

Perhaps one of the most important kinds of work archaeologists can do in addressing some of the problems of living in the twenty-first century is to provide insight into how to help decide on where to store nuclear waste and how to mark it so that people living thousands of years in the future will know the hazards.

The US government has been consulting with archaeologists since the 1980s on how to best mark proposed storage locations for nuclear waste. After all, who better to ask what kind of system is likely to work for 10,000 or more years than archaeologists? Based on their knowledge of the past, archaeologists have been able to make several important suggestions. An important article that has laid the foundation for many subsequent discussions about archaeology and nuclear waste is by Kaplan and Adams (1986), who outline several recommendations, as follows:

- Marking symbols should include symbols, pictures, and languages. Each alone is unlikely to be able to be interpreted properly thousands of years from now, but a combination of the three systems may.
- Structures should be constructed of natural materials such as earth or stone with little or

no perceived value. Metal or other materials with perceived value will likely be looted.

- The primary marking system should be detectable at eye level.
- A primary feature should be a series of monoliths ringing the site, each with symbols, pictures, and language conveying information. The monoliths should be granite or basalt, and be at least twice human height.
- Subsurface markers should be included at three different levels. These markers should be ceramic, shaped in a disc or lenticular form with a 12 centimeter diameter, and colored.

One of the biggest problems remaining includes how to mark the site so that people of the future will be able to understand the warnings. While archaeologists can be reasonably certain that monoliths and ceramic markers will withstand thousands of years of weathering and probably not be looted, establishing how to convey the information about the contents of the site and warnings is difficult. Language and symbols used today may be interpretable in a thousand years, but likely not in 10,000 years.