

## tpo\_9\_passage\_1

It has long been accepted that the Americas were colonized by a migration of peoples from Asia, slowly traveling across a land bridge called Beringia (now the Bering Strait between northeastern Asia and Alaska) during the last Ice Age. The first water craft theory about this migration was that around 11,000-12,000 years ago there was an ice-free corridor stretching from eastern Beringia to the areas of North America south of the great northern glaciers. It was this midcontinental corridor between two massive ice sheets—the Laurentide to the east and the Cordilleran to the west—that enabled the southward migration. But belief in this ice-free corridor began to crumble when paleoecologist Glen MacDonald demonstrated that some of the most important radiocarbon dates used to support the existence of an ice-free corridor were incorrect. He persuasively argued that such an ice-free corridor did not exist until much later, when the continental ice began its final retreat. Support is growing for the alternative theory that people using watercraft, possibly skin boats, moved southward from Beringia along the Gulf of Alaska and then southward along the Northwest coast of North America possibly as early as 16,000 years ago. This route would have enabled humans to enter southern areas of the Americas prior to the melting of the continental glaciers. Until the early 1970s, most archaeologists did not consider the coast a possible migration route into the Americas because geologists originally believed that during the last Ice Age the entire Northwest Coast was covered by glacial ice. It had been assumed that the ice extended westward from the Alaskan/Canadian mountains to the very edge of the continental shelf, the flat, submerged part of the continent that extends into the ocean. This would have created a barrier of ice extending from the Alaska Peninsula, through the Gulf of Alaska and southward along the Northwest Coast of north America to what is today the state of Washington. The most influential proponent of the coastal migration route has been Canadian archaeologist Knut Fladmark. He theorized that with the use of watercraft, people gradually colonized unglaciated refuges and areas along the continental shelf exposed by the lower sea level. Fladmark's hypothesis received additional support from the fact that the greatest diversity in native American languages occurs along the west coast of the Americas, suggesting that this region has been settled the longest. More recent geologic studies documented deglaciation and the existence of ice-free areas throughout major coastal areas of British Columbia, Canada, by 13,000 years ago. Research now indicates that sizable areas of southeastern Alaska along the inner continental shelf were not covered by ice toward the end of the last Ice Age. One study suggests that except for a 250-mile coastal area between southwestern British Columbia and Washington State, the Northwest Coast of North America was largely free of ice by approximately 16,000 years ago. Vast areas along the coast may have been deglaciated beginning around 16,000 years ago, possibly providing a coastal corridor for the movement of plants, animals, and humans sometime between 13,000 and 14,000 years ago. The coastal hypothesis has gained increasing support in recent years because the remains of large land animals, such as caribou and brown bears, have been found in southeastern Alaska dating between 10,000 and 12,500 years ago. This is the time period in which most scientists formerly believed the area to be inhospitable for humans. It has been suggested that if the environment were capable of supporting breeding populations of bears, there would have been enough food resources to support humans. Fladmark and others believe that the first human colonization of America occurred by boat along the Northwest Coast

during the very late Ice Age, possibly as early as 14,000 years ago. The most recent geologic evidence indicates that it may have been possible for people to colonize ice-free regions along the continental shelf that were still exposed by the lower sea level between 13,000 and 14,000 years ago. The coastal hypothesis suggests an economy based on marine mammal hunting, saltwater fishing, shellfish gathering, and the use of watercraft. Because of the barrier of ice to the east, the Pacific Ocean to the west, and populated areas to the north, there may have been a greater impetus for people to move in a southerly direction.

#### question 1

According to paragraph 1, the theory that people first migrated to the Americas by way of an ice-free corridor was seriously called into question by

A paleoecologist Glen MacDonald's argument that the original migration occurred much later than had previously been believed

B the demonstration that certain previously accepted radiocarbon dates were incorrect

C evidence that the continental ice began its final retreat much later than had previously been believed

D research showing that the ice-free corridor was not as long lasting as had been widely assumed

#### question 2

The word "persuasively" in the passage is closest in meaning to

A aggressively

B inflexibly

C convincingly

D carefully

#### question 3

Paragraph 2 begins by presenting a theory and then goes on to

A discuss why the theory was rapidly accepted but then rejected

B present the evidence on which the theory was based

C cite evidence that now shows that the theory is incorrect

D explain why the theory was not initially considered plausible

#### question 4

Paragraph 2 supports the idea that, before the 1970s, most archaeologists held which of the following views about the earliest people to reach the Americas?

A They could not have sailed directly from Beringia to Alaska and then southward because, it was thought, glacial ice covered the entire coastal region.

B They were not aware that the climate would continue to become milder.

C They would have had no interest in migrating southward from Beringia until after the continental glaciers had begun to melt.

D They lacked the navigational skills and appropriate boats needed long-distance trips.

#### question 5

Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

A Because this region has been settled the longest, it also displays the greatest diversity in Native American languages.

B Fladmark's hypothesis states that the west coast of the Americas has been settled longer than any other region.

C The fact that the greatest diversity of Native American languages occurs along the west coast of the Americas lends strength to Fladmark's hypothesis.

D According to Fladmark, Native American languages have survived the longest along the west coast of the Americas.

#### question 6

The author's purpose in paragraph 4 is to

A indicate that a number of recent geologic studies seem to provide support for the coastal hypothesis

B indicate that coastal and inland migrations may have happened simultaneously

C explain why humans may have reached America's northwest coast before animals and plants did

D show that the coastal hypothesis may explain how people first reached Alaska but it cannot explain how people reached areas like modern British Columbia and Washington State

#### question 7

According to paragraph 5, the discovery of the remains of large land animals supports the coastal hypothesis by providing evidence that

A humans were changing their hunting techniques to adapt to coastal rather than inland environments

B animals had migrated from the inland to the coasts, an indication that a midcontinental ice-free corridor was actually implausible

C humans probably would have been able to find enough resources along the coastal corridor

D the continental shelf was still exposed by lower sea levels during the period when the southward migration of people began

#### question 8

According to paragraph 5, the most recent geologic research provides support for a first colonization of America dating as far back as

A 16,000 years ago

B 14,000 years ago

C 12,500 years ago

D 10,000 years ago

## question 9

Look at the four squares [ ] that indicate where the following sentence could be added to the passage. Where could the sentence best fit?

It has long been accepted that the Americas were colonized by a migration of peoples from Asia, slowly traveling across a land bridge called Beringia (now the Bering Strait between northeastern Asia and Alaska) during the last Ice Age. [ ] The first water craft theory about this migration was that around 11,000-12,000 years ago there was an ice-free corridor stretching from eastern Beringia to the areas of North America south of the great northern glaciers. It was this midcontinental corridor between two massive ice sheets—the Laurentide to the east and the Cordilleran to the west—that enabled the southward migration. [ ] But belief in this ice-free corridor began to crumble when paleoecologist Glen MacDonald demonstrated that some of the most important radiocarbon dates used to support the existence of an ice-free corridor were incorrect. [ ] He persuasively argued that such an ice-free corridor did not exist until much later, when the continental ice began its final retreat. [ ] Support is growing for the alternative theory that people using watercraft, possibly skin boats, moved southward from Beringia along the Gulf of Alaska and then southward along the Northwest coast of North America possibly as early as 16,000 years ago. This route would have enabled humans to enter southern areas of the Americas prior to the melting of the continental glaciers. Until the early 1970s, most archaeologists did not consider the coast a possible migration route into the Americas because geologists originally believed that during the last Ice Age the entire Northwest Coast was covered by glacial ice. It had been assumed that the ice extended westward from the Alaskan/Canadian mountains to the very edge of the continental shelf, the flat, submerged part of the continent that extends into the ocean. This would have created a barrier of ice extending from the Alaska Peninsula, through the Gulf of Alaska and southward along the Northwest Coast of north America to what is today the state of Washington. The most influential proponent of the coastal migration route has been Canadian archaeologist Knut Fladmark. He theorized that with the use of watercraft, people gradually colonized unglaciated refuges and areas along the continental shelf exposed by the lower sea level. Fladmark's hypothesis received additional support from the fact that the greatest diversity in native American languages occurs along the west coast of the Americas, suggesting that this region has been settled the longest. More recent geologic studies documented deglaciation and the existence of ice-free areas throughout major coastal areas of British Columbia, Canada, by 13,000 years ago. Research now indicates that sizable areas of southeastern Alaska along the inner continental shelf were not covered by ice toward the end of the last Ice Age. One study suggests that except for a 250-mile coastal area between southwestern British Columbia and Washington State, the Northwest Coast of North America was largely free of ice by approximately 16,000 years ago. Vast areas along the coast may have been deglaciated beginning around 16,000 years ago, possibly providing a coastal corridor for the movement of plants, animals, and humans sometime between 13,000 and 14,000 years ago. The coastal hypothesis has gained increasing support in recent years because the remains of large land animals, such as caribou and brown bears, have been found in southeastern Alaska dating between 10,000 and 12,500 years ago. This is the time period in which most scientists formerly believed the area to be inhospitable for humans. It has been suggested that if the environment were capable of supporting breeding populations of bears, there would have been

enough food resources to support humans. Fladmark and others believe that the first human colonization of America occurred by boat along the Northwest Coast during the very late Ice Age, possibly as early as 14,000 years ago. The most recent geologic evidence indicates that it may have been possible for people to colonize ice-free regions along the continental shelf that were still exposed by the lower sea level between 13,000 and 14,000 years ago. The coastal hypothesis suggests an economy based on marine mammal hunting, saltwater fishing, shellfish gathering, and the use of watercraft. Because of the barrier of ice to the east, the Pacific Ocean to the west, and populated areas to the north, there may have been a greater impetus for people to move in a southerly direction.

#### question 10

Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

- A. Evidence that an ice-free corridor between two ice sheets developed when the continental ice first began to melt came primarily from radiocarbon dating.
- B. There is growing support for the theory that migration took place much earlier, by sea, following a coastal route along Alaska and down the northwest coast.
- C. Recent geologic evidence indicates that contrary to what had been believed, substantial areas along the coast were free of ice as early as 16,000 years ago.
- D. Research now indicates that the parts of the inner continental shelf that remained covered with ice were colonized by a variety of early human groups well adapted to living in extremely cold environments.
- E. There is evidence suggesting that areas along the coast may have contained enough food resources between 13,000 and 14,000 years ago to have made human colonization possible.
- F. Even though the northern part of the continent allowed for a more varied economy, several early human groups quickly moved south.