Tule Springs Fossil Beds National Monument Teacher Resources

Grades 9-12

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





National Parks in the History of Science: Radiocarbon Dating

Video Notes

Instructions: Complete this note taker on the history of radiocarbon dating at Tule Springs Fossil Beds National Monument while you watch the video at <u>this link</u> (<u>https://www.nps.gov/articles/000/radiocarbondating.htm</u>).

1. At several times in the past, Tule Springs had a lot of ______.

- 2. That water and associated ______ supported a diverse community of
- The sediments that are found at Tule Springs are from the ______, which is commonly known as the last Ice Age.
- 4. List at least three animals that once lived in Tule Springs
 - a.
 - b.
 - c.
- 5. The Tule Springs Expedition was an effort to determine if Ice Age mammals and ______ coexisted.

6.	A multidisciplinary team was put together, consisting of,
	, and
7.	Trenches that were hundreds of meters long and 35 to 40 feet deep were used to expose
	layers of rock.
8.	The Tule Springs Expedition was later nicknamed
	·
9.	What did archaeologists find at Tule Springs in the 1930s?
	a.
	b.
10.In the 1950s, after the development of the atomic bomb, a powerful new tool was created:	
11	.The radioactive form of is taken up by all living things on
	Earth.
12	When an animal or plant dies, that uptake of Carbon-14 ceases, and you can measure the of that in this plant or animal.
13.Carbon dating can be used to date:	
	a.
	b.
	c.
14	The Tule Springs expedition was unique in that it was the first place in North America.
	where was performed in a field
	setting.

15. Was there evidence that Ice Age mammals and ancient people interacted at Tule Springs?