

ANT 309 Lecture Outline January 25, 2010

- V The Recovery of Archaeological data: Reconnaissance and Survey
 - A Definition: Archaeological reconnaissance: systematic attempt to identify archaeological sites. Archaeological reconnaissance and archaeological survey are synonyms
 - 1 Objective: To discover and precisely locate sites and define their form, size, location, and context relative to landforms and habitats
 - B Types:
 - 1 Informant based: local people often know where sites are; the archaeologist asks questions
 - 2 Aerial Reconnaissance: examining stereoscopic photos looking for patterns (crop marks) and then ground truthing what you saw
 - 3 Subsurface reconnaissance (searching for anomalies):
 - a Via excavation: augering, coring, shovel tests, backhoe
 - b Magnetometer: measure variability in magnetic field of soil
 - c Ground penetrating radar: projecting radar beams into the ground
 - 4 Ground reconnaissance (gumshoe survey): Walking over the ground and looking down. Looking for natural windows into ancient sediment: cut banks, old surfaces.
 - a Procedures
 - i Pre-field Research
 - (i) Become familiar with local ethnohistory:
 1. Seasonal round (pattern of seasonal migrations),
 2. Settlement system
 3. Potential settlement pattern
 - a. Example Sierra Miwok: Semi-permanent villages in the lowlands, Seasonal camps in the mid-elevations, Ephemeral camps and hunting sites in the high elevations. Other possible site types: processing locations, cemeteries, rock art (pictographs [paintings] or petroglyphs)
 - ii Record Search (Previous research) Information Centers (CHRIS System)
 - (i) Previous surveys
 - (ii) Previously recorded sites
 - (iii) Archaeological Site records

4. Sketch Map (or GPS): Includes trinomial, north arrow, scale, legend
 - iii Field Survey
 - (i) Types
 1. Random
 2. Intuitive
 3. Systematic: Basic Method: Transects; Cursory (Surveyors spaced > 20 m), Intensive (Surveyors spaced < 20 m)
 - (ii) Sampling considerations
 1. Complete survey (the norm for CRM)
 2. Sample surveys (more common outside US)
 - a. Random sampling: Investigators will determine a particular percentage of an area that they want to examine and then divide it up into blocks. And select blocks randomly. Common in the 1970s.
 - b. Systematic sampling: Patterned, regularized sampling
 - c. Stratified random
 - d. Surface Collection
 - i. Total
 - ii. Sample
 - iii. Formal artifacts only (Formal versus informal)
 - e. Surface collection units
 - i. Random
 - ii. Stratified random
 - iii. Systematic
 - iv. Usefulness (?)

VI The recovery of archaeological data: Excavation

A Testing-- Initial subsurface exploration-- also referred to as test excavation Testing is intended to give you some preliminary information on

- 1 depth of a deposit
- 2 areal extent of a site
- 3 Type and distribution of constituents
- 4 Presence/absence features
- 5 Develop preliminary hypotheses
 - a Age
 - b Function
- 6 Types of vertical testing
 - a manual excavation units -- 1 x 2 or 1 x 1 m
 - b Backhoe trenching
 - c Augering
 - d Shovel probes
- 7 Horizontal testing
 - a Surface transect units (STUs)
 - b Large units (5 x 5 m) very shallow

- 8 Provenience: the horizontal and vertical location of an artifact, ecofact, or feature; Provenience controls: Controls set up to facilitate recording of provenience
- B Full Scale Excavation
 - 1 Conducted with constraints of time and money
 - 2 Research Design: A plan
 - a Questions that investigators hope to address
 - b Types of data they need to address them
 - c Description of methods to be employed
 - d safety plan
 - 3 Procedures: A Short history
 - a 19th century-- trenching and looting
 - b early part of this century-- more systematic excavation-- stratigraphic controls.
 - c crude technique: broadsiding or broadcasting
 - d 1930s-- grid systems and Quadrants
 - e Into the 1960s-- sites gridded into 5' x 5' squares.
 - f From the 1960s on-
 - i increased attention to ecofacts;
 - ii shifted to metric (exception: historical archaeology)
 - iii column samples
 - g Today
 - i Research designs-- methods driven by questions
 - ii Wide range of methods
 - iii Concern for sample size and representativeness of samples
 - iv Most subsurface sampling is driven by needs of Cultural Resources Management (CRM)