



Bear's teeth shed light on historic lead pollution

Slide by Neil Goalby. Available from rsc.li/424IS3G

Scientists have found lead in the teeth of a bear that lived around 1000 years ago. This is evidence that metal extraction long before the industrial revolution caused pollution. The scientists found lead concentrations in the teeth were high during the bear's active months and low during hibernation. This suggests the lead came from the bear's food, water and air intake. Mining and smelting practices of the time likely released particles into the environment, and these accumulated in the food chain.



This bear jaw reveals pollution existed before the industrial revolution

Questions

1. Describe how pollution was caused by lead extraction.
2. Explain how you can extract lead from lead oxide by heating with carbon.
3. Suggest why lead was easily extracted 1000 years ago.