GLOBAL HISTORY I HOMEWORK ASSIGNMENTS DUE FRIDAY, SEPTEMBER 19, 2008

I. What Killed the Woolly Mammoth?

Some scientists, led by Paul Martin, think that human hunters in North America were the main reason why many kinds of huge animals, such as the woolly mammoth and the giant sloth, disappeared about 10,000 years ago. Others, such as paleontologist Edwin Colbert, attribute the extinction to other causes. • As you read about this prehistoric mystery, think about what it might mean for us today. Then, on a separate sheet of paper, answer the questions that follow.

What Killed the Woolly Mammoth?

Paul S. Martin

About 10,000 years ago, as glaciers retreated into Canada and as man moved southward at the end of the last Ice Age, North America suddenly and strangely lost most of its large

animals. Native North American mammals exceeding 100 pounds in adult body weight were reduced by roughly 70 percent. The casualty list includes mammoths, mastodon, many species of horses and camels, . . . the giant beaver, tapirs and others totaling over 100 species. . . .

... My own hypothesis is that man, and man alone, was responsible for the unique wave of Late Pleistocene extinction... About 12,000 years ago, when the Paleo-Indians swept into North America across the Bering bridge... we can be confident that they were old hands at hunting woolly mammoths and other large Eurasian mammals. In contrast, the New World mammoth and other species of big game had never encountered man and were unprepared for escaping the strange two-legged creature who used fire and stone-tipped spears to hunt them in communal bands.

Sources: (1) "Pleistocene Overkill," by Paul S. Martin; (2) "Mammoths and Men," by Edwin H. Colbert; both in *Ants, Indians, and Little Dinosaurs*, ed. by Alan Ternes (The American Museum of Natural History, 1975).

Edwin H. Colbert

Then at the end of the Ice Age, when the last of the great continental glaciers was retreating . . . there was a relatively sudden and wide-spread extinction of mammoths

throughout the world. The woolly mammoth disappeared from northern Europe, Asia, and North America, as did the more southerly types in these continents. . . .

What was the reason for the wiping out of the mammoths? Why should these huge and seem-

ingly successful animals suddenly disappear from a scene which they had so long dominated? Was man concerned with their extinction? It hardly seems probable, for even though at this late date he was a clever and an efficient hunter, he was still rather scattered—certainly not a numerous member of the faunas' to which he belonged. Therefore, it is difficult to see how primitive hunters might have prevailed against the mammoths to such an extent as to cause their sudden and almost complete destruction. The answer to this question may always remain a secret.



Woolly mammoth

Questions to Think About

- 1. What facts about the disappearance of the animals do both writers accept?
- 2. How does Martin explain the extinction of large animals? What does Colbert think?
- 3. Determine Relevance Why is it important that the extinctions occurred soon after humans arrived on a new continent?
- 4. Recognize Cause and Effect What efforts are you aware of that are being made today to avoid large-scale extinctions like the ones described in the excerpts?

^{*} the animals of a specified region or time

II. Ice Age Art in an Underwater Cave

In 1985, a French deep-sea diver found ancient cave drawings on the walls of a huge sea cave in a cliff at the edge of the Mediterranean Sea. An expedition to study the Cosquer cave required people with unusual qualifications—expertise in art, plus enough skill in diving to get to the cave. One of the experts was Jean Courtin, who wrote this article with another French rock art expert, Jean Clottes. ◆ As you read this excerpt, think about how scientists interpret things they find. Then, on a separate sheet of paper, answer the questions that follow.

Ice Age Art in an Underwater Cave

by Jean Clottes and Jean Courtin

The evidence tells us that ancient people went into the Cosquer cave during at least two different periods. During Paleolithic times, the sea level was about 360 feet lower than it is now, and the coast was several miles away from the cliff. When the sea rose dramatically [about 12,000 years ago] more than half the cave was flooded. . . . We can thus safely assume that what remains above water is just part of the art in what must have been one of the greatest decorated caves in Europe.

The first period of activity at the Cosquer cave produced the forty-five stenciled hand-prints and thousands of finger tracings discovered so far.... What we have called Phase 1 is now well dated at about 27,000 years ago by four radiocarbon analyses....

Following Phase 1, the cave was abandoned for about 8,000 years, unless people used it without leaving any evidence of their presence. . . . We believe it was during Phase 2 that all the animal paintings and other engravings were made. This period is well dated at about 18,500 to 19,000 years ago by radiocarbon analyses of the charcoal in some

of the paintings, as well as by some charcoal lumps found on the floor. . . .

We have now documented about one hundred images of animals. Horses are the most numerous, making up nearly one-third of the total. In some drawings they are represented by a single head; in others, by the whole animal. Such minute details as the difference in coat color between belly and flank are discernible in one painting. On the same panel are three black horses with an ibex [wild goat] engraved over one of them. Horses are the animals most often depicted in other Upper Paleolithic caves, so their dominant presence in the Cosquer cave is not unusual.

The next most commonly depicted animals are ibexes and chamois [small goat antelopes], animals that favored the rocky environments that existed during Paleolithic times. All but one of the black ibexes are engraved. Their bodies are accurately proportioned, except for the horns. . . . Also represented are several European bison. . . .

One of the most delightful surprises of the Cosquer cave was its depiction of sea animals.

Source: "Neptune's Ice Age Gallery," by Jean Clottes and Jean Courtin, in *Natural History* (April 1993).

Questions to Think About

- 1. How did the paintings differ in the two periods called Phase 1 and Phase 2?
- 2. Recognize Cause and Effect How did the surroundings of the cave influence the kinds of animals drawn by the Paleolithic artists?
- 3. Activity Suppose that you found a cave filled with ancient rock drawings. What animals or symbols would you expect to find? Write a paragraph explaining why you think ancient artists would have drawn those images.

