# Chapter 3-5

## **Submerged Remains**

#### Abstract

There are about 80 sites of submerged remains in Lake Biwa. These remains represent a valuable historical heritage from which we can learn about the lifestyles of our ancestors who lived in the Lake Biwa area.

Keywords: Submerged remains, Awazu submerged remains, Legend of submerged villages

#### **1. Submerged Remains**

There are about 80 sites of remains where the traces of ancient homes, freshwater shell midden, tombs, earthenware and stone tools have been found at the bottom of Lake Biwa (and its attached lakes) and the Seta River, Lake Biwa' s only outlet. The mystery of these submerged remains has been the subject of investigations.

#### 2. Awazu Submerged Remains

Awazu submerged remains in Otsu City comprise the world's largest freshwater shell midden that dates back roughly 10,000 to 5,000 years ago (from the early to the middle of the Jomon period). The site of the remains was enclosed in sheet piles and water pumped out to create a dry land surface so that investigations could be conducted.

The mound contained a large amount of shells, primarily Seta-shijimi, a variety of basket clam, that were left after their content had been consumed by the people of those times. Furthermore, fishbone, animal bones and the husks of Japanese horse chestnuts, which quickly decompose in remains on the land, were discovered. Although it had previously been believed that life in the Jomon period was primarily centered on hunting, this revealed that nuts and other plants were also a source of food for the people of those times.

There are various opinions on the formation of the submerged remains, one of which suggests that the remains might have become submerged due to rising water levels caused by elevation of the bottom of the Seta River resulting from the deposition of sediment that formed a dam in the river.

### 3. The Legendary Submerged Villages

There are many legendary submerged villages in Lake Biwa, most of which are located a few hundred meters from the current lakeshore at a depth of 2 to 3 meters. The reason why these villages became submerged still remains a mystery.

However, investigation employing means such as diving, acoustic exploration of the lake bottom and boring on the lakeshore in search of the Mitsuva Sengen remains in Takashima City and the Naoe Sengen remains in Maibara City revealed some clues. Traces of glide planes caused by landslides and liquefiable strata were discovered, revealing a unique topology. This suggests that these remains became submerged due to landslides caused by an earthquake and provides important information not only helpful in discovering causes of the formation of submerged remains, but also of inestimable value in future town and city planning.

(Cultural Properties Protection Division, Shiga Prefectural Government)



Fig. 3-5-1 Awazu submerged remains



Fig. 3-5-2 Earthenware excavated from Awazu submerged remains