

LAB 3: SURVEY AND SAMPL

Goal: The goal of this lab is to give you a feel for what pedestrian survey is like. You will also generate data that we will use to compare and contrast the benefits and limitations of different sampling methods.

Activity: You will be conducting a mock survey for colored pasta. Different colors represent different archaeological materials. Different groups in your lab section will survey their parcels using different survey strategies. You will record how many "artifacts" you find and plot their locations on a map. Group maps must be handed in after the exercise on Thursday, October 13, 2011. This sheet with questions about your survey method and results on the back is due on Monday, October 17, 2011^{7h} before lecture.

Steps:

1) Your T.A. will divide you into four groups. Each group will be required to produce one survey map covering one of these four parcels of land. Larger groups may want to delegate various responsibilities to different members (e.g., surveyors, counters, and mappers) to facilitate efficiency.

2) You will be assigned a parcel of land as your group's survey area.

3) Your group will also be assigned one of four survey strategies, which you will then use to survey your parcel. These strategies are:

- random;
- 3-meter intervals;
- 5-meter intervals; and
- 10-meter intervals.

Your TA (or assistant) will provide details regarding how to carry out each strategy.

4) Your group will survey according to your strategy, flagging any pasta "artifacts" you encounter.

- **White pasta = bone**
- **Orange pasta = debitage (debris resulting from stone tool manufacture)**
- **Green pasta = cultural charcoal.**

You may mark concentrations of artifacts with a single flag rather than using individual flags to mark individual artifacts.

5) Map in the locations of the pasta you have flagged. Each group will submit one map for a grade. Every map should include (in addition to everyone's names):

- a. The location and type of all the artifacts encountered. Use distinct symbols for each of the three distinct artifact types.
- b. Counts of the artifacts present per cluster. *You will not lose points if your counts don't match ours, but it is imperative that every cluster is labeled with a count.*
- c. The total number of each artifact type found in survey area.
- d. Drawings of significant natural features or reference points.
- e. A key to indicate what each of your symbols/colors represents.

Survey Lab Questions

DUE OCTOBER 17, 2011

- 1) In the table below, record the # and calculate the percentages of each color of pasta recovered from the total number that were deposited **BEFORE YOU TURN IN YOUR MAP.**

Survey Technique: 5 meter intervals

Area Surveyed: 30 m x 30 m = 900 m²

↓

COLOR	Number Recovered	Total Number	% Recovered
Green	0	33	$p(\%) = 0\%$
White	1	33	$p(\%) = 3.03\%$
Orange	0	34	$p(\%) = 0\%$

[For percentages, (number recovered/total number) x 100 = $p(\%)$]

- 2) Are there certain types of objects you found more often or more easily than others? If so, explain why this occurred and how you might reduce bias in the future.

↓ We only found 1 pasta piece and it was white, the color that would stand out the most with the green grass and brownish/orangish leaves. The other two colors really blended in with the terrain. In the future I would maybe do the survey in the evening or when it is cloudy because the wet ground and angle of the sun made it very hard to see the artifacts. We could also try different survey techniques to see if our odds increase.

- ↓ 3) List one advantage and one drawback of the strategy you used for surveying.

We were at 5m intervals and could only take one step off of our line. This means we are missing about 3 meters in each interval which is more than we are seeing. So this was a drawback. One advantage is getting to really analyze the line we were walking. We did a cross interval as well, which allowed us to view the areas we may have missed.

30/30