



### 1. Woolly Mammoths

This illustration shows four female woolly mammoths in their herd. Fossil records indicate that herds consisted of adult females and young calves. When male mammoths reached young adulthood, they left their herd.

Illustration by Velizar Simeonovski © The Field Museum



### 2. Proportions

This sketch shows a Columbian mammoth, an African elephant, and an American mastodon (from back to front) next to a 6-foot-tall human.

Illustration by Velizar Simeonovski © The Field Museum



### 3. Mastodon Skeleton

This skeleton of an American mastodon shows the beast's tusks have a more pronounced curve than those of today's elephants.

Photo by John Weinstein © 2009 The Field Museum



### 4. Lyuba Illustration

An artist's rendering of what Lyuba might have looked like while alive. Lyuba is the best-preserved baby mammoth ever discovered and is the centerpiece of *Mammoths and Mastodons: Titans of the Ice Age*.

Illustration by Velizar Simeonovski © The Field Museum



### 5. Lyuba in Lab

An international team of scientists studied Lyuba after her discovery, performing an autopsy and DNA analysis.

© RIA Novosti



### 6. Lyuba

Lyuba's trunk collapsed when she died. Scientists theorize that the baby mammoth was trapped in silt and eventually suffocated.

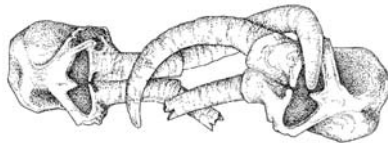
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### 7. Mastodon Combat

Young male mammoths and mastodons would fight for mating rights, sometimes to the death.

Illustration by Velizar Simeonovski © The Field Museum



### 8. Mammoths Locked

This scientific illustration shows a pair of Columbian mammoth fossil skulls with tusks that locked during battle, leading to the mammoths' deaths.

Courtesy Marshall Editions; *Mammoths, Giants of the Ice Age*, 2007.



### 9. Woolly Mammoth Skull

Visitors to *Mammoths and Mastodons: Titans of the Ice Age* will be able to see fossil skulls, as well as life-size replicas of these ancient beasts.

© <http://www.paleoart.com>



### 10. Hunters

Unlike dinosaurs, mammoths and mastodons lived side-by-side with humans for thousands of years. Killing a mammoth in the fall could ensure a steady food supply throughout the winter.

Illustration by Velizar Simeonovski © The Field Museum



**11. *Mammoths and Mastodons: Titans of the Ice Age*** includes several spear points (called Clovis points). The Clovis points might have been used for hunting mammoths and mastodons.

Photo by Charlotte Pevny. Courtesy of the Center for the Study of the First Americans, Texas A&M University.



### **12. Atlatl**

This atlatl (spear thrower) is a carved reindeer antler in the shape of a mammoth.

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### **13. Mammoth Tusk**

Scientists examine mammoth tusks to discover how old the animal was at the time of its death. Similar to rings on a tree, mammoth tusks grew in layers, year by year.

Photo by John Weinstein © The Field Museum



### **14. Mammoth Tusk Detail**

This close-up image of a mammoth tusk shows the conical way in which the tusks grew each year.

Scientists examine tusks to determine the age at which a mammoth died.

Photo by John Weinstein © The Field Museum



### **15. Mammoth and Mastodon Teeth**

The mastodon tooth (left), with its sharp cusps was used for shredding bark and twigs, while the mammoth tooth (right) was used to grind leaves and grasses.

Photo by John Weinstein © The Field Museum



### 16. Ivory Horse Carving

Unlike dinosaurs, mammoths and mastodons lived side-by-side with humans. This piece of mammoth ivory, carved in the shape of a horse, is one way humans utilized mammoths—as a vehicle for art.

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### 17. Necklace

This necklace, from Abri Blanchard, France, is made of stone, bone and mammoth ivory, and is estimated to be 35,000 years old.

© Logan Museum of Anthropology, Beloit College



### 18. Rouffignac Cave Painting

Humans were clearly influenced by these great beasts. This depiction of a mammoth, painted on the walls of Rouffignac cave in France, dates back 15,000 to 20,000 years ago.

© Jean Plassard, Grotte de Rouffignac



### 19. Exhibition Illustration

*Mammoths and Mastodons: Titans of the Ice Age* will include several life-size recreations of other Ice Age animals. This exhibition rendering features both the short-faced bear and the saber-tooth cat in the background.

© The Field Museum



### 20. Dan Fisher

Dr. Daniel C. Fisher, Professor of Geological Sciences at the University of Michigan, and curator of *Mammoths and Mastodons: Titans of the Ice Age*

© Peter Smith Photography



### 21. Bill Simpson

William F. Simpson, collections manager of fossil vertebrates at The Field Museum, and content specialist of *Mammoths and Mastodons: Titans of the Ice Age*. Photo by John Weinstein © The Field Museum



### 22. Ice

Photograph by R. Thorstein



### 23. Mammoths and Mastodons Logo

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### 24. Mammoths and Mastodons Text Color

© The Field Museum



### 25. Mammoths and Mastodons Text Black and White

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