

# The Interior News-Way

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

Vol. 1, Issue 3, Jan 2026

### In This Issue

January 31, 2026 Workshop Info

“Don’t Judge a Rock By Its Cover” by  
Gabrielle Smith

### 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>



Last Issue’s Answer: A trilobite of Genus *Ditomopyge*

### Online Resources

The Kansas Geological Survey (or KGS) has a wealth of information. One of their articles, “The Stratigraphic Succession in Kansas,” gives a look into the rocks found across the state, and has the full stratigraphic chart available. You can find it here:  
<https://www.kgs.ku.edu/Publications/Bulletin/s/189/>

### 4-H Geology Workshop Day

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

**Date:** January 31, 2026

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

#### Schedule:

All day - various collections and displays

9am - Welcome and brief explanation about the Geology project

9:15am - Keynote speaker – Andy Connolly (Ancient Animals & Plants of Kansas)

10am - Geology 101 workshop

10:30am - Quake Shaker workshop

11am - Educational display workshop

11:30am - Display box workshop (Mineralogy, Paleontology & Petrology)

Noon - lunch on your own

1-3:30pm - Geology ID contest

1-3:30pm - Geology ID of specimens

1-3:30pm – People available to answer questions about the project

1:30pm – Quiz Bowl Juniors

2:30pm - Quiz Bowl Seniors

4pm – 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 first 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/1FAIpQLSfuTtnEJ5DPjRjZZT TGtSUIWm2IF6wbMEv\\_ozpJBOwRZQZd\\_w/viewform](https://docs.google.com/forms/d/e/1FAIpQLSfuTtnEJ5DPjRjZZT TGtSUIWm2IF6wbMEv_ozpJBOwRZQZd_w/viewform)

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](mailto:nlgraham95@gmail.com)

## DON'T JUDGE A ROCK BY ITS COVER

By Gabrielle Smith

A geode may look like an ordinary rock on the outside, but don't take it for granite – it's what's inside that matters. Consisting mostly of quartz, chalcedony and calcite, these cave-like rocks take millions of years to form.

Of quartz it takes time for geodes to form. These unique formations began with mineral-rich groundwater seeping into a hollow burrow or cavity found in sedimentary rock, usually limestone from the Permian Period (299 to 252 Mya). Conditions changed and the process of water evaporation occurred, causing minerals to settle onto the cavity walls creating a hard shell of chalcedony. As the minerals continued to build layers upon layers, quartz or calcite crystals gradually formed, growing inward, slowly filling the cavity.



Geodes can be tough to identify. They can have a cauliflower-like appearance in Flint Hills limestone and look like bumpy, round grey rocks in Western Kansas. Geodes are light in weight for their size. Don't be fooled by a nodule, it's not your fault they look alike.



Nodule

Geodes can be found in quarries, road cuts, creek beds, outcrops, riverbanks, and construction sites. Don't quarry if you haven't found one, there are plenty in the Flint Hills (Walnut River, Butler County, Chase County, and near Junction City) and in Western Kansas (Wallace, Logan, and Trego Counties). Please remember to be gneiss and always get permission from the landowner when hunting on private land.

Geodes are sedimental reminders that beauty can be found within unexpected places.

Photos: 2023 Kansas 4-H State Geology Field Trip, Quarry, Marshall County

*Geodes,*

<https://geokansas.ku.edu/geodes#:~:text=They%20commonly%20form%20in%20limestone,Tre,go%20counties%20in%20western%20Kansas.>

*Geodes,*

[https://www.kgs.ku.edu/Publications/Bulletins/ED2/05\\_struc.html#:~:text=North%2DCentral%20Kansas.-,Geodes,Creswell%20Formation%20in%20Dickinson%20County.](https://www.kgs.ku.edu/Publications/Bulletins/ED2/05_struc.html#:~:text=North%2DCentral%20Kansas.-,Geodes,Creswell%20Formation%20in%20Dickinson%20County.)

*Rocks and Minerals of the Flint Hills*, <https://geokansas.ku.edu/rocks-and-minerals-flint-hills#:~:text=Geodes.,%2C%20Marshall%2C%20and%20Chase%20counties.>

*Flint Hills*, <https://geokansas.ku.edu/flint-hills#:~:text=The%20Flint%20Hills%20were%20formed,region's%20hilltops%2C%20slowing%20their%20erosion.>



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