

READING 9-3

Source: *History Begins at Sumer*, Samuel Noah Kramer, 1956. Falcon's Wing Press.

The First "Farmer's Almanac"

A small clay tablet discovered by an American expedition in Iraq made possible the restoration of a document more than 3,500 years old that is of prime importance in the history of agriculture and its techniques. The 1949-50 expedition, sponsored jointly by the Oriental Institute of the University of Chicago and the University Museum of the University of Pennsylvania, excavated the 3 by 4 1/2-inch inscription in the ancient Sumerian site Nippur. The tablet was in poor condition on its arrival. But after it had been baked, cleaned, and mended in the laboratory of the University Museum, practically its entire text became legible. Before the discovery at Nippur, 8 other clay tablets and fragments inscribed with different parts of this agricultural "primer" were already known, but it was impossible to make a trustworthy restoration of the text as a whole until the new Nippur piece, with 35 lines from the middle of the composition, came to light.

The restored document, 109 lines in length, consists of a series of instructions addressed by a farmer to his son for the purpose of guiding him throughout his yearly agricultural activities, beginning with the inundation of the fields in May-June and ending with the cleaning and winnowing of the freshly harvested crops in the following April-May. Before the Nippur discovery, 2 similar farmer's "handbooks" were known from ancient days: Virgil's far-famed and highly poetic *Georgics* and Hesiod's *Work and Days*. The latter, which is by far the earlier of the 2, was probably written in the 8th century BCE. On the other hand, the newly restored Sumerian clay document was actually inscribed about 1700 BCE and thus antedates Hesiod's work by approximately a millennium.

The Sumerian farm "handbook" begins with the line, "In days of yore a farmer gave (these) instructions to his son." The directions that follow concern the more important chores and labors that a farmer must perform to ensure a successful crop. Since irrigation was essential for Sumer's parched soil, the instructions began with advice concerning irrigation works: Care must be taken that their water does not rise too high over the field; when the water subsides, the wet ground must be carefully guarded against trampling oxen and other prowlers; the field must then be cleared of weeds and stubble and fenced about.

The farmer was next counseled to have his household and hired help prepare in advance all the necessary tools, implements, baskets, and containers. He must see to it that he has an extra ox for the plow. Before beginning to plow, he should have the ground broken up twice by the mattock and once by the hoe. Where necessary the hammer must be used to pulverize the clods. He was counseled to stand over his laborers and see to it that they did not shirk their work.

The work of plowing and sowing was carried on simultaneously by means of a seeder—that is, a plow with an attachment that carried the seed from a container through a narrow funnel down to the furrow. The farmer was instructed to plow eight furrows to each strip of approximately 20 feet. He was told to see to it that the seed was placed at an even depth. In the words of the "handbook": "Keep an eye on the man who puts in the barley seed that he make the seed fall 2 fingers deep uniformly." If the seed failed to penetrate the earth properly, he must change the share, "the tongue of the plow." There were several kinds of furrows, according to the writer of the "handbook," who advised in particular: "Where you have plowed straight furrows, plow (now) diagonal furrows; where you have plowed diagonal furrows, plow (now) straight furrows." Following the sowing, the furrows had to be cleared of clods, so that the sprouting of the barley would not be impeded.

"On the clay when the seed breaks through the ground," the Sumerian "handbook" continues, the farmer should say a prayer to Ninkilim, the goddess of field mice and vermin, lest these harm the growing grain; he should also scare away the birds. When the barley had grown sufficiently to fill the narrow bottoms of the furrows, he was to water it; and when it was dense enough to cover the field like the "mat in the middle of a boat," he was to water it a 2nd time. A 3rd time he was to water the "royal" grain. Should he then notice a reddening of the wet grain, it was the dread samana-disease that was endangering the crops. If the crop

showed improvement, he was to water it a 4th time, and thus get an extra yield of 10%.

When the time came for harvesting, the farmer was not to wait until the barley bent under its own weight, but was to cut it “in the day of its strength”; that is, just at the right moment. Three men worked as a team on the standing grain—a reaper, a binder, and a third whose duties are not clear.

The threshing which followed immediately upon the harvesting was done by means of a sledge drawn back and forth over the heaped-up grain stalks for a period of five days. The barley was then “opened” with an “opener,” which was drawn by oxen. By this time, however, the grain had become unclean through contact with the ground. Therefore, following an appropriate prayer, the grain was winnowed with pitchforks, laid on sticks, and thus freed of dirt and dust.

The document closes with the statement that the agricultural rules laid down were not the farmer’s own but those of the god Ninurta, the son and “true farmer” of the leading Sumerian deity, Enlil.

In order that the reader might taste the real flavor of the first farmer’s handbook in man’s recorded history, here is a literal translation of its first 18 lines. The reader is asked to bear in mind that the renderings are in some cases tentative, since the text is full of obscure and perplexing technical terminology. The translation that follows (it will no doubt be considerably improved over the years as our knowledge of Sumerian language and culture grows) has been worked out provisionally by Benno Landsberger and Thorkild Jacobsen—cuneiformists of the Oriental Institute of the University of Chicago—and the present writer.

In days of yore a farmer gave (these) instructions to his son: When you are about to cultivate your field, take care to open the irrigation works (so that) their water does not rise too high in it (the field). When you have emptied it of water, watch the field’s wet ground that it stays even; let no wandering ox trample it. Chase the prowlers and have it treated as settled land. Clear it with ten narrow axes (weighing no more than) 2/3 of a pound each. Its stubble (?) should be torn up by hand and tied in bundles; its narrow holes shall be gone over with a drag; and the four sides of the field shall be fenced about. While the field is burning (in the summer sun) let it be divided up into equal parts. Let your tools hum with activity (?). The yoke-bar should be made fast, your new whip should be fastened with nails, and the handle to which your old whip was fastened should be mended by the workers’ children.

Not only cereal farms but also vegetable gardens and fruit groves were sources of Sumer’s economic wealth. One of the more significant horticultural techniques practiced in Sumer from earliest days was shade-tree gardeping—that is, the planting of broad shade trees to protect the garden plants from sun and wind. This we learn from a Sumerian poem that is presented in Chapter 12.