

November 1997-Çatal Höyük Archaeobotanical Archive Report. *Hastorf, C. + J Near*
VCB PER Lab 38

The 1997 field season at Çatalhöyük marked the third season of flotation at the project. During this season the Palaeoethnobotany team, Christine Hastorf and Julie Near of the University of California - Berkeley oversaw the processing soil samples from the North, Mellaart, BACH, and Summit areas of the excavation. Peggy Hauselt and Meltem Acabay assisted this processing. Four additional Turkish workers helped on a full time basis. Two flotation machines were used concurrently in order to flot the 525 soil samples from these areas. The smaller machine was built in 1995 by Ann Butler of the Institute of Archaeology, London and was based on the Ankara system design using a 55 gallon oil drum as the flotation tank. The second was built in 1996 and was based on the SMAP design with a 75 cm diameter flotation tank (compared to a 56 cm diameter oil drum). Both of the machines used a .5mm aperture mesh to recover the heavy residue and a .17 mm aperture cloth for the light fraction residue. Each system used recycled water from their individual two tank settling system. Due to the particularly silty nature of the samples, the tanks required complete cleaning (of both the settling tanks and flotation tank) one to two times a week in addition to partial cleaning at the end of each day.

Samples were selected for each machine based on the size of the sample, with smaller samples going to the Ankara machine (called the small machine) and larger samples going to the SMAP machine (big machine).

The sampling strategy for the 1997 season was as follows: All units were to be sampled with bulk soil collection strategy (samples taken from one discrete location), targeted at 30 liters when possible. In units containing midden or other secondary, mixed soil matrices, a scatter sample was requested in addition to the bulk sample. In certain excavation units that spanned a large horizontal space, (primarily floor contexts) several bulk samples from the same unit were taken for flotation. These were taken at one meter intervals across the unit. Botanical material was also systematically collected from the 4 mm sieves that allowed for extraction of the artefacts from all excavated matrix. Units with special botanical material were sampled individually after consultation with us.

Although the majority of the samples will be processed in the laboratory at U. C. Berkeley, some preliminary sorting was carried out during the field season. Forty five samples were selected as priorities and examined for their botanical content at the 4 and 2 mm levels. From this analysis it is possible to discuss particular units with other specialists in the field. Samples varied dramatically from unit to unit with densities of botanical material ranging from 1-250 mg per liter of sediment. The diversity of samples was also variable and it is hoped that further analysis of these samples will result in the observation of patterning related to various contexts.

The heavy residue portion of the flotation samples were collected and sorted by a team of two trained students and 11 local women throughout the 1997 season. Some remaining residues from 1995 and 1996 samples as well as the 1997 samples were completed. In all, over 800 heavy residue samples were sorted. Charred botanical remains are common in the residues and are typically of a range of the more dense materials (charred wood, pulses, chaff and mineralized remains. Finds were weighed and distributed through the finds labs to the various specialists. Botanical material from this sorting and the light residues have been shipped to the archaeobotany laboratory at the University of California for analysis and distribution of other botanical specialists.

Work already completed from the 1997 priority samples illuminates some interesting results. In the North Area, Building 1, two units from post holes contained quantities of remains which led to the interpretation that specific plants may have been deposited intentionally before the posts were placed in the holes. One of these possible ritual deposits contained barley grains and another seed that is found typically as a weed in modern disturbed habitats. Another interesting result from this season was that the fills from nearby buildings in the Mellaart area were dissimilar, indicating that both the type of dumping and the origin of dumped material varies in locations that are spatially near each

other. Finally, relatively large quantities of tuber remains have been found in the screened matrix. Tubers are plant storage tissues, that most often occur under the ground in the plant, such as potatoes, and *Typha*. These are often edible for humans and could have been an important food source. From these regular quantities, it is easy to imagine that the inhabitants of the site relied on more than cultivated plants for their diet. Because we are paying more attention to the screen botanicals this year we are becoming more aware of the potential for regular wild foods in the inhabitants' diet. This is directing us to be concerned with merging the float and the screen data in our views on the foods at the site. This will be part of the research agenda during this year in the laboratory work.

Taxa List: The following is a list of identified botanical remains present in the 200 examined samples thus far. Approximately 125 plant taxa of either seeds and/or plant parts (parenchyma, nut material) have been categorized as unknowns. These are concurrently being identified through comparison with modern type collections in Ankara and Berkeley. In addition, numerous fragments of and other botanical remains are yet to be identified.

<u>Category</u>	<u>Taxa</u>	<u>Common Name</u>
Cereals:	<i>Hordeum vulgare</i> L.	barley
	<i>Triticum monococcum</i> L.	einkorn wheat
	<i>Triticum dicoccum</i> Schubl.	emmer wheat
	<i>Triticum aestivum</i> L.	bread wheat
	Poaceae (small, wild types)	"wild" grasses
Pulses:	<i>Cicer</i> L. sp.	chickpea
	<i>Lathyrus</i> L. sp.	vetchlings
	<i>Lens culinaris</i> Medik.	lentil
	<i>Pisum sativum</i> L.	pea
	Leguminaceae	"wild" legumes
	<i>Vicia</i> L. sp.	vetch
Other seeds:	Chenopodeaceae	
	Caryophyllaceae	
	Brassicaceae	
	<i>Celtis</i> L. sp.	hackberry
	<i>Galium</i> L. sp.	bedstraw
	<i>Lepidium</i> L. sp.	pepperwort
	<i>Lithospermum</i> L. sp.	
	<i>Polygonum</i> L. sp.	
	<i>Quercus</i> L. sp.	acorn (oak)
	<i>Scirpus</i> L. sp.	bulrush
	<i>Sisymbrium</i> L. sp.	
Pistacia spp.	pistachio	

Wood is also regularly present.