

Tar Pits Fossil Count

Elementary

Duration 20 minutes

Location

Supplies

- Worksheet
- Pencil
- Clipboard (optional)

NGSS Applications

- NGSS Appendix F
 - Practice 1
 - Practice 3
 - Practice 4
 - Practice 6
 - Practice 7
 - Practice 8

Concepts

- Studying fossils can help us understand the lives of ancient animals.
- The quantity of fossils we find from each species is an important piece of data.

Objectives

- Students will form hypotheses about ancient life based on the numbers of fossils we find at the La Brea Tar Pits.
- Students will collect and analyze data from the Museum.

Outline

- 1. Students will explore the Museum while counting how many herbivore and carnivore fossils they can find.
- 2. Students will use data collected from the Museum to draw conclusions about the behaviors of ancient animals.

Tally Up See how many herbivore and carnivore fossils you can find in the Museum! Don't forget key spots like the Dire Wolf wall and the display of Golden Eagle foot bones!

Carnivores	Herbivores

The Numbers

Here's how some of our most iconic species are represented in the La Brea collections:

The Carnivores (Comprise over 90% of our mammal fossils)

Saber-Toothed Cat: more than 2,000 individuals (second most common large animal here)
Dire Wolf: more than 4,000 individuals (most common large animal at the Tar Pits)
Coyote: at least 500 individuals
Giant Jaguar: at least 80 individuals
Short-Faced Bear: at least 30 individuals
Merriam's Teratorn (not a mammal): over 100 individuals

The Herbivores

Columbian Mammoth: at least 35 individuals American Mastodon: at least 15 individuals Harlan's Ground Sloth: at least 60 individuals Antique Bison: over 300 individuals (our most common herbivore) Western Horse: over 250 individuals Yesterday's Camel: at least 36 individuals

What can the numbers tell us?

Think about...

Why might we find so many more carnivores than herbivores here? In our collections, we have about 9 carnivore specimens for every herbivore.

Why are dire wolves so common in our collection (over 4,000 found)? Can their numbers tell us anything about their behavior?

Using what you concluded about dire wolves, can you make a similar conclusion for saber-toothed cats (over 2,000 found)?

What about the herbivores? Why do you think we find more horses and bison here than any other large herbivores?

Can you name one reason why finding many specimens from the same species can be valuable for paleontologists studying the Ice Age?