

The Nuragic Civilization of Sardinia—A Link to Ancient Israel?

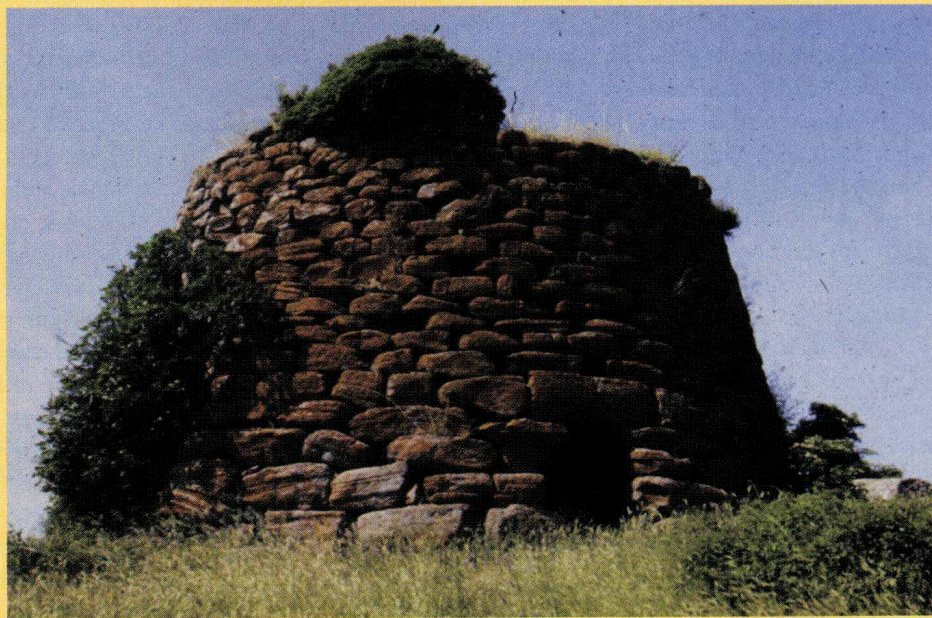
The imposing stone structures known as *nuraghi* (singular *nuraghe*) surely dominated the Bronze Age landscape of Sardinia. Although the remains of some 7,000 *nuraghi* have been found, up to 30,000 may have been built.

Classic *nuraghi* are truncated conical towers, about 40 feet in diameter, sloping up to a circular roof some 50 feet above the ground (see photo at right). Several courses of large, minimally dressed, dry-laid stone form the walls and usually an interior stairwell spirals up to the roof or to a second (and sometimes a third) story. A ground-level doorway, spanned by a large lintel, typically serves as an entrance. The ground-level chamber, which is generally less than 20 feet in diameter, contains one to three wall niches. The vaulted ceiling is 20 to 35 feet above the floor, perhaps accommodating raised wooden interior platforms or lofts to make use of the space.

Why were they built? Scholars have variously identified them as fortresses, grain silos, tombs, homesteads, or territorial markers. But excavations indicate that *nuraghi* were homes. In and around the main towers, excavators have found remains of hearths, ceramic cooking and serving vessels, butchered animal bones, grindstones and pestles, stone tools, spindle whorls and loom weights. Earlier *nuraghi* often have wells nearby; in later structures, wells were enclosed within walled courtyards. By the Late Bronze Age (c. 1300-900 B.C. in Sardinia and Italy), circular stone huts and well-defined activity areas were found in “villages” surrounding the *nuraghi*.

Some have argued that the corbelled dome, the rounded stone roof that is characteristic of classic *nuraghi*, originated in the Aegean. But the earliest Sardinian *nuraghi* date to the 18th century B.C., centuries before the Mycenaean *tholos* tombs—and before the similar *talayots* of the Balearic Islands, the *motillas* in Spain and the *brochs* in Scotland. Only in southern Corsica are there structures, called *torri*, that might be related to the *nuraghi*.

Most scholars believe that the classic *nuraghi* developed from earlier “corridor” *nuraghi*, about 180 of which have been found in Sardinia. These apparently indigenous structures have low stone platforms with interior corridors of varying plans and dimensions. The classic *nuraghi* incorporate both improved masonry techniques and more efficient



ROBERT TYKOT

spatial designs. Although outwardly massive, classic *nuraghi* have modest interior dimensions and could not have accommodated a household of more than five or six people.

It is hard to imagine how the prehistoric residents of Sardinia could marshal the intensive labor to build these colossal structures. American archaeologist Gary S. Webster estimates that a typical *nuraghe* was made of about 3,000 stone blocks and required some 3,600 man-days to assemble. That means it would take 10 men from neighboring farmsteads four to six years if they worked on it two to three months per year. This undertaking would not require a hierarchical society with specialized craftsmen. *Nuraghi*, in fact, are simple structures made of locally abundant stone, minimally altered, and have few standardized architectural features.

Why are they so enormous? The *nuraghi* dwellers apparently needed secure housing, as did the members of many other Bronze Age European societies. Growing populations and competition for better agricultural and pastoral lands may have driven this need, along with the intensive production and trade of secondary animal products such as wool, milk and cheese (even today you can probably find Pecorino Sardo in your supermarket—although it may be labeled Romano). But the island’s residents never enjoyed the prosperity of the Bronze Age Mediterranean societies to the east that developed more complex political and social institutions.

Late in the Bronze Age, however, Sardinian society apparently changed significantly. Subsidiary towers, one to three stories high, were added to perhaps a quarter of the *nuraghi*, along with defensive circuit walls. Many had overhanging stone parapets and terraces. Huge encasing walls connected the outer towers, forming a bastion that surrounded a small courtyard with a well. Such complexes became heavily fortified domestic compounds for large elite households that were supported by villages with hundreds of stone huts.

Sardinia may also have been the homeland of a tribe of mercenary warriors identified in contemporaneous sources as the Sherden, or Shardana, who streamed into the eastern Mediterranean basin toward the end of the Bronze Age. As Adam Zertal, the writer of the accompanying article, notes, the Shardana appear fairly frequently in the literary sources of neighboring Mediterranean nations but left no written records of their own. As a result, many details about this enigmatic civilization and its relationship with the eastern Mediterranean have long been lost to history. Only in the last decade have material remains emerged in Israel, which Zertal suggests have a connection with Sardinia. Perhaps these remains offer new clues linking the Shardana to the Bible lands.—Robert H. Tykot, associate professor of anthropology at the University of South Florida (from a forthcoming article in *BAR's* sister magazine, *Archaeology Odyssey*, www.archaeologyodyssey.org).