

REGIONAL DESCRIPTION OF COLLECTIONS

Mexico

The Tehuacán Collection

Malinda S. Blustain, *former Director of the Robert S. Peabody Museum of Archaeology*

Studies conducted during the past fifty years have provided extensive information about the origins of agriculture in Mesoamerica, especially maize cultivation. These ideas began with the work of Richard "Scotty" MacNeish of the Robert S. Peabody Museum, who, in 1960, launched a search for early agricultural sites in Mesoamerica. Disappointing excavation results at Tamaulipas, Mexico, led MacNeish to look at the data from other Mexican excavations. His research brought him to the Tehuacán Valley and the beginning of the Tehuacán Archaeological and Botanical Project. The participants in the interdisciplinary project came from the fields of archaeology, botany, geology and many others. Excavators included Douglas S. Byers and Fredrick Johnson, both former directors of this institution.

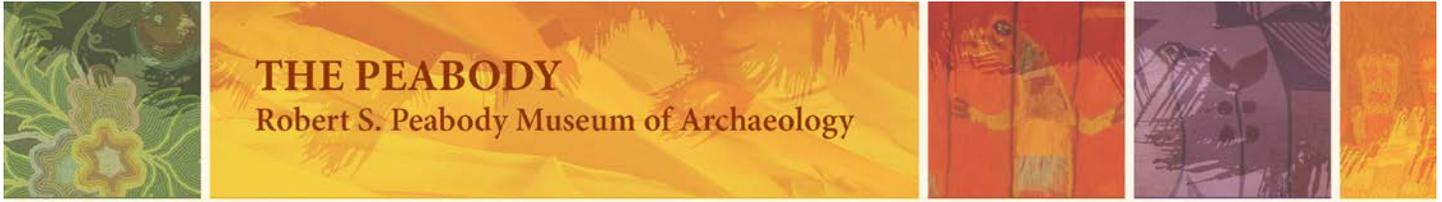
To find promising sites, MacNeish conducted a survey of schoolteachers around the Tehuacán area and in towns located in northern and southern reaches of the valley. Because the arid climate favors organic preservation, MacNeish focused his inquiries on the driest local caves and the artifacts found in them.



Ultimately he was led to Coxcatlan Cave where excavation produced tiny corncobs dating to c. 5000 BC. Most of their diagnostic features were intact and showed that the plant had physical traits that were intermediate between wild teosinte, thought to be an ancestral parent, and maize. These well-preserved specimens were confirmed as the probable ancestor to domesticated corn. The Peabody Museum collection has several of these specimens, now regarded as among the earliest examples of corn ever recovered.

Based upon the evidence gathered in the Tehuacán Valley MacNeish was able to show a gradual shift from hunting and gathering economies to cultivation and increasing use of domesticated plant foods. By 3000 BC, Tehuacán Valley farmers had domesticated beans, amaranth, gourds and maize. As the result of a reliable food source, settlements grew larger and eventually indicators of social stratification and complexity appeared, such as irrigation and the manufacture of pottery and textiles. By 1400 BC maize cultivation was present on both Mexican coasts, and the cultural florescence of the central highlands, southern gulf coast and the Chiapas and Guatemalan lowlands had begun.

The Robert S. Peabody Museum collections from the Tehuacán Valley are primarily the type specimens used to illustrate MacNeish's Tehuacán publications, in addition to his associated notes and manuscripts. The artifacts are lithics, ceramics, basketry, cordage, botanical specimens including corn, squash, beans, and other early cultigens; and soil and charcoal samples. As such, they represent only a small fraction of the excavated material. Much of their importance lies in the fact that the Robert S. Peabody Museum curates nearly all of the artifacts from the project that reside outside of Mexico. The vast majority of the Tehuacán collection is at the Instituto Nacional de Antropología y Historia in Mexico City and is more difficult to access than collections at domestic institutions.



A host of new analytical techniques such as AMS (accelerator mass spectrometry) dating and DNA testing, have created a demand for re-examination of museum collections. The Peabody collection remains extremely important to this ongoing research. For example, a lecture by prominent corn geneticist and Abbot alumna Mary Eubanks recently served as the inspiration for an advanced placement biology project on corn genetics by Laura Oh, now an alumna of Phillips Academy. Researchers from the National Museum of Natural History, Duke University, Texas Wesleyan University, and even Scotty MacNeish himself, have sought access to the collection for additional analysis and to look at the field documentation. Indeed, the museum's most frequent request for permissions is for use of photographs, the field notes and other documents in the Tehuacán collection or to borrow specimens for exhibition.