

# Tricky Tracks

## Learning lessons from stories in the snow



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TECHNICAL COLLEGE  
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### Activity Overview:

Storytelling is a way to pass on knowledge and wisdom. We can learn many things about animals from the stories they leave in the snow or mud with their tracks. UTTC science faculty and students use animal tracks to study wildlife. In this activity, you will look for clues left by animal tracks and learn how you can study animals at UTTC in the environmental science and research program. You will also hear elder Kathryn Froehlich tell the story of the coyote and the fox and have the opportunity to make your own track story.

### Materials:

- This activity guide (if you have a printer you can print it out, otherwise just follow along on screen).
- Something to write or draw with
- Optional: a camera to take pictures of tracks outside

### UTTC Student Spotlight: Kimberlee Blevins, Mandan, Hidatsa, Arikira



Kimberlee Blevins is a student in the Environmental Science and Research Program at United Tribes Technical College. Pictured to the left she is sharing her knowledge of animal tracks with Bismarck-Mandan area youth.

### Reflect:

Sometimes people think that science is only done in a lab with goggles and lab coats. But, students like Kimberlee and many scientists like UTTC faculty and wildlife biologist, Dr. Jeremy Guinn spend a lot of their time doing science outside. What is your favorite thing to do outside? If you were a scientist, what would you like to study or learn about outdoors? Write and share your responses with a friend or family member.

## Try being a wildlife biologist with this tricky track activity:

Imagine you are a scientist working in the field and you are the first to investigate a set of marks you observe in the snow or mud. Tracks can tell a story about what happened in the past and by studying them we can infer some things about the animals that left them. When scientists study tracks they make many observations and take field notes. Try it!



### Field Notes:

What do you notice about the marks? Use your senses to gather information about what they look like.

Based on your observations of the tracks make an inference or an interpretation of what story these tracks might be telling.

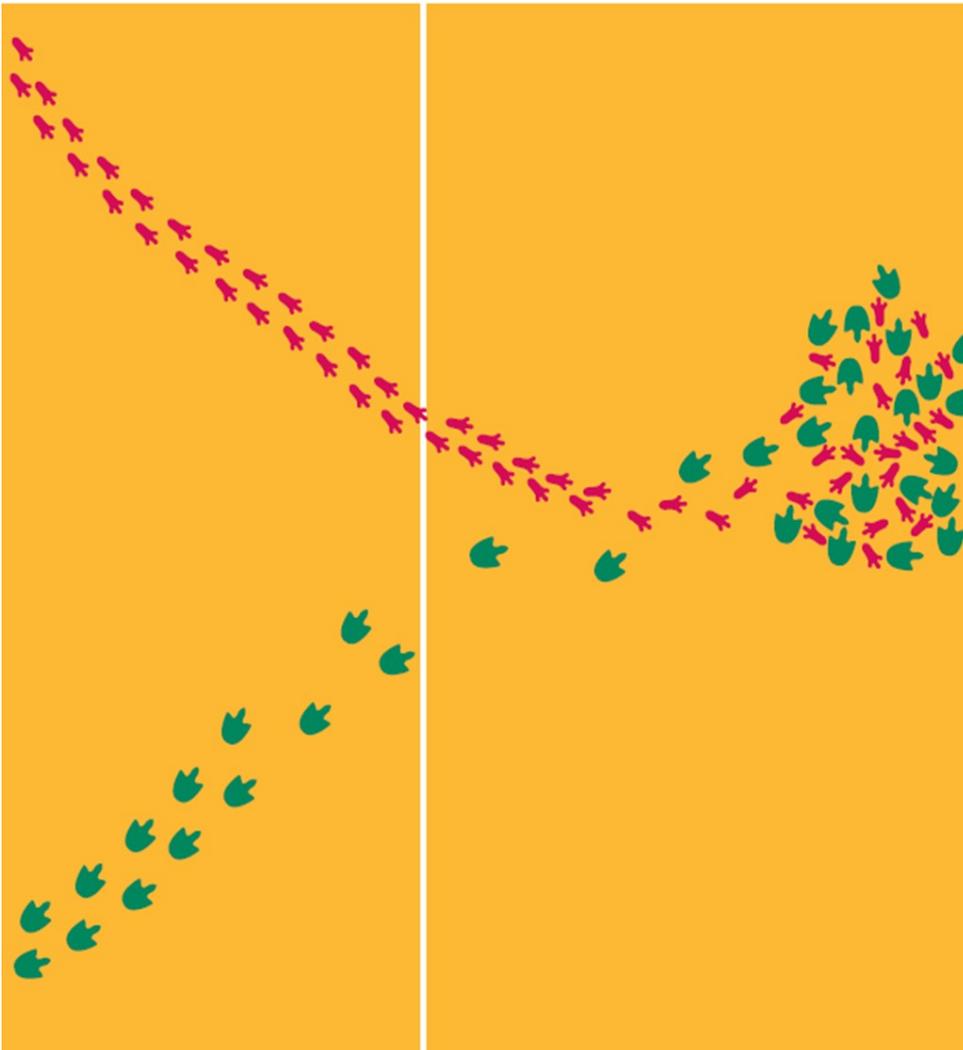
### ***Our observations:***

*We observe different marks in the ground. One is red and one is green. The red marks are smaller and closer together than the green marks. We observe the green marks getting farther apart at one point.*

### ***Our inferences:***

*We think the marks were made by animals and the green tracks might be starting to run toward the other set.*

You keep walking and discover more marks at the site. Study the new tracks and add in information to your field notes. Observations sometimes use numbers to describe what we see. We call these observations quantitative and include things like height, length, speed. Other observations are difficult to measure so we use qualities or characteristics such as smell, shape, or color to describe them. These types of observations are qualitative. Try adding in both quantitative and qualitative observations to your field notes. Compare your notes to a friend or family member.



## Field Notes

### New observations:

*What new things do you notice?*

### New inferences:

*Based on your new observations, what story do you think is unfolding?*

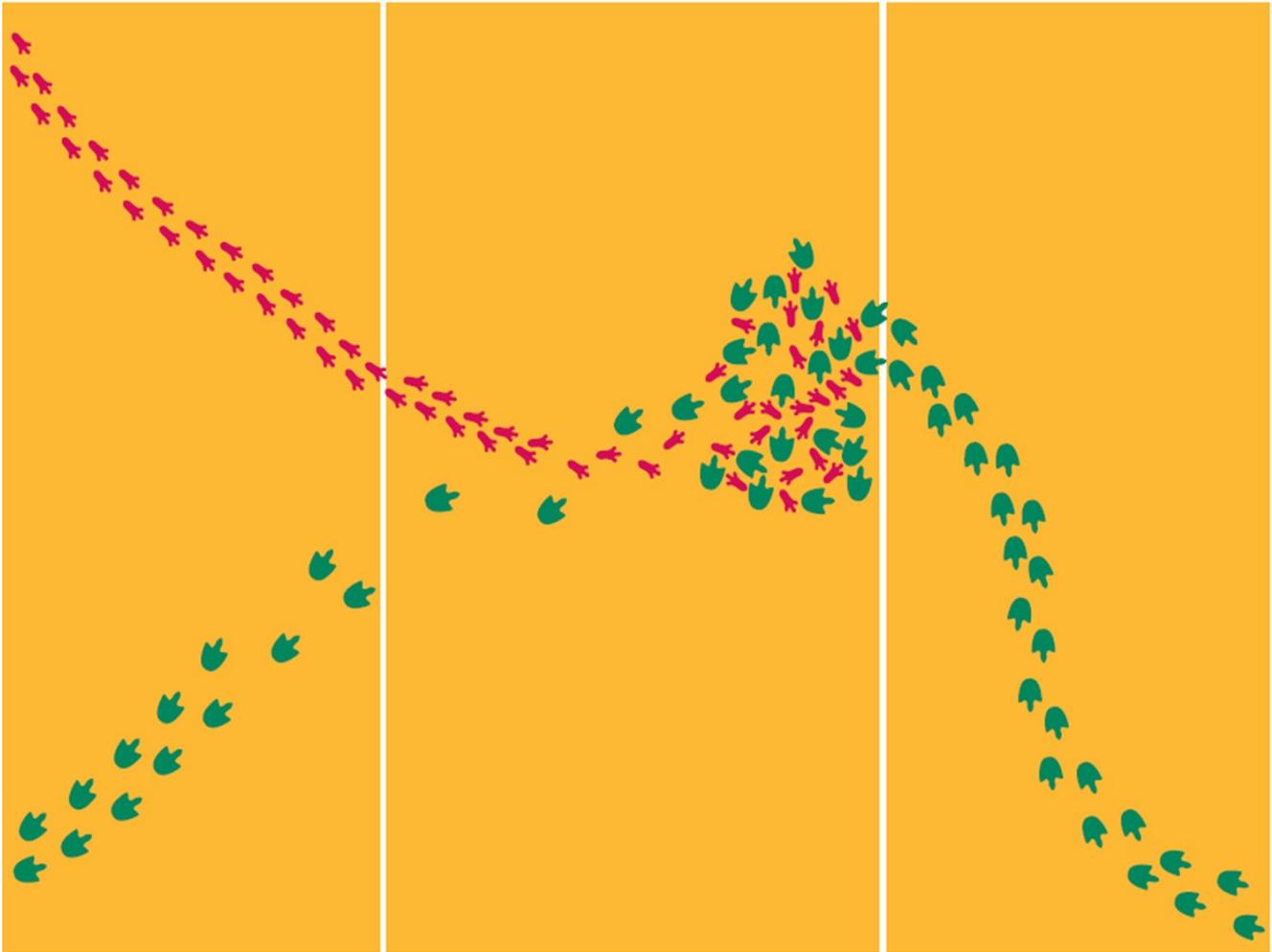
### **Our observations:**

*We observe the two sets of marks intermingled. They are no longer in a straight line but are positioned close together. Some are upside down and some are sideways. We observe 36 red marks and 25 green marks.*

### **Our inferences:**

*We think the animals are fighting each other. But some people think they might just be eating or drinking food.*

You keep walking and uncover more clues. Make one more set of observations and create a story to explain what you think happened at this site.



Think about the following questions while you create your story:

What kind of animals made the prints? Do you think any were birds? How would that change your story? Did they change their speed and direction? What might have changed the footprint pattern? Was the land level or irregular? Was the soil moist or dry on the day these tracks were made? Were the tracks made in snow, mud, or sand? What environment could you find tracks like these today?

## The story of the fox and coyote:

Scientists can learn about animals from their tracks but we can also learn lessons from stories we hear from our elders. Go to the website and listen to a story from a Sahnish, Arikara, Blackfeet elder Kathryn Froehlich. After hearing the story choose a “Learn About” or “Learn From Question” and share what you learned with a friend or family member.



<https://teachingsofourelders.org/story-coyote-fox-kathryn-froelich/>

## Create your own tricky track story:

Use the space below to draw your own story. Need inspiration? Head to this website to find more information about different types of animal tracks. <https://www.fws.gov/refuges/features/>

## We want to see your story!

Take a picture of your story and share it with us on social media. Or share pictures of real tracks you found outside. Email them to [abahnson@uttc.edu](mailto:abahnson@uttc.edu) or tag @unitedtribestech on Facebook.

## How can you become a wildlife biologist?

United Tribes Technical College has many degree paths that can lead to a career in animal research. Visit the various websites below to learn more about our programs and reach out to us to learn more!

