

**Ancient Olive Oil Production -
The Near East, Part I**

by Chris Mundigler

While most of us are probably aware of at least some of the uses of olive oil, and its trade, in the Greek and Roman worlds, what of the ancient Near East? Many different types of oils, made from many different sources such as lettuce, flax, radish, saffron and sesame, were used in the Near East, but olives and their oil rank among some of the most important. So vital, in fact, was olive oil that its production and economic importance continued right down through Greek and Roman times, and beyond.

As we have noted in previous articles in *Labyrinth*, from around 9000 BC onwards food plants were just starting to be cultivated in the ancient Near East, with wheat and barley as primary crops. Lesser known products were also being grown for the Upper Palaeolithic table, such as peas, beans, grapes, dates, figs and the focus of this next series of articles: olives.

Some of the oldest olive presses found in Israel, for example, show us that this fruit was being cultivated, pressed and processed as early as the tenth century BC. Pressing slabs, run-off basins and storage jars have been found at a number of sites in Israel, including Tel Dan, Tel Batash (Biblical Timnah) and Tel Migne (Biblical Ekron), all dating between the tenth and seventh centuries BC.

The process used to extract the highly-prized oil from the olives of these regions varied little in ancient times from village to village. Generally, for large-scale production of olive oil, a simple, single-beam press was used which, in many ways, was very similar to the wine press described and illustrated in the January 1999 issue of *Labyrinth*. However, instead of levers and screws to pull the beam down and crush the fruit, hanging weights were slowly added to the end of the beam to progressively squeeze all the oil out of the bagged olives (see Figure 1).

To produce varying qualities of oil, a two-step process was often employed. A first pressing of the olives initially took place in a large basin, producing an oily mash or pulp. Water was then added to the pulp and the oil rose to the surface where it was skimmed off. The second stage of the process saw the residue pulp placed into bags or baskets to be further crushed in the beam press arrangement described above. The oil so produced ran into large underground storage jars via grooves cut into the bottom stone slab. Such were the early ninth to seventh century BC olive presses found throughout the Israel-Palestine region.

There have, however, been much simpler olive presses found in ancient Biblical lands, but archaeological evidence for these has, so far, generally come from around 3000 to 2000 BC in the form of smaller square blocks of stone with simple grooves cut along the outer edges of the top of the slab (see Figure 2). The olives were crushed on the stone, the oil ran into the grooves and emptied into a reservoir at one side where it was scooped out and used for cooking and in lamps.

Still with archaeological evidence, pits have been found at ancient Meggido in Israel dating from around the fourth millennium BC and served as storage containers for grains and oils. Some of the pits, however, may have been olive pressing chambers since many of them were connected by sloping channels which could have drained off the oil from press to storage area.

In olive oil production, it is not entirely clear whether Egypt could not produce enough olive oil itself to support its needs or simply wanted imported oil over its own, but a great commerce and trade in oil took place in the eastern Mediterranean between at least the late predynastic and pre-Ptolemaic periods. It is the use and trade in olive oil which we will look at in greater detail in the next issue of *Labyrinth*.

The finest quality of olive oil was from the initial crushing of the fruit before it was bagged and crushed under the beam press. This produced a quality of oil so pure that it was permitted in rituals and sanctuaries of the highest order. We will investigate the many and varied uses for olive oil in the next issue of *Labyrinth*.

Olives were not, however, the only source of oil in the ancient Near East. Many regions could not support olive trees and “no attempt is made [in Assyria] to grow figs, grapes, or olives or any other fruit trees... The only oil these people use is made from sesame...” (Herodotus, *Histories*, 1.193). Further south, though, Egypt was another story. Pliny tells us that, “the olives of Egypt are very fleshy, but with little oil” (*Natural History*, xv.13). Strabo also tells us that Egyptian olive oil is “very good if carefully extracted; if not, the quantity is great, but with a strong odour” (*Geography*, xvii). To counteract this “unpleasantness”, perfumes and other additives were mixed with the olive oil to scent it for use as a cosmetic and ritual product. Lighting and cooking also benefited from olive oil - the more pure, the better. Next, we will look at the many uses of this oil in the ancient Near East, from sacred to culinary, from lighting to cosmetic. All proved to be innovative thousands of years ago, and all stood the test of time as they were passed down through the centuries to the later Greeks and Romans.