

1 On to the Age of Humanity

Hokkaido, Land of Elephants

The Naumann's elephant, a southern elephant which preferred a forest habitat, crossed over to Hokkaido from Honshu about 120,000 years ago. On the other hand, the mammoth was a northern elephant which preferred a grassland habitat, and reached Hokkaido from the northeastern Asian continent via Sakhalin (Karafuto), living here between about 45,000 years to 20,000 years ago. These two species of elephant have come to represent the waves of migratory animals which entered Hokkaido from the north and south, roaming the island in search of ideal habitats as the Earth's climate cooled and warmed again and again.

The foundation of Hokkaido's terrain was formed through major crustal deformation caused by seismic and volcanic activity. And, the natural environment which encompasses Hokkaido's various animal and plant life underwent great changes during the repeated warming and cooling cycles of the Quaternary period, the most recent period of the Earth's formation.

For example, near Kitahiroshima — a city located south of Sapporo — fossils have been discovered which indicate these climate changes. Fossils of large cold-water marine mammals such as Steller's sea cow have been discovered in a geological formations dating to approximately 1.2 million years ago, indicating that Hokkaido had a cold climate at that time. On the other hand, fossils of warm-water marine shellfish have been found in geological layers dating to approximately 210,000 years ago, indicating a warm climate.

Furthermore, during these varying climate cycles, land bridges occasionally formed, connecting Hokkaido to Honshu and the Asian continent. Animals such as mammoths and bison entered Hokkaido from Sakhalin (Karafuto), which was connected to the northeast Asian continent. From the south, animals such as Naumann's elephant and Irish elk entered Hokkaido via a land bridge to Honshu.

It is thought that humans entered Hokkaido in pursuit of these animals somewhat over 30,000 years ago. The humans of this era primarily used stone tools, and are classified as a Paleolithic culture. Eventually, the Jomon culture — characterized by its use of earthenware — emerged somewhat over 10,000 years ago. Around the time this culture began, the climate began to warm, marking the end of the Ice age. The people of the Jomon culture used technologies such as earthenwares, ground stone axes, and bows as they subsisted on hunting, fishing, and gathering. The Jomon eventually formed settlements and during the latter half of this cultural period, its people created stone circles and mass burial sites such as earthwork burial circles. They also produced items associated with prayer and festivals, such as clay figurines and stone rods. This culture lasted about 10,000 years, until metal tools came into use somewhat over 2,000 years ago. This is how human history began in Hokkaido.



Traces of Great Tsunamis

Encircled by three tectonic plates -- the Pacific Plate, Eurasian Plate, and North American Plate -- Hokkaido often experiences earthquakes and tsunamis. This display shows geographical layers of the coastal wetlands of the Tokachi area, cut away in cross-section to reveal strata from approximately 3,500 years ago to present day. The striped patterns visible in these geographic layers are alternating deposits of sand from tsunamis and volcanic ash. Dating reveals that major tsunamis have occurred about once every 400 years, on average. This means that the next such tsunami could occur in the near future.



The Prayers of the Jomon People

Warm climates which had lasted until the latter to final periods of the Jomon culture (4,000 to 2,300 years ago) gradually became colder. The changing climate had major effects upon the natural environment and human lifestyles. People began to construct stone circles of diameters exceeding 30 meters, and mass burial sites such as earthwork burial circles. They also fashioned a variety of ornaments, such as clay figurines and stone rods. It is thought that the people of the Jomon culture used such items for purposes including prayer and festivals.