Snohomish County) coached by R-A Mazzola narrowly missed placing in the top ten.

HORSE JUDGING

In Horse Judging: Ayane (Snohomish County), Haley (Pierce County), Makena (Snohomish), and Ellie (Snohomish) coached by Pat Pehling placed Ninth Overall, and

Third Place in Performance

tied for Eighth in Halter

Ninth Place Team in Oral Reasons

Congratulations to all of you! We are very impressed with your accomplishments at the Eastern National!

Due December 1: Applications For Harry Burcalow 4-H Endowment For Innovative Grants

Denise Echelbarger

Harry Burcalow is the former Associate Dean of the WSU College of Agriculture and Home Economics, now CAHNRS, and Associate Director of WSU Cooperative Extension. In retirement from WSU and now the WA 4-H Foundation Board, Burcalow remains a strong supporter of 4-H programs. He personally founded the Harry Burcalow 4-H Endowment for Innovative Grants, funding projects and
programs that help 4-H youth serve their communities, while learning about leadership, decision making, responsibility, and healthy lifestyle choices.

In 2022 the funds from the Harry Burcalow 4-H Endowment for Innovative Grants helped purchase gardening supplies for Yakima County’s Grandview Elementary After School Program. Goals included promoting 4-H to school youth, (many who come from low-income households), and providing hands-on learning through the 4-H gardening curriculum.

The goal of the grant is to fund worthy 4-H youth development programs or projects. The emphasis is on short-term needs such as new innovative programs, seed money, emergency, or unanticipated shortfalls. 4-H depends on involvement and donations to help Washington youth from all walks of life succeed.

Learn more about the Harry Burcalow 4-H Endowment for Innovative Grants HERE.

**Washington 4-H Equine Program Rule Book – Update**

Jennifer Leach

After much discussion and consideration of feedback from key Washington 4-H horse judges, key horse program volunteers/leaders and State Equine Committee of county 4-H staff and faculty, a decision has been made to return to a Washington-based model for developing and implementing a Washington State 4-H Equine program rulebook, as well as training of 4-H horse show judges, rather than the multi-state PNW model (Oregon, Washington and Idaho) that has been in place for many years.
This change has been officially enacted as of the new 4-H year which began October 1st, 2023, and we are currently in the process of redesigning essential components of our program to align with these changes.

Here is what is happening:

1. Washington State 4-H will have a state-specific rulebook that is updated on an annual basis or as-needed and aligned with the start of the 4-H program year.
2. Recommendations or suggestions to the rulebook or other official WA 4-H Program policies and procedures can be initiated by any judge, volunteer, staff/faculty, parent, or member by submitting an online form, which can be found here: [https://wsu.co1.qualtrics.com/jfe/form/SV_7VXMipUDSCCPG6y](https://wsu.co1.qualtrics.com/jfe/form/SV_7VXMipUDSCCPG6y).
3. Depending on the rule or policy change as related to the 4-H equine program—final recommendations are vested in the State 4-H Equine Committee with final approval with the State 4-H program leader.
4. The state equine committee is working to develop a Washington State 4-H Horse Judges School that is accessible, affordable, and efficient while still upholding a high standard for professionalism, knowledge, and utilization of the 4-H Positive Youth Development framework.

This will mean several things for the existing PNW 4-H Horse Judges list:

1. The PNW horse judges list will still be active on our WA website and carried over, and so judges who are currently on the list will remain on the list and be part of the new Washington 4-H horse judges’ system.
2. Once the development of the new judge’s training system is in place, the Washington State 4-H horse judges list will be updated.
3. Washington State 4-H Equine Program Rules for the 2023-2024 can be expected to be consistent with the updates that were introduced late this summer via two addenda that were posted to the [Horse Program Website](https://wsu.co1.qualtrics.com/jfe/form/SV_7VXMipUDSCCPG6y).

It is our hope that this change creates a stronger 4-H equine program in Washington State with an efficient system for training judges, show managers, and volunteers by maintaining a rulebook that has clearly defined rules and policies that is reflective of Washington State 4-H program that promotes horsemanship, sportsmanship, and the Essential Elements of positive youth development.

We realize that many people will have questions, and we ask that you have patience as we work to answer questions and consider any feedback we receive.

For questions about the 4-H horse judge’s training, contact Stephanie Roeter-Smith.
For questions and/or clarifications about Washington 4-H policies and rules related to equine, contact Jennifer Leach, WSU 4-H equine contact.

The Washington 4-H Horse Judge’s Sub Committee members are:

Stephanie Roeter Smith, WSU 4-H Faculty, subcommittee chair
Jennifer Leach, WSU 4-H Faculty and State 4-H equine contact
Kim Baker, 4-H Staff
RA Mazzola, 4-H Staff
Pat Pehling, 4-H Volunteer
Dusti Kissler, 4-H Staff and 4-H Horse Judge
Dawn Spencer, 4-H Judge
Anne Garrett, 4-H Judge
Patty Burns, 4-H Judge
Sherri Spoltman, 4-H Judge

Submitted by Jennifer Leach, WSU 4-H Horse Contact - Email: jleach@wsu.edu and Stephanie Roeter-Smith - Email: stephanie.roeter@wsu.edu
### Save the Dates! State Equine Presentations for 2024!

**Kim Baker & Jennifer Leach**

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**UPDATE**
The State Equine Presentations Contest date has changed from September at State Fair to **February 3, 2024** (on Zoom)! Help us spread the word!

Teams are encouraged to try both contests. Fun Derby Party Saturday after Hippology Contest!

Will be held during State Fair. Dates will be published with the State Fair schedule.

**Rules, Registration and Information:** [WA State 4-H Horses](https://extension.wsu.edu/4h/projects/animal-science/companion-performance/horse/)

**New for 2024** — the state equine presentations, formerly called “National Equine Presentations,” will no longer be held at the 4-H State Fair. This year, the equine presentation contest will be held February 3, 2024 and will be virtual.
These are specific presentations for seniors that focus on the equine industry that include individual presentation, team presentation, and public speaking, with the top blue-ribbon winners eligible to represent the Washington State 4-H equine program at the Eastern 4-H Equine Roundup that is held the first weekend of November in Louisville, Kentucky.

More details will come later about the specifics of the contest, such as registration information, updated rules, etc.

We wanted to let counties know now about the revised date in order to prepare senior 4-H members at the county level for the state contest.

Kim Baker has agreed to be the coordinator for this state contest. If you have questions about the contest contact Kim at kim.baker@wsu.edu or Jennifer Leach, State 4-H Horse contact at jleach@wsu.edu

Submitted by Jennifer Leach, State 4-H horse contact

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**Washington 4-H Horse Program Q and A Session Announces Topics for December 6th Zoom!**

Jennifer Leach & Kim Baker

The Q and A session for the Washington 4-H Equine Program is for parents, leaders, staff, and members has been offered monthly on the first Wednesday of each month from 6:30 to 7:30 pm

For December 6th Q and A, the topics will be updates for the upcoming 4-H year for state contests such as horse bowl, hippology; equine presentations; horse judging, and groom squad.

A very important update and details will also be shared on the soon to be published Washington State 4-H Equine Rule book being developed by the State 4-H Equine Committee. This rule book will be replacing the PNW 4-H Horse Contest Guide.

The December meeting will be facilitated by Jennifer Leach, 4-H Equine Contact/Specialist and Kim Baker, State 4-H Equine Coordinator.

**The Zoom meeting ID is 452-082-9765 with no passcode.** You must have a zoom account to participate.

Submitted by Jennifer Leach, 4-H Equine Contact/Specialist
WSU Fall Invitational Meat Judging Practice and Contest Set For Pullman on November 18th!
Mark Heitstuman

FALL INVITATIONAL MEAT JUDGING PRACTICE & CONTEST

November 18, 2023
WSU Meat Laboratory, 2155 Wilson Rd., Pullman WA 99164

Practice: 7 am – 11 am
Classes, carcasses, and cuts (not in the contest) will be available for practice on your own. Officials will be provided, and WSU Meat Judging team members will be present to provide guidance to coaches and youth.

Lunch & Contest Registration: 11 am at Ensminger Pavilion

Contest: 1 pm – 4 pm
Layout:
6 Placing Classes, 2 Sets of Questions, 30 Retail ID Cuts, 4-6 Beef Carcass Grading
Divisions:
Novice (no prior contest experience at State 4-H, State FFA, or Cougar Invitational)
Junior (13 years old and younger)
Senior (14-18 years old)
Awards:
Announced 30 min after contest concludes. Just in time for the holidays, meat products will be given as awards to individuals only (no team awards), so please bring a cooler.

Online Registration:
$10/person on or before November 10th
$15/person after November 10th
Visit https://meatsciences.wsu.edu for online registration link.

Contact:
Blake Foraker, 509-335-4112, blake.foraker@wsu.edu
Hello, Maite!

People have thought about mermaids for a long time. Ancient people even drew humans with fish tails on cave walls. So, did they really see mermaids or were they drawing from imagination?

The marine experts from the National Oceanic and Atmospheric Administration (NOAA) say that no mermaids have ever been found in the ocean. But we’ve fully mapped only about one-quarter of the ocean floor. There are probably between 700,000 and one million different kinds of plants and animals in the ocean. At least two-thirds of those are still unknown to us.

Does that mean mermaids could be swimming around in parts of the ocean we haven’t explored? Maybe. But our best guess is that people mistook other sea animals for mermaids—like manatees and their relatives.

Manatees are also called sea cows. They’re big, slow swimmers that graze on sea grass. They belong to the scientific group Sirena—named after sirens. Those are killer mermaids. In Greek mythology, they lured people to their deaths with beautiful singing.

Like mermaids, manatees have bodies that taper into a tail. They have no hind limbs. Their front limbs are flippers with finger-like bones inside them. Manatees can turn their heads like humans do. Plus, their faces give a slight human vibe—but not quite like the mermaids we see in movies.

Maybe that’s why we have historical records of sailors saying they were surprised that the mermaids they saw weren’t as pretty as they expected.
When it comes to DNA, mermaids might be closer to home.

I talked about fish and human DNA with my friend Allison Coffin. She’s a neuroscientist at Washington State University.

“Fish and humans are distant cousins,” Coffin said. “Humans are actually more than half fish when you think about our genetic material. From that perspective, I guess you could say we’re all mermaids.”

The first ever animal with a backbone was a fish. So, all animals with backbones today came from fish who lived about 500 million years ago.

If you visit Coffin’s lab, you’ll see lots of zebrafish. They’re freshwater fish related to minnows. They have stripes a bit like a zebra. Zebrafish share more than 70% of their genes with humans. They have similar genes to 84% of the genes that cause human disease. That means scientists can study zebrafish to solve human problems.

Coffin studies sensory cells deep inside your ear called hair cells. Sound vibrations bend your hair cells. That sends electrical signals to your brain. Your brain uses the signals to figure out what it’s hearing and where the sound comes from.

Hair cells can be damaged by loud noise, injuries or just old age. That’s one way hearing loss happens.

Fish have hair cells in their ears, too. They also have them along the outside of their bodies. It’s a lot easier to study hair cells on the outside—which is one of the reasons scientists like Coffin study hearing in fish to help understand hearing in humans.

Unlike humans, fish can grow new hair cells if they need to. Maybe someday humans will be able to regrow their hair cells and regenerate their hearing, too.

All thanks to the hard work of scientists and the good luck that we have fish cousins.
Dr. Universe: How do plants that need very little water survive? – Alivia, 11, Maryland

Dear Alivia,

My neighbor has a very prickly garden. It’s full of cactuses—including one thorny plant nearly as tall as my house. That’s not something you see every day in the Pacific Northwest. Cactuses usually live in dry places like deserts.

I talked about your question with my friend Linda Chalker-Scott. She’s a garden scientist at Washington State University.

She told me plants that need very little water have adapted to dry conditions. Adaptations are changes in the physical body or behavior that help a plant or other living thing survive. Then, it can pass on those changes to its babies.

“Plants are very adaptable,” Chalker-Scott said. “They will colonize almost every environment, and some are able to survive low water conditions. Over time, these plant populations evolve ways to conserve water.”

Another way to describe plants that live in dry places is drought tolerant. They can survive times with little water by holding on to the water inside them.

One way they do that is by adapting their leaves. The outside of a leaf is called the epidermis—just like your skin. One of the jobs of the plant's epidermis is to make wax and ooze it out. The wax protects the leaf from damage and holds in water.

Many drought-tolerant plants, including cactuses and succulents like jade plants, have evolved to make more wax than other plants. A thick wax layer slows down how much water the plant can lose.

Plants lose water through small openings called stomata. If you zoomed in with a microscope, you’d see the stomata look like tiny mouths. The “lips” are called guard cells.
Plants use their roots to suck up water from the ground. It travels up the stem. Then, when the guard cells open the stomata, plants release some water through the openings. It evaporates into the air as water vapor.

Many drought-tolerant plants have evolved smaller leaves. Smaller leaves mean fewer stomata to let out water.

Some plants take it to an extreme. Their leaves adapted into spines. All those prickly spines you see on a cactus? Those are modified leaves. They don’t have stomata, so they don’t lose water through their leaves.

But plants still need stomata. That’s how they take in carbon dioxide and release oxygen when they make food using the sun’s light. So, cactuses have stomata on their stems and open them at night when it’s cooler.

Plants also adapt their roots to survive in dry places. Some cactuses have shallow roots that spread out to suck up lots of water when it rains. Others have a very long central root that reaches the water deep underground.

Chalker-Scott told me that even plants adapted to dry conditions love water. “Most plants will use as much water as they can get,” she said. “It’s a misconception that you don’t need to water your cactuses and succulents very much because they’ve adapted. If you water them, they’ll grow very quickly.”

Maybe that’s why my neighbor has such happy cactuses. With all that water, they can grab life by the thorns.

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!