Introduction to Archaeology, Cultural Resource Management, and Archaeological Terms

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What is Archaeology?

• The scientific study of material remains (tools, pottery, jewelry, monuments, documents, etc.) of past human life and activities
• Recovery and analysis of material cultural left behind by past human activity
• Where they lived, when they lived, how they lived, subsistence strategies, etc.
• Two methods: material remains (direct) and effect on landscape (indirect)
What isn’t Archaeology?

• Archaeology is NOT Paleontology, which studies fossilized remains of ancient organisms including dinosaurs.
Archaeology as a process

• Theory, methods, & analyses
• Background research
• Survey
• Excavations
• Lab work-identification
• Analysis
• Submission of site records
• Report writing
Cultural Resource Management (CRM)

- CRM term used mainly by Archaeologists to describe “managing historic places of Archeological, architectural, & historical interest and considering impacts to such places under the environmental and historic preservation laws” (King 2004:9)
- Practice of managing cultural resources in response to some legal or policy mandate
- Often removed from research unlike in academia
- Involves Native American consultation
What are Cultural Resources?

- Physical evidence or place of human activity
- Consist of natural and built environments that have cultural value of some kind to some sociocultural group
- Non-renewable and fragile
Cultural Resources

- Archaeology now goes beyond just material remains and focuses on cultural processes and cultural change
  - Archaeological sites and associated artifacts
  - Historic properties/sites
  - Traditional Cultural Properties (TCPs)
  - Sacred/religious sites, structures, practices, beliefs, etc.
  - Cultural items (human remains, funerary objects, sacred objects, objects of cultural patrimony)
  - Historical documents
  - Cultural use of natural resources and resources themselves
Archaeological Site

• Location where human activity occurred and materials left behind

• The physical remains of human occupation or activity
  • May be historic or prehistoric
  • May include
    • artifacts (3 or more)
    • features
    • environmental data
  • Can be surface, subsurface, or both
Historical Property

• Historic Property as defined by law: “any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register of Historic Places” [36 CFR 800.16(l)(1)]

• Includes artifacts, records, and material remains related to and located within such a property

• Historic Site
  • Archaeological Site: remains of site no longer in use or maintained; must have clearly defined archaeological potential (associated artifacts, features, ecological evidence)
  • Non-archaeological Site: consists of building, site, structure, or district that in general is still used or maintained
Historic/Prehistoric

• Prehistoric sites
  • belongs to period before written records
  • Native Americans

• Historic sites
  • arrives at different times in different parts of California
    • early as 1542 in one area
    • late as 1870 in others
  • Over 50 years of age
Protohistoric

• Transition between Prehistoric and Historic

• Period of time during which a culture has not yet developed writing but other cultures have noted its existence in their own writings
Protohistoric

Glass Trade Beads

Glass Projectile Points
Traditional Cultural Properties (TCP)

• Property “eligible for inclusion in the National Register of Historic Places (NRHP) based on its associations with the cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions of a living community” (NPS 2012)

• Rooted in traditional community’s history and important in maintaining cultural identity of community (traditional community = beliefs, customs, and practices passed down through generations, shared, and help define traditions of community)

• Place that has significant cultural or religious importance to Native Americans (can include sacred places and cultural landscapes)
Tribal Cultural Resource

• Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe

• Can include cultural landscapes, historical resources, unique archaeological resources, and non-unique archaeological resources
Esselen Indian “Birthing Rock”
Archaeological Terms
Artifact
Object made, modified/altered, or transported by humans
Accomplish task or activity
Native American Artifacts

Lithics

• Lithics/Chipped stone: stone tools and the byproducts of making stone tools

• Types
  • Tools: projectile points, knives, bifaces, scrapers, etc.
  • Debitage: waste byproduct of tool making activity; includes flakes/shatter
  • Cores: parent material

• Cortex: outer layer of rock (rind) formed on exterior of raw materials by weathering processes

• Hammerstone: Hard cobble used to strike off lithic flakes from core
Dart/Spear Point
Garza Fire 2017

Projectile Points

Arrowhead
Greeley Hill VMP 2018
Native American Artifacts
Groundstone: Used to process food and other materials

- Metate/Mano
- Millingstone/Handstone
- Mortar/Pestle
Other Artifacts

• Bead: small artifact with drilled hole used as form of money, status symbol, medium of exchange, or as decorative item; can be made of stone, bone, or shell

• Sherd: fragment of a pottery vessel
Ecofacts

• Ecofact: by-product of human activity that doesn’t meet definition of artifact (i.e. burned seeds, burned bone, charcoal, etc.)
  • Fire-affected rock (FAR)/Fire-cracked rock (FCR): angular broken rocks produced as result of deliberate use of fire; often associated with campfires/hearths
  • Faunal remains: items left behind after animal dies and/or is processed/eaten (bone, shell, scales, hides, etc.)
FEATURE

• A Large Stationary “Artifact” (not portable)

• Location where certain activity occurred
Bedrock Mortars (BRM)

Detwiler Fire 2017

Park Fire 2017
Cupules
Rock Art Sites
Pictographs
Petroglyphs
Hearths/Roasting Pits
Midden Soil

• Midden
  • Old/ancient garbage dump (domestic waste)
  • Dark soil created by decomposing organic material (animal bone, shell, plant material/charcoal, etc.)
  • Often associated with artifacts
Historic Building, Structure, and Object

• Historical building or structure is “any structure or property, collection of structures, and their associated sites deemed of importance to the history, architecture, or culture of an area” (H&SC 18955: State Historical Building Code)
Historic Building, Structure, and Object

• Examples of Buildings:
  • Houses
  • Barns
  • Stables
  • Sheds
  • Garages
  • Courthouses
  • Libraries
  • Mills
  • Factories

• Train depots
• Hotels
• Churches
• Stores
• Schools
• Theaters

• Examples of Structures:
  • Bridges
  • Tunnels
  • Lookouts
  • Dams
  • Silos
  • Windmills
  • Kilns
  • Earthworks
  • Cairns

• Boats
• Railroad cars
• Aircraft
• Canals
• Ditches
• Flumes
• Roads
• Fences
• Rock Walls
Historic Building, Structure, and Object

- Object: stationary, non-portable historic-era resource that is neither building nor structure
- Examples: sculpture, monument, boundary marker, statuary, fountain
Other Definitions

• Cultural Landscape: geographic area including cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity (including ceremonial activities), or person, or exhibiting other cultural or aesthetic values
  • Four main types: historic sites (battlefields, etc.), historic designed landscapes (parks, campuses, estates), historic vernacular landscapes (rural villages, agricultural landscapes, industrial complexes), ethnographic landscapes (sacred sites, massive geological structures)

• District: contiguous (usually) grouping of sites, buildings, structures, or objects linked historically by function, theme, or physical development

• Isolate: place where two artifacts or less are located
Other Definitions

• Provenience: origin; source; original context
• Integrity: ability of property to convey its significance
• Significance: resource’s importance in relation to historic/prehistoric context
• Carbon-14 (C14) or Radiocarbon dating: method of dating age of deposit, event, or site using organic material
• Dendrochronology: method of dating events, environmental change, and archaeological artifacts by using the characteristic patterns of annual growth rings in timber and tree trunks (tree-ring dating)
Ceremonial (Ritual) Objects

- Objects used in practice of religious ceremony

Mission Indian Paviut Wand

Maidu Ceremonial Head Plume (1800-1900)
Ceremonial Objects: Charmstones

- Artifact modified and used in way to ensure success in certain venture (hunting, fishing, collecting resources, etc.)
Ethnography

• Study of people and cultures
• Description/brief history of group or culture along with geography they lived in and what climate existed when they lived there
Preservation

• How well an object resists decomposition/deterioration

• Many Native American artifacts made of perishable materials (organic materials) and so have not preserved until present day except in particular circumstances

• Typically only find Native American artifacts that are constructed of more durable materials such as stone, bone, and ceramic

• Many early American pioneer homes constructed of wood (perishable) that has not preserved well – often only foundations, chimneys, and piles of wood remain
Site Condition

• Condition: state of something, especially in regard to its appearance, quality, or working order

• Relative condition of overall site
  • Good, Fair, Poor
  • Degree of Disturbance
Stratigraphy

- Layers (strata) of natural or cultural material that make up depth of site
- Law of Superposition: oldest layer at bottom, youngest at top
Subsistence

• Types of food people ate
• Subsistence strategy: method by which obtain food
• Examples: fishing, acorn gathering and processing, seed gathering and processing, deer hunting
Time Period

• Period in which site occupied, or in which a culture active
CRM Acronyms and Terms

• APE: Area of Potential Effect
• Project: legally defined scope of work under CEQA
• CEQA: California Environmental Quality Act
• NEPA: National Environmental Policy Act
• Compliance: adhering to environmental or resource protection law (i.e., CEQA); meeting specific standards
• Lead Agency: public agency that has primary responsibility for carrying out or approving project; determine what level of CEQA review required; must be recognized state entity
CRM Acronyms and Terms

• CRHR: California Register of Historical Resources
• NRHP: National Register of Historic Places
• NAHC: Native American Heritage Commission
• NACL: Native American Contact List
CRM Acronyms and Terms

• NOE: Notice of Exemption (exemption – reason project exempt from requirements of CEQA)

• CATX or CATEX: Categorical Exemption (exemption from CEQA for class of projects deemed not to have significant effect on environment)

• EIR/EIS: Environmental Impact Report/Environmental Impact Statement

• MND: Mitigated Negative Declaration

• ND: Negative Declaration
Questions?
References
