

## 2. A rich environment

### 2.1 The natural environment in the Paleolithic Period

The Late Paleolithic Period, from 40,000 to 12,000 years ago, belongs to the Ice Age. The average temperature is estimated as six to seven degrees centigrade lower than the present average temperature. Plant and animal ecology and geographical features were different from those of today.

Subarctic forest was the dominant plant community in the Japanese Archipelago. Pine, fir, spruce and ferns thrived. Naumann's elephant, Yabe's elk and moose were some of the immigrant megafauna from the continent. Humans of those days lived by seasonally moving their dwellings to hunt such animals and to gather plant foods.

### 2.2 A warming climate

The final Ice Age ended about 12,000 years ago, a warmer climate arrived, and the natural environment changed. The Japanese Islands

Unit:thousand years

DATE	PERIOD	FUSSA		
		SITES	STRATUM	LAND FORM SURFACE
700   40  15    5  3	Paleolithic   Incipient Jomon  Earliest Jomon Early Jomon Middle Jomon Late Jomon Lastest Jomon Yayoi Period Kofun Period	Fussafudosen       Nagasawa	Kasumi Gravel	
			Tachikawa Gravel	Tachikawa Surface
			Tachikawa Loam	
			Haijima Gravel	Haijima Surface
				Kawasaki Surface
			Low Positional Terrace Gravel	Amagase Surface
				Chigase Surface

Fig.6 Land forms and geology and natural history of Fussa City.

were soon covered in the east by rich oak dominated broad-leaved deciduous forests and in the west by broad-leaved evergreen forests. Mostly deciduous broad-leaved forests developed in the Tama region. Due to the warming climate, the sea level rose, and by 6,500 years ago the sea water had advanced deep into the lowlands. This is called the Jomon Transgression. At the same time the megafauna such as the Naumann's elephant and Yabe's elk became extinct and were replaced by an increase in small to mid-sized animals such as deer and wild boar. Rich forests supplied abundant edible plants, and abundant fish and mollusks could be obtained from the rivers and sea. These environmental changes brought changes in the human life style. The symbol of that change was the appearance of earthenware. Following the Paleolithic Period is the Jomon Period when people began to use earthenware.

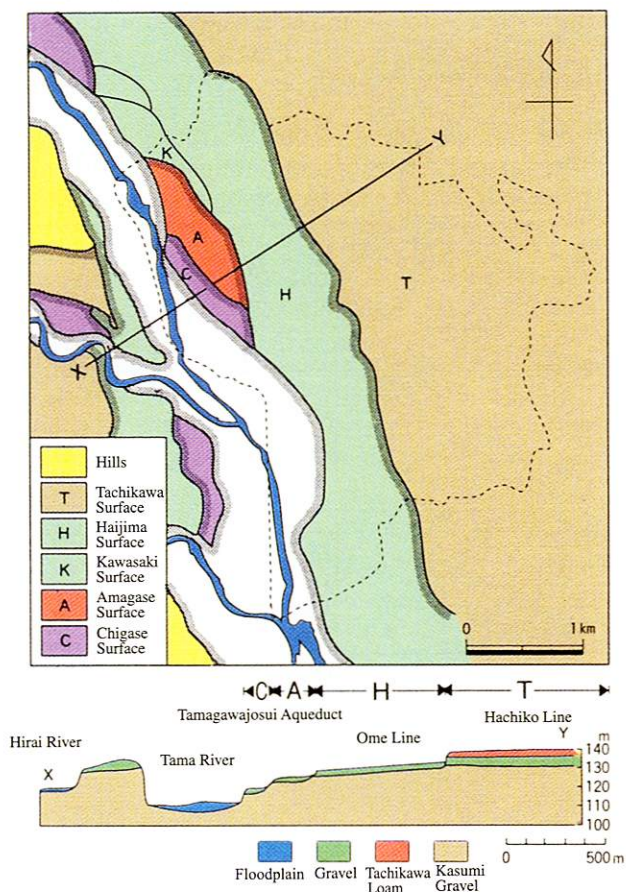


Fig.7 River terraces and geological cross-section in Fussa City.

The Neolithic Jomon Period begins from the first appearance of earthenware 13,000 years ago and continues for 10,000 years to the beginning of rice cultivation initiating the Yayoi Period about 3,000 years ago. From the Middle Jomon Period about 4,500 years ago, the natural environment again gradually changed. The climate became cooler, rainfall increased, and flow from the higher lands increased the wet lowland areas. People advanced to such wet lands and rice cropping was initiated. The society changed from the hunting, fishing and gathering Jomon Period to the farming Yayoi Period.

### 2.3 How nature blessed Fussa

The Tama River flows along the south edge of the Musashino Plateau. South facing river terraces developed on its left bank and abundant springs issued from the terrace edges at places called *hake*. These places were suitable environments for ancient people. Fussa City is located on such a river terrace.

Many Jomon villages along the Tama River basin were formed near the edge of the terrace in order to use the abundant spring water. The village sites from the earliest part of the Jomon Period (9,500 years ago) in Fussa have been discovered on the higher Tachikawa Terrace. The village sites of the middle and later parts of the Jomon Period (about 5,000-3,500 years ago) in Fussa were discovered on the Haijima Terrace. By considering regional village sites, settlements on the left bank of the Tama River gradually migrated from the upper terrace to the lower terrace to maintain a closer distance to the Tama River as the habitat and river current changed.



*Fig.8 Buckeye nuts. The Jomon people gathered such nuts as a foundation of their economy.*



*Fig.9 Jomon cedar (Yakushima, Kagoshima Prefecture). The actual age of this tree is not clear, but it is estimated at more than 4,000 years. It indicates the Jomon Period vegetation.*