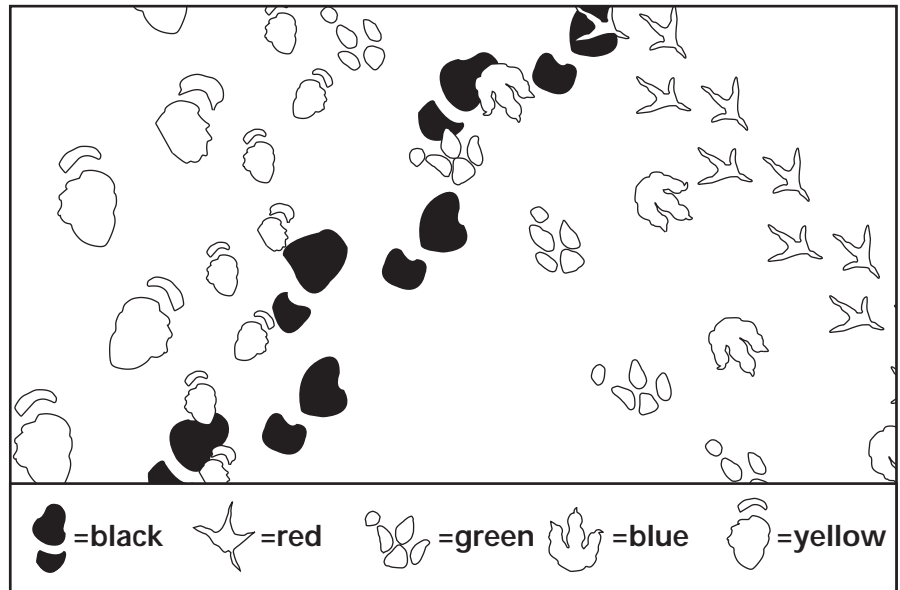


# Be a Sleuth— How Dinosaurs Behaved

Like today's crime-scene investigators, paleontologists study trackways—fossilized footprints—for clues about how dinosaurs behaved. For example, did they travel in herds, like elephants? Did some hunt alone? Did they migrate long distances in search of food, like modern caribou? Trackways often hold the key.

Look at this illustration. Let's say you are a paleontologist who has just come across these awesome clues, frozen in place from the days when non-avian dinosaurs roamed the Earth. What can you figure out about those long-ago creatures by studying their trackways? Color the different animals' tracks in different colors (we've done the first one for you) and then try to answer the following questions. (Keep in mind: You won't be able to answer all the questions with certainty.)



1. How many different kinds of animals were here?
2. Did the animal that left the red tracks walk on two or four legs? Was it walking or running?
3. Did the animal that left the yellow tracks travel alone?
4. Which dinosaur walked across the area first?
5. How many individual animals were here?
6. If these animals were all here at the same time, can you make some guesses as to why?

## Detective Fact:

There is only one known footprint of the *Tyrannosaurus rex*. Scientists believe that the rarity of *T. rex* footprints (and fossils) means that there simply weren't that many *T. rex* around. Modern animals at the top of the food chain—lions, eagles, great white sharks—tend to be rare as well.

### Make Your Own Trackway!

(You will need a measuring stick.) Find a setting where you can see your footprints (sand, snow, or mud). First walk, then run, over the same area. For each set of prints, measure your stride (the distance from toe to toe made by the same foot). What are the differences in your stride between your two sets of prints? Ask a friend who is taller or shorter to repeat the same activity. Compare and contrast your footprints.

ANSWERS  
1. Five. 2. Probably two legs and walking. 3. Probably not. 4. The one with the black tracks. 5. Probably six. 6. Answers may include: looking for food or water, migrating, escaping a predator.