

# Tuesday News



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



**4-H** 

WASHINGTON STATE UNIVERSITY  
EXTENSION

Tuesday News – May 16, 2023

## CONTENTS

### FEATURES

- Grow Your Digital Knowledge and Support The Washington 4-H Tech Changemaker Teens!
- Washington State 4-H Teen Conference Registration Extended to May 22nd – Register Today! **>NEW!<**
- State 4-H Ambassadors Present the 4-H Youth of the Month for May!
- Enter the Washington State 4-H Fair Patch Design Contest – Closes May 30th!
- Celebrate Pride Month With A 4-H Pride Shirt!
- “Prepare for Fair” Set For May 21st On Zoom!!
- Fifth and Final State 4-H Virtual Photo Club Meeting Recording Now Available! **>NEW!<**
- 2023 Washington 4-H State Livestock Judging Contest Update
- Skunk Works 4-H Robotics Club of King County Wins Award at World Championships
- KYG Conference Facilitator Positions Now Open
- 2023 State Horse Bowl Results Reported
- 2023 State Hippology Contest Results Report
- Practice Horse Judging Contests Available Online!
- Registration is Open for the Annual Wahkiakum 4-H Great White Tail Run
- Ask Dr. Universe: Do Your Eyeballs Grow? **>NEW!<**

- Ask Dr. Universe: Do Insects Have Blood In Their Bodies?
- Dressage Clinic Coming to Franklin County in June!
- Upcoming 4-H Horse Events to be Hosted By Yakima County Extension 4-H
- Announcement of Dressage Tests for the 2023 4-H State Fair
- Reining Pattern for 2023 4-H State Fair Now Available
- Q and A Sessions for the Washington 4-H Horse Program Continue
- March 26th 4-H Market Poultry Zoom Recording Now Available!
- Explore 4-H with WSU Extension Recording – Basic 4-H Cat Project

---

## Features

---

### Grow Your Digital Knowledge and Support The Washington 4-H Tech Changemaker Teens!

Please support our *Washington State 4-H Tech Changemaker (TCM)\* Program Teens* today! **Our seven-partner site\*\*** TCM teens have reached more than 2500 Washington citizens, *in person!*

Please view our videos, which assist us in meeting our *virtual* education goals. Each video watched contributes *an additional \$40 to our WA TCM project from our funders, if viewed in the month of May!*

We are proud of our youth and their work advancing public understanding of the digital world! (Videos are 4-10 minutes long)

- Safe Internet Use and Reliable Websites: <https://youtu.be/hHI39u2xP6k>
- Video Conferencing: <https://youtu.be/cC3YjVhDHDE>
- Email Basics: <https://youtu.be/bbaRIapk79U>
- Password Strength: <https://youtu.be/Mm4Q75vWKe8> –
- Virtual and Remote World of Work: <https://youtu.be/xxlvLJrexNU>

Give us THREE more minutes and complete a survey on your impressions of the video(s) you watched!

[https://4hcouncil.co1.qualtrics.com/jfe/form/SV\\_57pa913cL7N188K](https://4hcouncil.co1.qualtrics.com/jfe/form/SV_57pa913cL7N188K)

Visit our State 4-H TCM website at: [4-H Tech Changemakers | 4-H Youth Development Program | Washington State University \(wsu.edu\)](#)

*\*The funders included Microsoft; Land O' Lakes, Inc.; Tractor Supply, and Verizon. The National 4-H Council administers the project.*

*\*\*Partner counties include Spokane, Ferry, Whatcom, Chelan, Grays Harbor, the Kalispel Tribal site, & Wahkiakum.*

**Gary F. Varrella, Ph.D.**

WSU Spokane County Extension Director & 4-H Educator

509-477-2163 (office) 509-435-3369 (cell)

Visit our web page: <http://extension.wsu.edu/spokane/4h/>

Like 4-H Facebook: [spokane4h](#)

Like WSU Extension on Facebook: [wsuextensionspokanecounty](#)

---

## Washington State 4-H Teen Conference Registration Extended to May 22nd – Register Today!



The deadline to sign up for the ***Building your Future, Washington State 4-H Teen Conference*** has been extended to May 22, 2023.

Check out all of the benefits of attending!

<http://extension.wsu.edu/4h/stc/workshop-descriptions/>

- Tour the Vet School
- Participate in the Vet Clinic Simulation Center: [Watch Video](#)
- College Prep and Career Workshops:

- How to Apply
- Scholarships
- Financial Aid
- Exploring Different Majors
- Thinking About Your Future
- It's All About Money
- You're Hired! Practicing Interview Best Practices
- Mental Wellness Workshops:
  - Glow Yoga
  - Stress Management
  - Mentally Preparing for Adulthood
  - Holding Brave Space
  - Teens Helping Teens: A Guide to Mental and Emotional Health

### **AND SO MUCH MORE!**

- Explore our Washington State University Campus in Pullman, Washington
- Live in a college dorm for 3.5 days
- Eat cafeteria food with your new friends
- Meet other teens from across Washington State
- Participate in team-building challenges
- Challenge your leadership potential
- Participate in a state-wide service project making KIND CARE KITS for RONALD MCDONALD HOUSE OF CHARITIES across Washington State

**For all information on registration, workshops and other details,  
[CLICK HERE](#) for the Teen Conference page!**

**Kelly Stewart**   
 4-H Program Coordinator  
 WSU Whitman County Extension  
 310 N. Main, Room 209  
 Colfax, WA 99111  
 (509)397-6290

---

# State 4-H Ambassadors Present the 4-H Youth of the Month for May!

The Washington State 4-H Ambassadors recognize the 4-H Youth of the Month honoree for May, **Hailey Mack of Whatcom County!** The Ambassadors are proud to highlight 4-H youth monthly throughout the year!

 <p><b>4-H YOUTH OF THE MONTH</b></p> <p><b>Hailey Mack</b> <i>Senior Whatcom County</i></p> <p><b>PROJECTS:</b> Dog, Public Presentations "Build Your Own House"</p> <p><b>Washington State 4-H</b></p>	<p><b>Hailey Mack</b></p> <p><b><u>Favorite Part About 4-H:</u></b> Hailey loves that she gets to pursue her interests, overcome obstacles, and expand her community through 4-H.</p> <p><b><u>Years in 4-H:</u></b> 3 years</p> <p><b><u>Past Projects:</u></b> Hailey had fun participating in the poultry project.</p> <p><b><u>Favorite Hobbies:</u></b> Reading, skateboarding, pastoring preschoolers, and playing music.</p> <p><b><u>Favorite Book:</u></b> The Maximum Ride Series</p> <p><b><u>Favorite 4-H Memories:</u></b> She likes remembering a time when each member of her dog 4-H club fell asleep with their dogs.</p> <p><b><u>Favorite Food:</u></b> Ribs or fettuccini alfredo</p> <p><b><u>Future Career:</u></b> Hailey is planning on becoming either a nurse or teacher, as she loves little kids and helping others.</p> <p><b><u>Project You'd Like to Do:</u></b> Her dream would be to do the horse project.</p> <p><b><u>Favorite Vacation:</u></b> Hailey loves remembering her first trip after she was adopted.</p> <p><b><u>Biggest 4-H Achievement:</u></b> Hailey has made it to State Fair with her public presentation project for the past two years.</p> <p><b><u>Favorite Ice Cream:</u></b> Chocolate chip mint</p> <p><b><u>Wish I could Go:</u></b> Maui, Hawaii.</p>
--	---

If you have any questions about the State Ambassadors, or are interested in joining, please email [wa4hsa@gmail.com](mailto:wa4hsa@gmail.com). We hope to hear from you!

## Enter the Washington State 4-H Fair Patch Design Contest – Contest Closes May 30th!

**SUBMIT YOUR DESIGN  
TODAY!**

**Did you know that 4-H Members Create the Design  
for the Washington State 4-H Fair Patch?**

Each year, a winning patch design is selected to become the patch  
worn by members from around Washington State!!

See how you could be the one to create next year's patch!

<https://extension.wsu.edu/4h/fairs/state-4-h-fair/>



Live Link: <https://extension.wsu.edu/4h/fairs/state-4-h-fair/>

Download the Contest Rules and Entry Form [HERE](#)



## Celebrate Pride Month With A 4-H Pride Shirt!


Washington State 4-H PRIDE shirts are for sale through Monday, May 22nd. The shirts will arrive the first week of June, in time for PRIDE Month. All proceeds go to supporting youth programming and community outreach for our State Teen Equity & Inclusion Ambassadors.

<https://www.customink.com/fundraising/wa-4-h-pride-23>



---

## “Prepare for Fair” Set For May 21st On Zoom!!



***Prepare for Fair***

**SUNDAY, MAY 21, 2023, 2-3:30 PM**

**This virtual workshop is for adult 4-H Volunteers who are in their first couple of years as leaders and may need some help to get their club ready for an area or county fair.**

## ***Prepare for Fair!***

We will discuss and share general 4-H fair information for volunteers (club and new superintendents) – how to get your club/project areas ready, entry times (computer/paper) and tags, using your premium/handbook, the fair and essential elements, How to spell F.A.I.R., 4-H Fairs and Competition, youth and preparing them to sell market animals, and will cover many contests and activities. Our intention is to keep this discussion as general as possible and not give specifics for any particular fair (but use examples). We plan to have a State 4-H Fair “How to ...” virtual workshop in early June, so that will not be covered specifically. There will be many resources shared out during this virtual presentation.

Pre-register for this Zoom presentation at <https://bit.ly/3LBAyO2>,

After registering, you will receive an e-mail with the Zoom meeting link.

Pam Watson, M.Ed.

WSU Lewis County Extension 4-H and Poultry

[pwatson@wsu.edu](mailto:pwatson@wsu.edu)

---

## **Fifth and Final State 4-H Virtual Photo Club Meeting Recording Now Available!**

**RECORDING - MAY MEETING  
STATEWIDE 4-H PHOTO CLUB**

*5th meeting,  
May 14th,  
recording*

  
WASHINGTON STATE UNIVERSITY  
EXTENSION



We held our fifth and last meeting for this 4-H year for the State 4-H Photo Virtual Club on May 14th, 2023. Our fifth meeting theme/focus was on matting, mounting, fair entries, scorecards, photo labels, and our virtual contest entries.

You can find the recording at <https://bit.ly/42FPuSL>

We are trying a new system for capturing data on our post-workshop survey. Please use the link in the video to take the survey when you finish watching the recording.

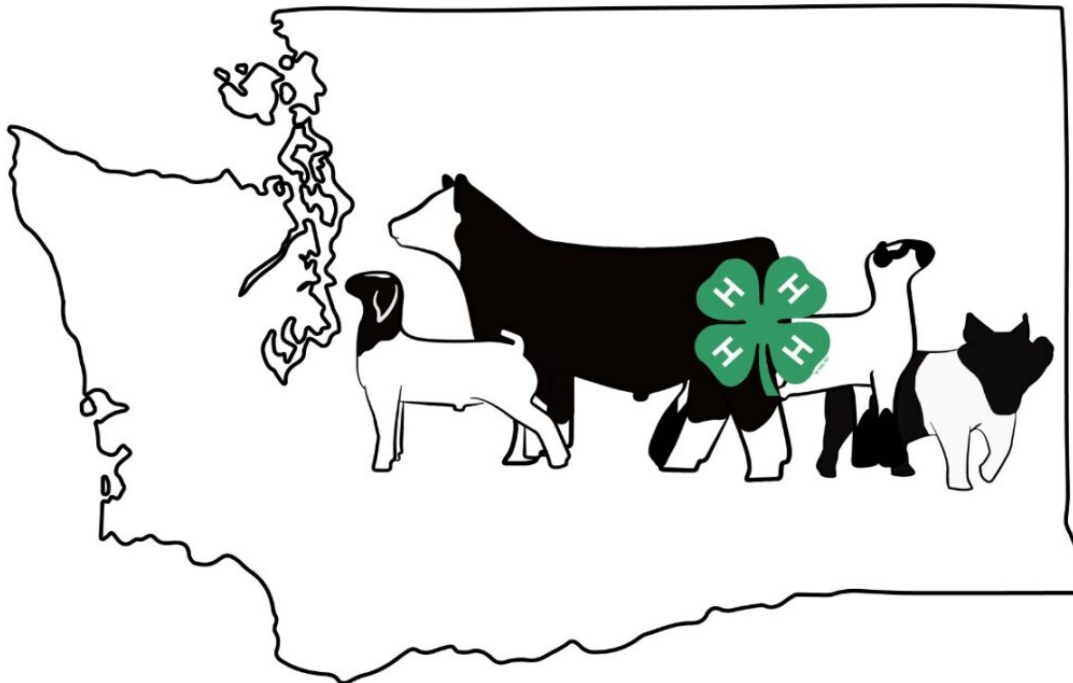
There is an announcement of our Virtual 4-H Photography Contest in this recording and stay tuned for the full advertisement of the contest in next week's 4-H Tuesday News!

Learn something new with us!

Pam Watson, M.Ed.  
WSU Lewis County Extension  
4-H Youth Development Agent, WSU Faculty

---

## 2023 Washington 4-H State Livestock Judging Contest Update



The 2023 Washington 4-H State Livestock Judging Contest is scheduled for June 24, 2023, and will be held at the Ardell Pavilion, centered on the Grant County Fairgrounds. Contest guidelines and rules with NEW for 2023 updates are linked in this article and are up for viewing on the Washington 4-H website. Additionally, the travel guidelines document and fillable registration forms specific to Junior, Intermediate and Senior contest registrations are linked



below. Again as in 2022, the 2023 contest has NO Requirement for Qualifying, just come and participate.

This will be our second year hosting the Livestock Judging Contest at the Grant County Fairgrounds in Moses Lake, WA. The committee is looking forward to another successful contest year. In 2022 we had three senior teams that traveled to national 4-H contests representing the Evergreen state.

**New for 2023:**

- There will be a registration deadline this year for early registration. **June 9, 2023** – all registration materials signed by the county extension professional (specialist, educator, coordinator, administrative, etc.) will be due by end of day to qualify for early registration fees (\$15/team; \$5/individual). Late registrations will be accepted with a late fee charged (\$10/individual). All fees (check, credit or cash) will be collected the day of the contest.
- Teams and coaches will need to be prepared to identify the contests they would like to travel to by the end of the state contest. If the first place team has not determined that when asked then they will forfeit first choice and so on. So – coaches and parents PLEASE be prepared before you come to the contest to compete.
- Also new will be a dress code (see guidelines appropriate dress). Key no hats, torn or ripped or frayed jeans, no shorts, and no t-shirts with graphics or written sentiments.

Registrations will need to be sent to [Robert.kestell@wsu.edu](mailto:Robert.kestell@wsu.edu) and CC [pskuber@wsu.edu](mailto:pskuber@wsu.edu) by end of day June 9, 2023. Late registrations will be charged a late registration fee. Any questions about the contest? Please contact Paul Kuber [pskuber@wsu.edu](mailto:pskuber@wsu.edu).

**Document Links:**

**[2023 Livestock Judging Contest Rules and Guidelines](#)**

**[2023 Livestock Judging Team Travel Guidelines](#)**

**[2023 Livestock Judging Registration Form – Intermediate](#)**

**[2023 Livestock Judging Registration Form – Junior](#)**

**[2023 Livestock Judging Registration Form – Senior](#)**

**See you on June 24th!**



WASHINGTON STATE UNIVERSITY  
EXTENSION

**Paul S. Kuber, Ph.D.**

Associate Professor

State 4-H Agri-Science Specialist

Northeast Region Livestock and Forage Specialist

Washington State University Extension

222 N. Havana St. Spokane, WA 99202

W: 509-477-2185 C: 614-302-1600 [pskuber@wsu.edu](mailto:pskuber@wsu.edu)

---

## Skunk Works 4-H Robotics Club of King County Wins Award at World Championships

Nancy Baskett

Skunk Works Robotics 4-H Club of King County won an Excellence in Engineering Award at the World Championships held in Houston, Texas in April.

Skunk Works has just wrapped up its competition season. The team did well at its local events and qualified for the district championships in Cheney in early April. In Cheney, the team ranked tenth overall, but took home a blue banner as a member of the winning alliance and also won the Excellence in Engineering award. These achievements earned Skunk Works a spot in the World Championships held in Houston from April 19th through the 22nd. The team competed on the Milstein field and was ranked 32nd – and again won an Excellence in Engineering award.

Skunk Works will hold an Information Night for prospective new members on May 23. More information is available by emailing [\*\*coach@skunkworks1983.com\*\*](mailto:coach@skunkworks1983.com)

The team is pictured below:



# KYG Conference Facilitator Positions Now Open

Dorothy Elsner

Know Your Government Conference Facilitator positions are officially open! Have you thought about joining the team? Click the link posted below to apply!

<https://forms.gle/1TW5DCR2U9XZvnev6>



Dorothy Elsner  
WSU/Skagit County 4-H Program Coordinator  
11768 Westar Lane Suite A  
Burlington WA 98233

[Dorothy.elsner@wsu.edu](mailto:Dorothy.elsner@wsu.edu)  
(360) 395-2360

# 2023 State Horse Bowl Results Reported

Kim Baker



Congratulations to the thirty-eight participants from six Counties who participated in the 2023 Washington State 4-H Horse Bowl Contest on May 6th at Grant County Fairgrounds.

Thank you to all the officials for their contributions of time and knowledge in making the Contest possible:

- Ann Vondereau was the Senior Moderator, with Jennifer Leach and Ramona Leber as judges, along with scorekeepers Laura Harding and Miquela Rogers and Timer Carolyn Russo.
- Kim Baker was the Intermediate Moderator, with Julie Hartz as the Judge and Sarah Koll and April Lightner as scorekeepers and Maria Kollin as Timer.
- A special thank you to Carolyn Russo for arranging for such an excellent facility and to Pat Pehling for coordinating an excellent contest!

## Results:

### **Seniors:**

Champion Team – Snohomish

Reserve Champion Team – Skagit

3rd Place Team – Spokane

### **Top Ten Individuals**

1st with Gold Medal – Alice Cottrell-Steen – Snohomish

2nd with Silver Medal – Norah Gilbertson – Spokane

3rd with Bronze Medal – Kierstan Dotzauer – Skagit

4th – Claire See – Skagit

5th – Katie Johnson – Snohomish

6th – Rachel Greiner – Skagit

7th – Stella Marsh – Spokane

8th – Lillie Hedge – Snohomish

9th – Hunter McKittrick – Snohomish

10th – Cassidy Pruiett – Skagit

## **Intermediates:**

Champion Team – Spokane  
Reserve Champion Team – Snohomish  
3rd Place Team – Thurston  
4th Place Team – Whitman  
5th Place Teams – Skagit and Grant

## **Top Ten Individuals:**

1st with Gold Medal – Case Friesen – Snohomish  
2nd with Silver Medal – Alice McFarlane – Snohomish  
3rd with Bronze Medal – Annika Warren – Spokane  
4th – Leah Andreassen – Thurston  
5th – Kashley Brown – Spokane  
6th – Jason Dodge – Spokane  
7th – Courtney Lightner – Skagit  
8th – Emma Matter – Snohomish  
9th – Sophia Belmer – Thurston  
10th – Corbin Kuster – Spokane

Of course, the County Coaches deserve recognition for their commitment to serving the youth in their counties to prepare them for and support them in the Contest:

Skagit – Sharrie Nelson and Hannah Brown  
Snohomish – RA Mazzola, Hannah Kruchek, Erika Kapur and Jaeden Kapur  
Thurston – Molly Pestinger  
Spokane – Cheryl Paz, Shannon Lawson and Sarah Gilbertson  
Whitman – Ashley Alred and Kailub Whitman  
Grant – Kristen McCrae

---

## **2023 State Hippology Contest Results Report**

Kim Baker



Thirty-six 4-H members representing six counties from around our state competed in the Washington State 4-H Hippology Contest this past weekend at



the Grant County Fairgrounds in Moses Lake. We were so happy to see some new counties giving the contest a try! A huge thank you to Carolyn Russo, Grant County Fairgrounds, and anyone who had a hand in hosting this event! It was the perfect venue.

Many, many volunteers and officials are needed to put on a hippology contest and we appreciate everyone who stepped in to fill all the spots! Thank you!!

Congratulations to all our 4-H contestants! You were amazing!! We hope you had fun, learned some new things while demonstrating what you have learned so far, and are inspired to keep your knowledge base growing! We hope to see you back again next year! And a special thank you to all the coaches!

### **Senior Results:**

State Champion Team – Snohomish  
Reserve State Champion Team – Skagit/Thurston  
3rd Place Team – Spokane

### **Senior Individual Placings:**

Top Individual, Gold Medalist, and High Point Exam – Norah Gilbertson, Spokane  
Reserve Individual, Silver Medalist, and High Point ID Stations – Madison Erickson-Corp, Snohomish  
3rd Place Individual and Bronze Medalist – Kierstan Dotzauer, Skagit  
4th Place Individual – Vivian Rice, Snohomish  
5th Place Individual – Claire See, Skagit  
6th Place Individual – Hannah Wold, Snohomish  
7th Place Individual – Saige Bosworth, Spokane  
8th Place Individual – Maria Kollin, Thurston  
9th Place Individual – Ashleigh Neihart, Snohomish  
10th Place Individual – Sophia Lawson, Spokane

### **Intermediate Results:**

State Champion Team – Snohomish  
Reserve State Champion Team – Spokane  
3rd Place Team – Thurston  
4th Place Team – Skagit  
5th Place Team – Whitman  
6th Place Team – Grant

### **Intermediate Individual Placings:**

Top Individual, Gold Medalist, and High Point ID Stations – Emma Matter, Snohomish  
Reserve Individual, Silver Medalist, and High Point Exam – Case Friesen, Snohomish  
3rd Place Individual and Bronze Medalist – Annika Warren, Spokane

- 4th Place Individual – Alice McFarlane, Snohomish
- 5th Place Individual – Courtney Leightner, Skagit
- 6th Place Individual – Jason Dodge, Spokane
- 7th Place Individual – Sophia Balmer, Thurston
- 8th Place Individual – Leah Andreassen, Thurston
- 9th Place Individual – Kashley Brown, Spokane
- 10th Place Individual – Aerin Cuff, Snohomish

Remember that everyone is welcome to attend our Virtual State Equine Q & A to ask questions about any equine topic, including hippology and horse bowl. Our next meeting is scheduled for May 25th from 6:30 to 7:30 pm. The Zoom meeting ID is 452-082-9765 with no passcode.

*You must have a zoom account to participate.*

## Practice Horse Judging Contests Available Online!

See below about two on-line Practice Horse Judging contests that would be great for your 4-H or FFA Horse Judging teams. Each course is only \$20 with unlimited access for 90 days (from your date of enrollment). Each contest has 6 classes with 2 halter and 4 performance.

There are questions, officials, and critiques at the end of each class. Follow the links below or QR code to enroll.

### HORSE JUDGING PRACTICE CONTEST

PRESENTED BY:



horseIQ™  
EH  
EXTENSIONHORSES.ORG

Two Different "Courses" each with 6 practice classes!  
Includes: Questions, Officials, and Critiques

ENROLLMENT COST: \$20/COURSE  
(UNLIMITED ACCESS FOR 90 DAYS FROM ENROLLMENT)

**ENROLLMENT LINKS:**

**PRACTICE JUDGING 1**

<https://catalog.extension.org/product?catalog=HorseJudgingContest>

**PRACTICE JUDGING 2**

<https://catalog.extension.org/product?catalog=1676909671DNE4F>

**CLASSES IN HORSE JUDGING PRACTICE 1:**

1. AGED STOCK TYPE GELDINGS
2. PERFORMANCE MARES
3. HUNTER UNDER SADDLE
4. TRAIL
5. WESTERN RIDING
6. RANCH RIDING

**CLASSES IN HORSE JUDGING PRACTICE 2:**

1. PERFORMANCE HALTER MARES
2. PERFORMANCE HALTER GELDINGS
3. TRAIL
4. WESTERN PLEASURE
5. RANCH PLEASURE
6. HUNT SEAT EQUITATION





**Practice Judging 1 Live Link:**

**<https://catalog.extension.org/product?catalog=HorseJudgingContest>**

**Practice Judging 2 Live Link:**

**<https://catalog.extension.org/product?catalog=1676909671DNE4F>**



**Dr. Kathy Anderson, PhD**

*Professor, Extension Horse Specialist*

University of Nebraska–Lincoln

Animal Science

ANSC C-204

Animal Science

Lincoln, NE 68583-0908

[402-472-6414](tel:402-472-6414)

[KAnderson1@unl.edu](mailto:KAnderson1@unl.edu)

Facebook: [UNLhorse](https://www.facebook.com/UNLhorse)

<https://animalscience.unl.edu/horse>

*Submitted by Jennifer Leach, 4-H Faculty Liaison State Horse Committee*

---

## **Registration is Open for the Annual Wahkiakum 4-H Great White Tail Run!**

The 39th Annual Wahkiakum 4-H Great White Tail Run is on Saturday, May 20, 2023. Registration begins at 8:30 am at the Skamokawa Vista Park Office, Run starts at 10:00 am. We have several walk/runs available: 10K, 5K, 2 mile through Julia Butler Hansen National Refuge in Skamokawa, Washington. Participants can register online or via mail with the brochure and t-shirts are available for purchase too!

**In order to guarantee a t-shirt purchase, you must register by May 5th.**

Please contact our run coordinator Carol Ervest with questions, 360-465-2275 or email Lisa Frink, Wahkiakum 4-H Program Coordinator, [lfrink@wsu.edu](mailto:lfrink@wsu.edu)

We look forward to seeing you soon! #gwtr2023



**DATE:** Saturday, May 20th, 2023

**TIME:** Registration begins at 8:30 am; Run at 10 am

**COURSE:** 10K, 5K, 2-mile run/walk through Julia Butler Hansen National Refuge in Skamokawa, Washington

**AWARDS:** Recognition given for overall male and female winners in each event, ribbons for top three finishers in each age division.

**OFFICIAL DOG RULES:** Socialized dogs only. Dogs should be at least 6 months old with current vaccinations. Dogs must be on leash at all times and stay on designated course. Female dogs in season are not permitted.

**REGISTRATION INFORMATION AND LINKS:**

Mail in Registration: [2023 4-H GWTR Brochure](#)

Online: <https://runsignup.com/Race/WA/Skamokawa/GreatWhiteTailRun>

Must register by 5/5/23 to guarantee a shirt.

For further information, call:

360-465-2275 or 360-795-3278

The Julia Butler Hansen National Wildlife Refuge, in addition to protecting endangered deer, is also a wintering area for waterfowl on the Pacific flyway. Skamokawa Vista Park has showers, playgrounds, yurts, overnight campsites & RV accommodations. For reservations at this park, call 360-795-8605.

---

## Ask Dr. Universe: Do Your Eyeballs Grow? – Ashlynn, 8, Utah



### Do your eyeballs grow? – Ashlynn, 8, Utah

Dear Ashlynn,

I was the cutest kitten. I bet you were an adorable baby, too. Like me, you probably had a big, round head with chubby cheeks and huge eyes.

The fact babies have big eyes made some people think babies are born with adult-sized eyeballs. I talked about this with my friend Edward Johnson. He teaches classes about the human body in the [School of Biological Sciences](#) at Washington State University.

“It’s a very good question because there’s a lot of misinformation about it,” Johnson said. “Eyeballs do grow—but not very much compared with other parts of the body.”

He told me to think about the thigh bone—also called a femur. That bone grows a lot. The average newborn baby has a 3-inch thigh bone. The average adult has an 18-inch thigh bone. That means the thigh bone gets about six times bigger. That's a huge change.

Eyeballs don't grow nearly that much. Johnson told me adult eyeballs are about one-and-a-half times as big as baby eyeballs. The average newborn baby's eyeball is 0.6 inches in size. The average adult eyeball is 0.9 inches.

Some scientists think babies have big peepers because traits like chubby cheeks and big eyes make babies cute. Looking at that **cuteness** turns on the brain's reward system. That makes it feel good to take care of a baby—or even just look at one.



So, does any part of the body stay the same size from birth?

“As far as I know, all organs and tissues grow from birth up until adulthood—with the possible exception of a couple middle ear ossicles,” Johnson said. “If any structure doesn't grow, those would be candidates.”

The **middle ear ossicles** are three teeny bones that sit in the middle ear. Their names are the malleus, incus and stapes. As sound travels from outside the ear through the middle ear, the bones vibrate. That makes the sound louder as it moves into the inner ear. There, it changes into a signal that goes up a nerve to the brain.

It makes sense middle ear bones don't grow—or only grow a little bit. They're the tiniest bones in the human body. They're also stiffer than other bones. That helps them vibrate better.

From itty-bitty ear bones to eyeballs, your body is amazing. If you think about it, asking big questions about our world is another way of growing. You're doing that beautifully!



Sincerely,  
Dr. Universe

---

## Do insects have blood in their bodies? – Raman, 7, Washington

Dear Raman,

You probably don't look like an insect. You don't have feelers or wings. You keep your skeleton inside your body instead of on the outside. But what about blood? Do insects have blood like yours?

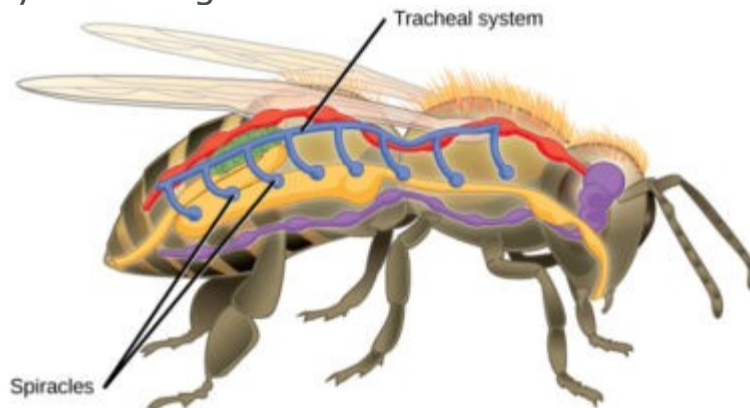
I talked about this with my friend [Richard Zack](#). He's an entomologist at Washington State University.

"Insects have hemolymph," he said. "It's very similar to blood."

Zack told me hemolymph moves differently through the body, and it doesn't do everything blood does.

Humans and other mammals have [closed circulatory systems](#). That means their blood travels in blood vessels. A heart pumps the blood all over the body, and it moves through a network of blood vessels to get there.

As it moves through the body, blood carries things with it. It carries chemical messages called hormones. It carries nutrients. If you get hurt, it carries cells that repair wounds. If germs get into your body, immune cells travel in the blood to fight the germs, so you don't get sick.



*Check out this insect's heart (red) and network of air tubes (blue).*

*Credit: CNX OpenStax via WikiCommons CC-BY-4.0*

Insects have [open circulatory systems](#). They don't have any blood vessels. Their hemolymph just sloshes around in their bodies. They have a heart, but it's not like yours. It's one long tube along the insect's back. This tube pulls in some of the hemolymph as it sloshes around and pushes it to the front of the insect. There, the hemolymph can pick up hormones and other stuff from the insect's brain. It carries those things with it as it flows freely back through the insect's body. Hemolymph carries hormones, nutrients, and cells for wound repair and germ-fighting—just like human blood does.

But human blood does one more thing. Blood contains a protein called hemoglobin. That protein grabs on to oxygen from the lungs. It carries the oxygen through the network of blood vessels and delivers it to your cells. Hemoglobin contains iron. It's red—and that's why human blood is red.

Hemolymph doesn't contain hemoglobin. It doesn't carry oxygen at all. Instead, insects send oxygen to their cells through **tiny air tubes**. Insects have openings on each side of their bodies—called spiracles. They open these spiracles to let in air. Each spiracle is linked to a network of air tubes. Oxygen moves through these tubes to get to each cell in the insect's body.

Since they don't have iron-rich hemoglobin, hemolymph isn't red like human blood. Hemolymph contains lots of copper. So, hemolymph is blue green. But that color can change depending on what the insect eats.

"The functions of hemolymph and blood are almost exactly the same," Zack said. "Except for this one biggie: Insect blood doesn't move oxygen. That's a whole different system in insects. But when you think of all the other things that blood does—moves messages through the body, moves nutrients, heals wounds—hemolymph does the same things."

It turns out you have a lot in common with insects after all.

Sincerely,  
Dr. Universe

P.S. Did you know goldfish can have surgery? Check out the latest episode of the **Ask Dr. Universe** podcast to meet a fish veterinarian and learn all about fish medicine.

---

**[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!](#)**

---

## Dressage Clinic Coming to Franklin County in June!



Please mark your calendars for a dressage clinic with Abby Welch on June 18th in Franklin County.

The clinic is open to 4-H horse members and is a great way to receive practice and guidance in preparation for the Washington State Junior Horse show.

For more information, contact Sue Duffy, 4-H Horse Superintendent for Benton/Franklin County. Sue's email address is [smarieduffy@gmail.com](mailto:smarieduffy@gmail.com).

Read Abby Welch's Bio [HERE](#)

2023 Dressage Show Entry Form is [HERE](#)

Entry Form for Dressage Clinic with Abby is [HERE](#)

*Submitted by Jennifer Leach, State 4-H horse contact.*

---

## Upcoming 4-H Horse Events to be Hosted By Yakima County Extension 4-H

Hay!!! Do you love horses? Upcoming Yakima County horse events at <https://extension.wsu.edu/.../4-h-events/4-h-horse-events/>



---

## Announcement of Dressage Tests for the 2023 4-H State Fair

The dressage tests for English dressage at the 2023 4-H State Fair will be Test 3 for both Training Level 1 and First Level.

Western Dressage has come back for the 2023 4-H State Fair and Test 3 for both Basic Level and Level 1.

4-H horse members will only be able to ride either English Dressage or Western Dressage, but not both, due to time constraints related to arena time.

These tests are available on the respective governing organizations—United States Dressage Federation (USDF) for English (<https://www.usdf.org/>) and the Western Dressage Association of America for Western dressage (<https://www.westerndressageassociation.org>)

The Western Dressage Association of America is the governing body for the Washington State 4-H Horse program. The information in the 2015 PNW 4-H Horse Contest guide on page 20 is outdated. In Washington, we do not use the North American Western (NAW) dressage tests.



*Submitted by Jennifer Leach, WSU Extension 4-H State Fair Board Staff Liaison.  
E-mail Jennifer at [LeachJ@co.cowlitz.wa.us](mailto:LeachJ@co.cowlitz.wa.us).*

---

## **Reining Pattern for 2023 4-H State Fair Now Available**

The 4-H State Fair reining pattern is now posted on the horse page on the WSU 4-H webpage located at <https://extension.wsu.edu/4h/projects/animal-science/companion-performance/horse/>

Reining will once again be offered at State Fair for Seniors only. The reining pattern is the same as last year to encourage participation since this is only the second year of 4-H reining. And also includes the scoresheet as an educational and judging tool.

There will be additional reining patterns for county level use that are reflective of basic reining and/or introductory reining. More to come next week. For those who do reining—it is a series of circles, stop, back, figure 8, flying changes, roll backs, and/or spins. And based on skill level and/or complexity of the series of movements.

*Submitted by Jennifer Leach, Chair of the “Ad Hoc Reining Committee” and 4-H State Fair board 4-H Staff Liaison. E-mail Jennifer at [LeachJ@co.cowlitz.wa.us](mailto:LeachJ@co.cowlitz.wa.us).*

---

## **Q and A Sessions for the Washington 4-H Horse Program Continue**

Have questions about the Washington 4-H horse program? We are planning to have a monthly Q and A for leaders, parents, members, and staff on the third



Thursday of each month via Zoom from 6:30 to 7:30 pm. Zooms will start in February and run at least through June.

There will be no specific topics for this first zoom but will be around the theme/parameters of horses and youth development. It will be more than “what are the rules.” However, there will be time set aside for input on future topics for the subsequent Zooms.

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

The meeting will be facilitated by Jennifer Leach, WSU Extension 4-H State Fair Board Staff Liaison. If you need further clarification of the meeting, feel free to contact Jennifer at [jleach@wsu.edu](mailto:jleach@wsu.edu)



---

## March 26th 4-H Market Poultry Zoom Recording Now Available!



### Recording- 4-H Market Poultry



**From March  
26th, 2023**



**This presentation is for any  
youth or volunteer who has  
an interest in market poultry  
and how to get started.**

Brought to you by the WSU Extension 4-H Youth  
Development Small & Companion Animal Committee

If you are working on a Market Poultry Project and need to get some basics or more advanced info, check out our recording from March 26th, 2023. We covered fryers, turkeys, ducks, and geese, with the focus being on fryers and turkeys. This program is available to all, not just 4-H youth.

Find the link to the recording below.

<http://bit.ly/3ze4SbT> (WSU Zoom Recording)

Please take our post-workshop survey after viewing the recording at (WSU Qualtrics) this link is also in the recording. <http://bit.ly/3LRPppq>

Thanks for watching our workshop!

Pam Watson, M.Ed., [pwatson@wsu.edu](mailto:pwatson@wsu.edu)

WSU Lewis County Extension

4-H Youth Development Agent, WSU Faculty

---

## Explore 4-H with WSU Extension Recording – Basic 4-H Cat Project



### Recording-Basic 4-H Cat Project



**From March 5th,  
2023**

**This presentation is for anyone who  
has an interest in the 4-H Cat Project  
and how to get ready for a show.**

Brought to you by the WSU Extension 4-H Youth  
Development Small & Companion Animal Committee

## Explore 4-H with WSU Extension – Recording -Basic 4-H Cat Project

This presentation is for anyone who has an interest in the 4-H Cat Project and how to get you and your cat ready for a 4-H Show. 4-H Volunteer Caroline Vadino presents with us on Explore 4-H with WSU Extension the “Basic 4-H Cat Project” from Sunday, March 5th, 2023. **You can find the recording for this presentation at <http://bit.ly/3Zlo3Wk>.**

There is a short survey at the end of the presentation with a link that will take you to a WSU Qualtrics page, please take a few minutes to complete the survey.

Thank you and enjoy the workshop,

Pam Watson, M.Ed.

WSU Lewis County Extension

4-H Youth Development Agent, WSU Faculty

---