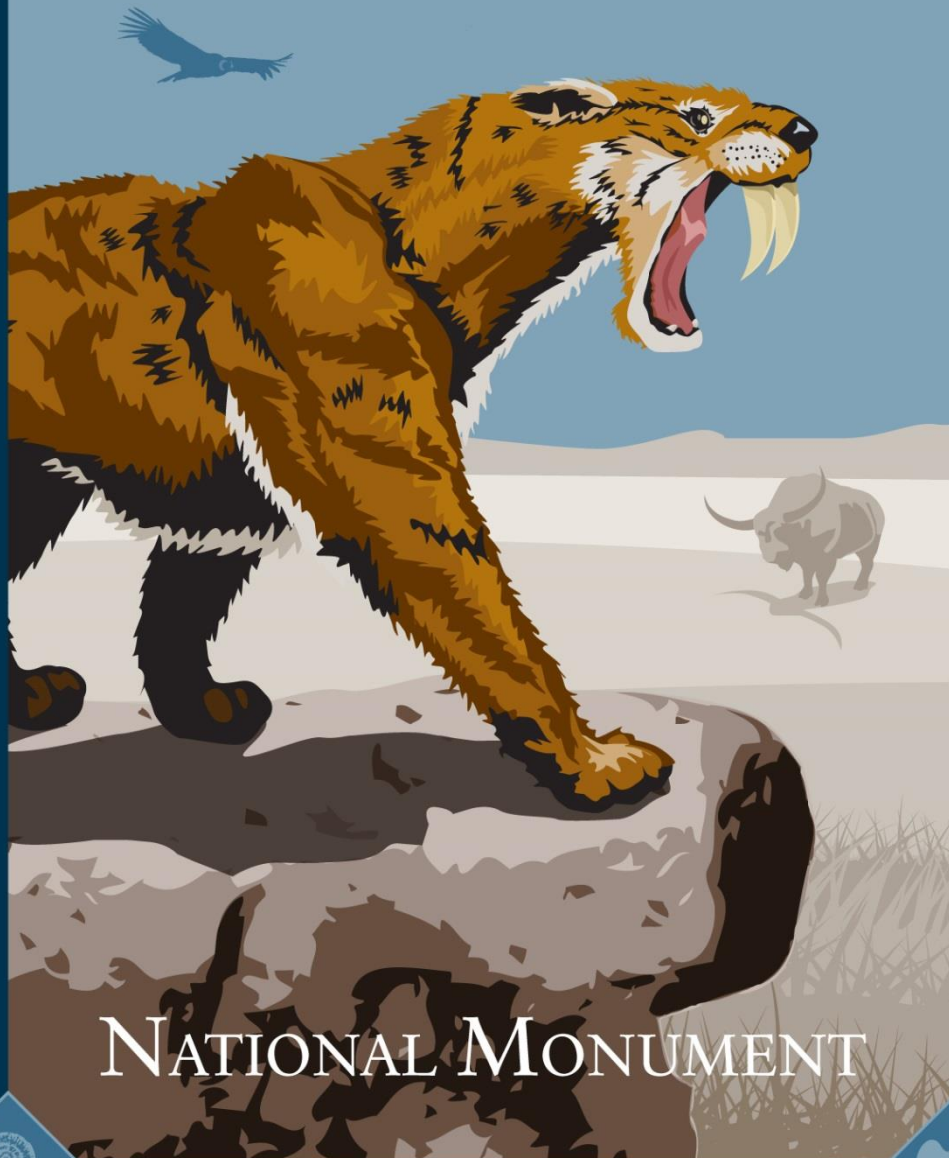




# Teacher Resources

## TULE SPRINGS FOSSIL BEDS



NATIONAL MONUMENT

Kindergarten – 2<sup>nd</sup> Grade

# Tule Springs Fossil Beds National Monument Teacher Resources

## Grades K-2

Tule Springs Fossil Beds is one of our newest National Park Service units, located in the Las Vegas Valley. We are providing these educational resources for K-12 educators together with our partners: the Protectors of Tule Springs. Over the last ~570,000 years, water has transformed the Upper Las Vegas Valley. Tule Springs Fossil Beds National Monument is an urban park that preserves the unique story of this ever-changing ecosystem

Tule Springs Fossil Beds National Monument preserves thousands of Pleistocene (Ice Age) fossils that help tell the story of a dynamic environment. These fossils were preserved within expanding and contracting wetlands between 100,000-12,500 years ago. Many of the Pleistocene animals of Tule Springs are still alive today, including the coyote (*Canis latrans*), jackrabbit (*Lepus* sp.), and aquatic snails. Some animals went extinct, disappearing from North America entirely.

The Monument also protects Mojave Desert habitat from urban development. This wildlife and plant corridor is home to a diverse group of native plants and animals. Flash floods are also common seasonally in the upper Las Vegas Wash. Important cultural resources, such as historic objects, cultural sites, and artifacts are also protected within the Monument.

Tule Springs Fossil Beds National Monument is in the early phases of park planning, so we do not have facilities on site. Further information can be found at [NPS.gov/TUSK](https://www.nps.gov/TUSK)



# What's for Dinner?

## Concepts

- We can make hypotheses about how ancient animals survived by observing their physical structures.
- Careful observation and hypotheses can help us figure out things we don't know.

## Objectives

- Students will observe the shape of animals' teeth to determine whether they are carnivores or herbivores.

Review the idea that we can determine what an animal ate by observing the shape of its teeth. Paleontologists use visual clues like teeth shape to help determine what long extinct animals ate for food.

Herbivores, or plant eaters, have strong, flat molars that grind up leaves. Their canine teeth, if they have them, are small.

Carnivores, or meat eaters, have prominent canine teeth for tearing at meat and usually a limited number of molars.

Omnivores are animals that eat both meat and plants. They have a combination of sharp front teeth for tearing meat and flat molars for grinding plant materials.

You can show students some examples of living animals and have them determine what is the animal's diet. Example of familiar animals to Ice Age animals they will see in pictures:

- Cats (domestic cats, mountain lions, jaguars, etc.)
- Dogs (domestic dogs, wolves, coyotes, etc.)
- Horses
- Elephants
- Bears

Explain that this concept can also be applied to extinct animals, and that making careful observations about fossils can give us important clues about how animals survived.

# What's for Dinner? Observations

Talk about any animal in the pictures and form a hypothesis about what you think it ate.

Make sure you give evidence for your conclusion!

Animal: \_\_\_\_\_

Diet: \_\_\_\_\_

Evidence: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Draw the animal's teeth:



# Species Finders- The Past Animals of Tule Springs!

## Concepts

- Animals come in many shapes and sizes.

## Objectives

- Students will compare different animals in pictures.
- Students will identify observable characteristics of animals that have been found as fossils.

## Outline

We can describe animals in many ways: their relative size, how many legs they have, and by their external features. Review these characteristics with students.

1. Find an animal larger than you. What did you find? Try walking like that animal.

2. Find an animal smaller than you. What did you find? Draw it in the space below.

A large empty rectangular box with a blue border, intended for a student to draw a smaller animal as described in the previous step.

3. Find an animal that is about the same size as you. What did you find? Name it.