

POTTAWATOMIE COUNTY 4-H NEWSLETTER



Ambassador Spotlight

Meet **Tyler Liebsch**! Tyler is a member of the Olsburg Booster 4-H club. He is passionate about photography and could be seen with a camera all over Washington DC this summer!

UPCOMING EVENTS

- ✿ **Discover Your Future**
Deadline: December 8th
See Attachment
- ✿ **Kansas Beef Expo**
December 11-14, 2025
Hutchinson, KS
- ✿ **Conservation Poster Deadline**
December 19, 2025
Westmoreland, KS
- ✿ **Free Enrollment Deadline**
December 31, 2025
4-H Online
- ✿ **Scholarship Applications Due**
January 5, 2026
Online
- ✿ **County Officer Training**
January 18th 2-4pm
Sunflower Room, Westy
- ✿ **State Horse Judging**
January 23, 2026
Topeka, KS
- ✿ **Dust to Diamonds**
January 24, 2025 6-10PM
St. Bernard's, Wamego, KS
- ✿ **Geology Workshop**
January 31, 2026
Portoff Hall, Manhattan, KS
- ✿ **Regional Club Days**
February 7, 2026
Alma, Kansas
- ✿ **Citizenship In Action**
February 15-16, 2026
Topeka, KS
- ✿ **Jr. Beef Producers Day KSU**
March 7, 2026
Manhattan, KS
- ✿ **Jr. Sheep Producers KSU**
April 11, 2026
Manhattan, KS



Monthly Shout Out

Jeanna Haug, The Legend

The face of our office, the one and only Jeanna Haug!

They say absence makes the heart grow fonder, and you never truly know what you have until it's gone. Those words have never felt more true than over these past few weeks. While Jeanna's hard work is always appreciated, her time away recovering has reminded us just how much she means to our office, to the 4-H program, and to me personally.

Jeanna has a gift for making every day brighter; from keeping the candy dish full, to paying the bills,

to making sure every program we host is fully prepared and runs without a hitch. She brings this incredible blend of honoring long-held traditions while also guiding us through needed change, and that balance has become a cornerstone of who we are. More than anything, she holds our office together in a way that feels like family. Her presence, her care, and her commitment have been deeply missed and genuinely felt every single day.

Jeanna, we can't wait to have you back. Things just aren't the same without you.

Shout Out Nomination Link

Use this link to tell me all the cool things you are doing in 4-H! Include a photo! It can be a club, member, volunteer, organization, business.... anyone/thing that is doing great things for or in 4-H!

https://docs.google.com/forms/d/e/1FAIpQLScU6hXS0dhounXHA_T5_-udggbzC_8teqkhoaDzns93szcgQ/viewform?usp=pp_url

Competition Time!!!

Regional 4-H Day

February 7th @ Alma School!

This event is a fantastic opportunity for 4-H'ers to build and showcase their presentation skills. Whether it's public speaking, demonstrations, musical performances, or group activities, 4-H Day has something for everyone. You can find regulations, guidelines, and helpful tips [here](#):



Registration is due by January 24th using the link [found here](#).

Hint: Participating in 4-H Day is a great way to strengthen your project report, earn achievement pin credits, and contribute to your club goals!

EXTRA: We will be having a contest showcase as a come-and-go on this day as well! Come try something new! See Attached Flyer!

This Month in Pictures



Kinsey Havice from the Dutchmill 4-H Club and a friend made Carmel Apple Crunch Cookies at the extension office!



Cody Pennington from the Shinning Star 4-H Club attended Kansas Youth Leadership Forum at Rock Springs Ranch.



Taylor Bryant of the Olsburg Booster 4-H Club attended the National 4-H Congress in Atlanta, GA!



Kansas 4-H Livestock Judging Team wins in Louisville, KY! The PT members on the team were Mason Rookstool placing 10th overall and William Meinhardt! Congrats!!

**DISCOVER
YOUR
FUTURE**
K-STATE
Research and Extension

"I was able to use concepts I learned in the intro to human development course through Discover Your Future in my leadership role as a 4-H Ambassador."

Jadyn Eckert -
2024 DYF Student



Kansas State University Agricultural Experiment Station and Cooperative Extension Service. K-State Research and Extension is an equal opportunity provider and employer.

K-State Opportunity

Discover Your Future

Provides high-school juniors and seniors enrolled in 4-H, learning and career exploration opportunities through 4-H project participation and access to introductory college courses at Kansas State University.

The program is designed to help youth prepare for things like postsecondary education and future careers.

Benefits to 4-H Youth:

- Combine 4-H project with advanced learning.
- Use course assignments to help set goals, manage project expectations and increase knowledge within project area.
- Obtain dual high school and college credit.

Benefits to Parents/Guardians:

- Inexpensive opportunity for child to gain college credits.
- Opportunity for 4-H youth to explore career opportunities and pathways.

Courses offered in Spring 2025

- **Introduction to Public Speaking** COMM 106 (3 credit hours)
- **Introduction to Agricultural Communications** AGCOM 110 (2 credit hours)
- **Introduction to Human Development** HDFS 110 (3 credit hours)
- **Introduction to Personal Financial Planning** PFP 105 (3 credit hours)

See Attached Flyer for more details

https://kstate.qualtrics.com/jfe/form/SV_01CbtGRIpzdoPYO

Enrollment Time

Enrollment Deadline Coming!!

Don't forget to enroll by December 31st and select "Pay with Check" to have your \$15 fee covered by 4-H Council!

(Do not send a check! We have great donors like Blue Valley Telecom that help cover the fees!)

<https://www.pottawatomie.k-state.edu/4-h/enrollment.html>



Experience of a Lifetime

Citizenship Washington Focus

Are you ready for the adventure of a lifetime? Join us as we start our journey towards Citizenship Washington Focus (CWF) 2028. The CWF experience brings together our area 4-Hers for a year and a half of leadership, team-building, and friendship. In the summer of 2028 our delegation will travel across the country to participate in an immersive citizenship experience, ultimately landing in Washington, D.C.. As we travel east, we will make stops at a number of sites; St. Louis Arch, Mammoth Cave, Gettysburg, Etc, which will be determined by the 4-Hers during our time together. Please consider joining us for this unforgettable experience, as it is truly a once-in-a-lifetime opportunity. Anyone who will be (14) by January of 2028 is eligible to participate.

Although we will not start the formal meeting process until February of 2027, we need to keep the fundraising in order to keep trip costs low for delegates and their families. Call or Email Amber today to get your name on the list! Any and all fund raising ideas are welcomed! If we start early we pay less out of pocket!



Time to Shine!

FREE MONEY!!!

Kansas 4-H Scholarships are Due January 5th!

<https://www.kansas4-h.org/resources/awards-and-recognition/scholarships.html>

Pottawatomie County Seniors..... Don't miss the free money! If you need help, reach out, and we can work on the best application and resume the selection committees have ever seen!! Let's show them how awesome you all are and bring home some of that free money!



Time to Shine

Regional Club Days

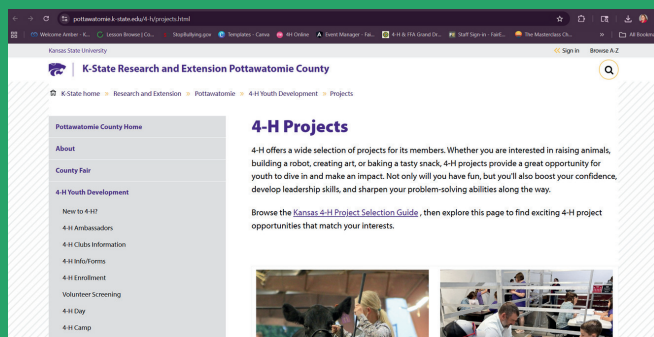
- February 7, 2026
- Alma, Kansas
- Sign Up Coming Soon!
- We will be offering 4 new contest areas this year for practice! Check out the attached Flyer!



I Didn't Know That!

Resources Available!

- In an effort to get our resources out to you, the 4-H families, we will be highlighting areas each month in the newsletter!
- This month we would like to highlight our new PROJECTS PAGE! This will be an evolving space for you to find information out about the project areas and even some local area experts in those areas! Check it out today!!!
- <https://www.pottawatomie.k-state.edu/4-h/projects.html>



Knowledge Expansion Warning

Volunteer Zoom Sessions

The Kansas Association of 4-H Volunteers is trying something new for this 4-H Year. They will be holding Zoom Connections for Kansas 4-H Volunteers. they are continuing with the theme from the Leadership Forum to nurture more Kansas 4-H Volunteers to be the most successful they can be in their volunteer role!!!

Kickoff Session Details

- DATE: Sunday, December 7, 2025
- TIME: 7 p.m. to 8 p.m. CT(via Zoom)
- TOPICS: Feedback from the November Volunteer Forum, Spring Into Volunteering scheduled for April, and Regional and State Record Books
- AUDIENCE: Registered Kansas 4-H Volunteers

Upcoming Sessions (All 7-8 p.m. via Zoom)

- Feb. 22: 7 p.m. (Club Days, Spring Into Volunteering, Fairs)
- June 28: 7 p.m. (State Fair, Project Record Books)
- August 30: 7 p.m. (Club Structure & Activities, Volunteer Forum)

REGISTER FOR THE DECEMBER 7th, 7 P.M. ZOOM.

Thank you for joining us to help make Kansas 4-H Members the best they can be!

**VOLUNTEERS
NEEDED**

International Opportunity

Japan Exchange Hosts!



Looking for a new experience for summer 2026? Host a Japanese delegate in the comforts of your own home while exploring the world. 30 teens, ages 12-16 are needing host families this summer from July 23 to August 15. We want to make host family assignments asap, so families can communicate and get to know each other. If you have further questions, please call Pam Van Horn, Kansas 4-H Japanese Exchange Coordinator, 785-826-8917, or e-mail pvanhorn@ksu.edu.



Pottawatomie County Conservation Opportunity

Poster Contest

- Theme: "Soil, Where It All Begins!"
- Poster Contest: K-8th Grade
- Limerick Contest: 5th -8th Grade
- Essay Contest: 5th -8th Grade
- Deadline December 19th
- See Attached Flyer for more Details!

Contest entries can be mailed or delivered to our office at:
Pottawatomie Conservation District
501 State Street, P.O. Box 246
Westmoreland, Kansas 66549
Call or Email Chalee Braun at
785-457-3398
chalee.braun@ks.nacdn.net



Communication Central

Leaders Corner

- THANK YOU for attending the leader training! I thought the dialogue was great and appreciate the time you dedicate to our youth! If you were not able to attend we will try round two soon!
- Don't forget to get your financial books to me! They need to be approved by our board!
- If I am needing your organizational chart, please email that to me!
- December is a good time to get the members started on their regional club days presentations!
<https://www.pottawatomie.k-state.edu/4-h/4H%20Day.html>
- Resources Tab is Live! Still being added to, but it is live! <https://www.pottawatomie.k-state.edu/4-h/resources.html>

Time to Shine!

Horse Judging Contest

What: 2026 KS State 4-H Horse Judging Contest

- Cost: Early bird (by January 2, 2026)- \$25; Late (by January 9, 2026)- \$30

When: January 23, 2026

Where: Equifest of KS; Topeka, KS

Who: The contest awards are available to all Kansas 4-H members 9-18.

- An open contest is also available

For More Information:

<https://www.kansas4-h.org/educational-experiences/project-based-events/contests/horse-judging/>



Project Learning Opportunity

4-H Geology Workshop Day

Leaders Lesa and Rob Reves

Date: January 31, 2026: 9am-4:30ish

Location: Pottorf Hall, 1710 Avery Ave, Manhattan, KS

Schedule (subject to change):

- 9 am - Welcome and brief explanation about the Action Team & project future
- 9:15 am - Keynote speaker
- 10-12 pm - Workshop Rotations (30 mins each)
- Noon - lunch on your own (restaurants within 2 miles)
- 1-3 pm - Geology ID contest, ID of Specimens and Experts available to answer questions!
- 1:30 pm - Quiz Bowl Juniors
- 2:30 pm - Quiz Bowl Seniors
- 4 pm - wrap up/feedback/questions/ideas for future

Display boxes are available for purchase and pickup
Additional boxes can be preordered for a later date

There is **no fee** for the workshop day. Everyone is welcome to come and learn!

You can sign up for the workshop day here.

https://docs.google.com/forms/d/e/1FAIpQLSfuTtnEJ5DPjRjZZTTGtSUIWm2IF6wbMEv_ozpJBOWRZQZd_w/viewform



Check out the Natural Resource Project Page and the December Geology Newsletter!!!

<https://www.pottawatomie.k-state.edu/4-h/natresources.html>

Leadership Experience

Citizenship In Action

Would you like to have more influence in laws and rules that affect your life? Citizenship in Action is for you! This 2-day event is sponsored by the State 4-H Youth Leadership Council. The purpose of the event is for Kansas youth to learn how the state legislative process works and how their voice and participation in decision-making can make a difference in their local communities. The legislative visit will not only familiarize youth with the capitol building, but will also show them how they can affect the legislative process.

When: February 15-16, 2026

Where: Topeka KS - Hotel Topeka at City Center (formerly Capitol Plaza)

Who: Youth 13-18 years old



Party Time!

Dust to Diamonds

- Fairgrounds Enhancement Fundraiser on Sat., January 24th at St. Bernard's Parish Hall!
- Enjoy a delicious meal, open bar, silent & live auction, all while helping fund a great cause.
- Please use the link below to reserve your tickets today:
- <https://forms.gle/4NzmU7kVsGjo18tP7>
- The Fair Board is asking each club to donate a basket to auction off! These can be dropped off with any fair board member or at the extension office prior to the 24th!

POTTAWATOMIE COUNTY FAIR
ENHANCEMENT FUNDRAISER

Dust to Diamonds
Saturday, January 24, 2026

DISCOVER YOUR FUTURE

K-STATE
Research and Extension



4-H Career Exploration and Career Pathway Program (CEP)

DYF is a program created to ignite curiosity and build skills in 4-H youth by fostering early career exploration and creating pathways to post secondary success, ensuring a seamless transition into future careers and academic endeavors.



HDFS 110 - INTRO TO HUMAN DEVELOPMENT

A study of lifespan human development through an individual's awareness and understanding of his or her own physical, social, and psychological growth and relationships with family, peers, and others.



PFP 105 - INTRO TO PERSONAL FINANCIAL PLANNING

Students will learn to analyze and evaluate strategies for managing money on both personal and family levels, covering essential topics such as budgeting, saving, investing, credit use, and debt management.



AGCOM 110 - INTRO TO AGRICULTURAL COMMUNICATIONS

Introductions to agriculture communications programs, activities, careers, and trends, this course will cover audience analysis across media platforms, Associated Press writing style, and understanding target audiences.



COMM 106 - PUBLIC SPEAKING

This course introduces students to the art of public speaking, guiding them in crafting and delivering impactful speeches while fostering critical thinking about public discourse. Students will develop essential communication skills, reduce speaking anxiety, and learn how to tailor messages for diverse audiences.

STUDENT APPLICATION:

https://kstate.qualtrics.com/jfe/form/SV_01CbtGRlpzdoPYO

SIGNATURE FORM:

https://kstate.qualtrics.com/jfe/form/SV_3F71B70tRkIWuSG

Application opens November 1st. Due December 8th, 2024

Kansas State University Agricultural Experiment Station and Cooperative Extension Service.

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KANSAS *Beef Expo*

DECEMBER 11-14, 2025

KANSAS STATE FAIRGROUNDS
HUTCHINSON, KANSAS



JUNIOR BREEDING SHOW | JUNIOR MARKET SHOW
KING OF THE RING MARKET SHOW | OPEN PROSPECT SHOW AND SALE
CHRISTMAS IN THE COUNTRY TRADE SHOW | VISIT FROM SANTA

2025 SHOW JUDGES

JERROD ARTHUR

SENIOR HEIFERS

JUNIOR HEIFERS

PROSPECT MARKET

RYAN RASH

SENIOR HEIFERS

JUNIOR HEIFERS

PROSPECT MARKET

JAKE & ASHLEY WAGNER

KING OF THE RING

PROSPECT SALE HEIFERS

PROSPECT SALE STEERS

MCKENNA RICHARDSON

KBE SHOWMAN WORLD CHAMPIONSHIP

For more information
and to enter online visit the web site or on Showman

www.KANSASBEEFEXPO.com

**POTTAWATOMIE COUNTY FAIR
ENHANCEMENT FUNDRAISER**

Dust to Diamonds
Saturday, January 24, 2026

**St. Bernard's Parish Hall
17665 Old Post Road, Wamego**

Ticket Sales Now Open

Table of 8 \$350 - Single \$50

Adult (21+) Event - Country Attire

6-10 PM

**Catered Meal by Barleycorn's,
Open Bar, Silent Auction, & Live Auction**

**Proceeds go to support the
Pottawatomie County
Fairground Improvements.**



Scan to Register

Deadline is January 10th

Questions 785-844-0430



**KANSAS STATE
UNIVERSITY**

Extension
Pottawatomie County

COMING SOON CONTEST INTRODUCTION EVENTS



LIVESTOCK SWEEPSTAKES

**Meats
Livestock Evaluation
Skill-A-Thon**



FAMILY & CONSUMER SCIENCE JUDGING

**Consumer Decision
Making**



CROPS & WEED ID

**Plant and Seed ID
Crop and Weed ID**



HORTICULTURE JUDGING

**Plant and Seed ID
Plant Judging**

Try a New Contest

**Self-Grading for
Immediate Feedback**

**REGIONAL
CLUB DAYS**
February 7th 2026
Alma High School

**COME AND GO FORMAT
AVAILABLE ALL DAY**

**Resources Available
to take home**

K-State Research and Extension is committed to providing equal opportunity for participation in all programs, services and activities. Program information may be available in languages other than English. Reasonable accommodations for persons with disabilities, including alternative means of communication (e.g., Braille, large print, audio tape, and American Sign Language) may be requested by contacting the event contact Pottawatomie County Extension four weeks prior to the start of the event 1/07/2026 at 785-457-3319 or asharp@ksu.edu. Requests received after this date will be honored when feasible. Language access services, such as interpretation or translation of vital information, will be provided free of charge to limited English proficient individuals upon request. Kansas State University Agricultural Experiment Station and Cooperative Extension Service K-State Research and Extension is an equal opportunity provider and employer.

(785) 457-3319

WWW.POTTAWATOMIE.K-STATE.EDU/4-H/

ASHARPE@KSU.EDU

Conservation Contests!

The Pottawatomie County Conservation District is again offering three contests for your elementary and junior high/middle school students!

Poster Contest: K - 8th
Theme: "Soil. Where it all Begins"
Limerick Contest: 5th - 8th
Essay Contest: 5th - 8th



Everyone gets a prize!

1st - 3rd Places and Honorable Mentions will receive additional prizes.
Awards will be announced at our annual meeting in 2026.

Deadline for all Contests: December 19, 2025

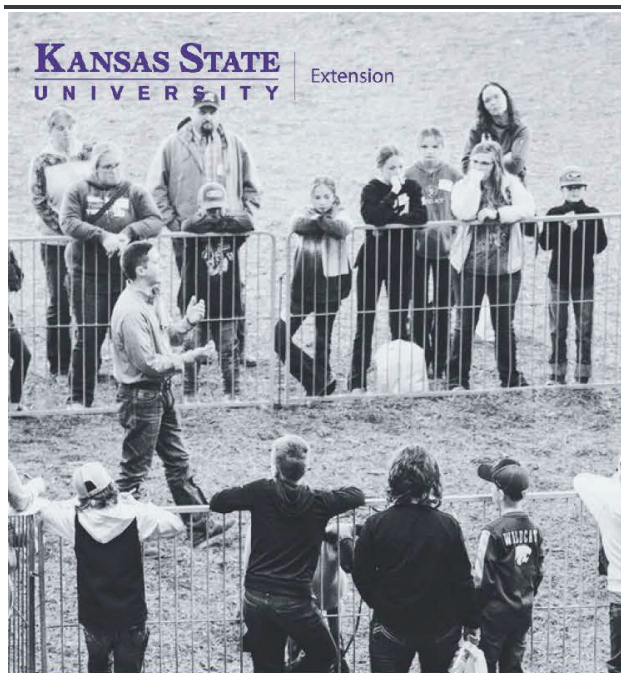
Please contact us for any needed materials to help you discuss the topic with your students and for a detailed copy of our rules and guidelines. We have a list of websites available as well! We welcome entries from schools, 4-H clubs, Scout troops, religious affiliated groups etc. as long as students are given a lesson and entries are monitored by an adult.

Only one entry per student per contest.

Contest entries can be mailed or delivered to our office at:

Pottawatomie Conservation District
501 State Street, P.O. Box 246
Westmoreland, Kansas 66549
Call or Email Chalee Braun at
785-457-3398
chalee.braun@ks.nacdnet.net





KANSAS STATE
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Extension

2026 K-State Junior Sheep Producer Day



Date

4.11.2026

Manhattan, KS



Scan Me!



Registration

Due: 3.20.2026

Cost: \$20/person

<https://bit.lySheepJrProducer>

**All adults & youth must register to attend.*

***Only those registered by 3/20/26 will receive a t-shirt.*

****Late registration is \$30/person.*



Questions

Lexie Hayes



785.532.1264



adhayes@ksu.edu

Program

Join us for the biennial K-State Junior Sheep Producer Day on Saturday, April 11, 2026. Presentations will be provided by featured guests, as well as K-State faculty, staff, and students. This event will be an educational day of activities in which youth, parents, extension agents, ag teachers, and sheep project leaders can increase their knowledge of youth sheep project selection and management. A variety of topics will be shared, including an optional YQCA certification at the end of the day. All ages and skill levels are invited! Lunch and a t-shirt are included. The registration fee is \$20/person for those who sign up by March 20 or \$30/person for those who register after that date. Only those who register by the deadline will receive a t-shirt. This is a family event! Anyone attending, including both youth and adults, must register. There will be an optional tour of the sheep and meat goat center offered on Friday evening and Saturday after jr. day.

Tentative Schedule

Friday, April 10

5:00-7:00PM Optional Tour of Sheep & Goat Center

Saturday, April 11

8:00AM Check-in

9:00AM Welcome

9:15AM Selection

10:00AM Nutrition

10:45AM Morning Breakout Sessions

-facilities & equipment, reproduction, project management purchase to show

NOON Lunch

1:00PM Health

1:45PM Afternoon Breakout Sessions

-wool, showmanship, clipping & grooming

3:45PM Dismissal

4:00PM Optional YQCA Class

4:00-6:00PM Optional Sheep & Goat Center Tour



K-State, County Extension Councils, Extension Districts, and U.S. Department of Agriculture Cooperating. All educational programs and materials available without discrimination on the basis of race, color, religion, national origin, sex, age, or disability.



(785) 457-3319

WWW.POTTAWATOMIE.K-STATE.EDU/4-H/

ASHARPE@KSU.EDU

2026 K-STATE JUNIOR BEEF PRODUCER DAY

Program

Join us on March 7, 2026, for the biennial K-State Junior Beef Producer Day! This event is a fun-filled educational day for youth, parents, beef project leaders, ag teachers, and extension agents to expand their knowledge of youth beef projects. Presentations by K-State faculty, staff, K-State livestock judging team members, students, and guest speakers will cover topics that may include selection, nutrition, daily care, meat science, reproduction, health, grooming, and showmanship. An optional YQCA certification class will be offered at the end of the day. A complimentary lunch and t-shirt will also be provided for those who register by the deadline. The registration fee is \$20 per person for those who sign up by February 13. The fee will increase to \$30 per person for those who register after the deadline. Only those who register by February 13 will receive a t-shirt. This is a family event! Anyone attending the event must register, including youth and adults.

Registration

Deadline: February 13

Fee: \$20/person

Registration Link: <https://bit.ly/BeefJrProducer>

Late Registration: \$30/person (after February 13)

*All attendees must register, including youth & adults.

**Late registrants will not receive a t-shirt.



Scan Me!

Tentative Schedule

8:00AM	Check-in
9:00AM	Welcome
9:15AM	Project Selection
10:00AM	Morning Breakout Sessions -Nutrition, Meat Science, Daily Care, Grooming & Fitting
Noon	Lunch
1:00PM	Afternoon Breakout Sessions -Health, Reproduction, Showmanship
3:15PM	Dismissal
3:30PM	Optional YQCA Class

Registration Due
February 13

Questions?

Lexie Hayes

☎ 785.532.1264 ✉ adhayes@ksu.edu



K-State, County Extension Councils, Extension Districts, and U.S. Department of Agriculture Cooperating. All educational programs and materials available without discrimination on the basis of race, color, religion, national origin, sex, age, or disability.

KANSAS STATE
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Extension

The Interior News-Way

A Newsletter By Leaders for Kansas 4-Hers in the Geology Project

Vol. 1, Issue 2, Dec 2025

In This Issue

January 31, 2026 Workshop Info

"Brachiopods" by Brenden Crouch

"My Kansas Septarian Nodule" by Joshua Seeger

What's That Specimen?

Can you identify the specimen below? No worries if you can't! The image is taken from the weebly website, so take a look around and see if you can find it.
<https://kansasgeology.weebly.com>



Online Resources

We have a YouTube channel where videos and shorts have been posted as additional resources. Topics include putting together a box and an explanation of the rock cycle. The videos are also available through the weebly site. You can find the channel here:
<https://www.youtube.com/@KansasGeologyActionTeam>

If you have a submission you would like to have considered for the newsletter, you can send them, along with your name and county, to Natasha Graham, the 4-H Geology Project Leader in Johnson County, at nlgraham95@gmail.com.

4-H Geology Workshop Day

Leaders Lesa and Rob Reeves have set up a day of workshops in January.

Date: January 31, 2026

Location: Pottorf Hall, CiCo Park, 1710 Avery Ave, Manhattan, KS

Schedule (subject to change):

All day - collections, lapidary displays, educational displays, & others

9 am - Welcome and brief explanation about the Action Team & project future

9:15 am - Keynote speaker

10 am - workshops

10:30 am - workshops

11 am - workshops

11:30 am - workshops

Noon - lunch on your own (many restaurants located within 2 miles)

1-3 pm - Geology ID contest

1-3 pm - Geology ID of specimens

1-3 pm - people available to answer questions

1:30 pm - Quiz Bowl Juniors

2:30 pm - Quiz Bowl Seniors

4 pm - wrap up/feedback/questions/ideas for future workshops

There are some display boxes available to purchase and pick up, and more can be preordered for a later date. Look at the previous issue for more information on boxes.

There is no fee for the workshop day. Everyone is welcome to come and learn!

You can sign up for the workshop day here.

https://docs.google.com/forms/d/e/1FAIpQLSfuTmEJ5DPJRjZZTgISUWm2IF6wbMEv_ozpJBOWRZQZd_w/viewform

My Kansas Septarian Nodule

By Joshua Seeger



Found June 14, 2025 - Blue Hills Shale, Jewell Co, KS

On June 14, 2025, I found the largest septarian nodule I've ever found, an absolute beast: pulled from the Blue Hills Shale of Jewell County, Kansas. When I finally got it cut open, polished it, and cleaned it, it felt like I was holding a piece of Earth's history in my hands. And in a way, I was. Septarian nodules may look like simple "mud balls" from the outside, but inside they hold a story that began almost 100 million years ago.

Back in the Cretaceous, Kansas wasn't prairie, it was seafloor. The Western Interior Seaway stretched from the Gulf of Mexico to the Arctic, and anything that died in that shallow sea—plankton, plants, tiny animals—settled into the mud. As that organic material decayed, it released gas that disturbed the surrounding sediments. Over time, that soft, organic-rich patch hardened first, creating the early form of what would become my concretion. Minerals like aragonite and calcite began to cement the mud together, forming a solid ball around whatever lay at the center.

As the concretion dried, it shrank, and that shrinking created the star-like cracks called septaria, which are the thin fractures that sometimes resemble turtle shells or lightning bolts when the rock is cut open. Later, mineral-rich groundwater flowed through the area, depositing layers of calcite inside those fractures. That's what gives these nodules their iconic golden veins. After millions of years of erosion, Kansas finally gave one up to me.

Once I got the nodule home, the real work started. It was far too large for a standard rock saw, so I attacked it with a reciprocating saw and a grinder. It took over an hour of steady cutting before the concretion finally split open, but the result made every minute worthwhile. After cutting, I washed the whole piece thoroughly, especially the big calcite pocket it held, because any leftover dirt would scratch the surface during polishing.

Brachiopods

By Brenden Crouch

Do you know what fossil Brachiopods are? They are a phylum of shelled marine creatures that can be found in a lot of places in Eastern Kansas. There are still some around today, but not as many as there used to be. There were around 30,000 species of Brachiopods, now we have around 300. They thrived in the Paleozoic Era, and were more diverse than bivalves during that time period.

Brachiopods can be identified by their line of symmetry. Their shells are not mirror images of each other, they are more like a hamburger bun, with a different top and bottom. They did not have two mirrored imaged shells similar to your right and left hands like oyster shells. The line of symmetry on a brachiopod cuts through the center of the two shells the same way a hamburger would be cut in half if you could not eat an entire hamburger!



Photo from Serious Eats Blog.



Brachiopod

Bivalve

Photo from the Digital Atlas of Ancient Life.

Brachiopods only lived in salt water and not freshwater. Brachiopods were filter feeders. Instead of using gills, they had a lophophore which they used to breathe and filter food. They had a structure called a pedicle that helped them attach to the floor of the ocean on a hard surface or burrow in the sea floor. The pedicle came out of a hole in one shell called the ventral valve or pedicle valve. The other shell was called the dorsal or brachial valve. Once attached they remained stationary.

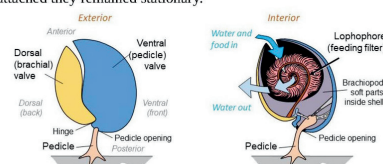


Diagram from Kentucky Geological Survey.

Brachiopods used to be divided into two classes as Articulata and Inarticulata. But testing done at a molecular level has revealed that there is a better way to classify these organisms. They are now divided into four classes: Strophomenata, Rhynchonellata, Lingulata and Craniata. Strophomenata and Rhynchonellata are both part of the previous Articulata class. Lingulata and Craniata make up the previous Inarticulata class.

Some common Kansas fossil Brachiopod genera in the Strophomenata Class are Chonetinella, Echinaria, Hystriculina, Meekella, Derybia, Reticulatia, Neochonetes, Meekella, Linoproductus, and Juresania. In the Rhynchonellata Class common Kansas fossil brachiopods include: Composita, Crurithyrus, Dielasma,

Then came grinding. Using a grinder with a sanding disk, I leveled out all the high spots to get a flat, smooth surface. Once that was ready, I switched over to polishing pads on a variable-speed corded drill, working from 50 grit all the way up to 6000. I went around the surface twice with each grit, keeping everything wet so I wouldn't burn the stone or leave scratches. When the polishing was finished, I washed the piece again, let it dry, and used a foam pad with auto rubbing compound to bring out the shine. One final rinse later, the whole surface gleamed.

What started as a mud ball on an ancient seafloor is now one of the most striking pieces in my collection. The process was long, dusty, and loud, but seeing the yellow calcite veins flash in the light made it more than worth it. The best part is that this method works on almost any rock, but few reveal a story as old, or as beautiful, as a Kansas septarian nodule.



Etnaketa, Huastella, Neospirifer, Phacodonta, Punctospirifer, Rhynchonella, Schizophoria, and Wellerella. In the class Lingulata you can find the genus Orbiculoida and in the class Craniata you can find the genus Crania here in Kansas.

Hope this information helps you understand the way Brachiopods lived and how they survived in the ocean.

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