

Archaeology: From Map to Museum

LD 4: Map Sampling, Surveys and Settlement Patterns

Description: The objectives of this exercise are to conduct four hypothetical archaeological surveys that entail (a) random sampling, (b) stratified random sampling, and (c) non-random sampling of a regional settlement system. You will record the results of each of these survey and sampling strategies and report your results in the Online Journal. In order to complete with the outcomes of this exercise, you will be provided a topographic map of the archaeological zone of Xochicalco, Morelos, Mexico. Xochicalco, which rose to prominence in the period of the Mesoamerican Epiclassic (ca. A.D. 600-900), has been extensively mapped and excavated. As such, we will use this archaeological zone for the purposes of determining the extent to which different types of survey and sampling strategies are in fact effective.

Instructions: Using the transparency overlay of the alphanumeric grid provided by your instructor, you will use four distinct strategies for determining areas that you believe will yield significant archaeological materials. Place the left edge of the transparency survey grid (i.e., the left edge of column "1") at the left margin of the topographic map. Place the top edge of the survey grid (i.e., the top edge of row "A") at the top margin of the topographic map. The strategies for selecting units is as follows:

1. Use the transparency overlay and its alphanumeric grid to select ten survey grid units at random from the map of Xochicalco. This selection is strictly random and can be based on any logic or random order that you choose.
2. Select five transect columns or rows (e.g., Row = Letters; Column = Numbers) at random. You may choose both columns and rows that may or may not intersect.
3. Select ten non-random units on the basis of where you would expect to find habitation or settlement in the area of the map given such considerations as the presence of water, topography, defense, etc.
4. Finally, select five units on the basis of a stratified sampling that excludes steep cliffs and those areas not specifically included within the topographically mapped portions of the Xochicalco mapping. You may also exclude hills and gorges and or valleys, or other features that you determine, if you wish.

Reporting Results: After you have made your selections, please enter comments on the results or findings resulting from your respective survey strategies into the Online Journal. In each case, you should first specify which survey or sampling strategy you used, and indicate specific units on the hard copy of the map of Xochicalco. Also, please provide some indication of your respective sampling or survey strategy...in other words, what logic or random ordering went into your selections.

Note: Having completed your entries into the Online Journal, your professor will reveal the settlement history and mapping of the site for the period of A.D. 500 and then A.D. 600 through 900. Once you have had a chance to compare the actual settlement mappings with your sampling predictions, please indicate in comments posted to the Online Journal how well you did in selecting grid units or transects that revealed buried settlement or related architectural features and sites. Please indicate the survey grid unit numbers that correspond with actual settlement type or architectural features encountered in your findings. Finally, be prepared to comment on which of the survey or sampling strategies proved most effective to the development of your sample and your predication of ancient settlements. Also, please provide some indication of whether or not you believe that your findings provide a representative sampling of the overall site.