

Tule Springs Fossil Beds National Monument

Rock Record & Climate

Supplemental Materials

Scientists can document and interpret sediment layers, called strata, to interpret environmental changes through time. The sediment column below was recorded from the rock record of Tule Springs Fossil Beds. To the left are the sediments they observed, and to the right are the environments through time they interpreted from their observations. Desert wetland springs used to be more abundant and more inter-connected in the Tule Springs area compared to today. Scientists can also infer warmer or cooler global temperatures through time from ice core records, taken from ice sheets in Greenland. Pictured below is a global temperature graph from 35,000 to 5,000 years before the present. **What patterns do you see in the past environments of Tule Springs? What patterns do you see in global temperature through time?**

Figure based on: Springer, K. B., Manker, C. R., & Pigati, J. S. (2015). Dynamic response of desert wetlands to abrupt climate change. *Proceedings of the National Academy of Sciences*, 112(47), 14522-14526.

