

INADVERTENT DISCOVERY OF HISTORICAL, ARCHAEOLOGICAL OR CULTURAL RESOURCES PLAN

INTRODUCTION

The purpose of this plan is to ensure that NSF funded fieldwork activities are conducted in a manner that avoids major impacts to cultural resources. Cultural resources are protected under the [National Historic Preservation Act \(NHPA\) Section 106](#).

Section 106 of the NHPA requires federal agencies to consider the effects on historic properties of projects they carry out, assist, fund, permit, license, or approve. If a federal project has the potential to affect historic properties, a Section 106 review is required.

DEFINITION OF A HISTORIC PROPERTY

A historic property is defined as “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.” 36 CFR 800.16(l)(1).

SECTION 106 DETERMINATION

Depending on the nature of the proposed fieldwork, NSF may initiate consultation under Section 106 to evaluate potential effects on historic properties. The most common actions that are identified as having an impact on cultural resources include ground disturbance (i.e., digging and coring, and archaeology projects).

Regardless of the “effects” determination, all researchers working in areas with potential cultural resources, should follow the following guidelines to mitigate any potential damage to cultural resources.

MITIGATIONS MEASURES WHEN CONDUCTING FIELDWORK IN OR NEAR CULTURAL RESOURCES

Note: below information has been adapted from the Department of Natural Resources “Mining and Cultural Resources Guidance” and the Department of Ecology, State of Washington, “Inadvertent Discovery Plan: Plan and Procedures for the Discovery of Cultural Resources and Human Skeletal Remains”.

All projects working in areas with potential cultural resources:

1. Prior to the start of your field season, be sure to check with the landowner/manager (NPS, BLM, USFWS, or state, village/community, etc.) to determine if the proposed study area will have an impact on known sites. All of the Federal agencies and many communities will have someone on staff or a local expert with knowledge on the area's cultural resources.
2. Inform all field team members of the [laws and statutes](#) regarding cultural resources.
3. If possible, locate study sites, field camps, and access routes in locations that are previously disturbed.
4. Consider creating 100m (~300ft.) buffers from water bodies (anadromous streams, rivers, lakes, springs) for ground disturbing activities. Areas adjacent to water bodies have high potential for cultural resource sites.
5. Visually inspect an area prior to its disturbance to see if you can identify any possible cultural features. Keep your eyes open for anything out of the ordinary.
 - a. Examples of cultural resources that could be encountered during fieldwork:
 - i. An accumulation of shell, burned rocks, or other food related materials.
 - ii. Bones, intact or in small pieces.
 - iii. An area of charcoal or very dark stained soil with artifacts.
 - iv. Stone tools or waste flakes (for example, an arrowhead or stone chips).
 - v. Obvious large depressions with built up walls or systems of connected smaller depressions.
 - vi. Modified or stripped trees, often cedar or birch, or other modified natural features, such as rock drawings.
 - vii. Historic mining structures including cabins, buildings, and other structures that appear older than 50 years, or equipment for mining and other activities, including large machinery and parts, mine shafts or tunnels, rail, canals, ditches, fencing and tools.
 - viii. Clusters of tin cans or bottles, or other debris that appear older than 50 years.
 - ix. Old munitions casings. **Always assume these are live and never touch or move.**
 - x. Buried railroad tracks, decking, foundations, or other industrial materials.
 - xi. Remnants of homesteading. These could include brick, nails, household items, toys, food containers, and other items associated with homes.
- Note:** The above list does not cover every possible cultural resource. When in doubt, assume the material is a cultural resource.
6. Try to avoid terraces, ridges, and overlooks when selecting your study site; these are areas of high potential for cultural resources.
7. Be familiar with the history of human occupation/use in your study area. This information can provide detail on the types of cultural resources you may encounter.
8. When in doubt, contact your NSF Program Officer or the SHPO office (see contact information below)

Additional steps for project that have received a Section 106 Consultation:

9. Keep records of the information provided to your field team on location and description of cultural resource sites within your area of potential effect (APE). Create buffer zones around these localities to prevent inadvertent damage. You do not necessarily have to avoid the areas

completely, but everyone on crew should be aware of the potential presence of cultural resources.

10. Complete all required end of season reporting requirements.

IN THE EVENT THAT YOU ENCOUNTER:

Cultural resources:

1. Immediately stop ground disturbance activity.
2. Contact the SHPO office and provide photographs, a description, and location information (GPS coordinates or a notation on a topographic map is sufficient).

Human Remains:

1. Immediately stop ground disturbance activity.
2. Contact the regional Alaska State Troopers (see contact information below).
3. Regard the site as a potential “crime scene” until a person with appropriate expertise and authority determines otherwise.

CONTACT INFORMATION:

Alaska State Troopers, Missing Persons Clearinghouse:

Phone: (907) 269-5038

Fax: (907) 337-2059

Lt. Paul Fussey

Phone: (907) 269-5682

E-mail: paul.fussey@alaska.gov

*Malia Miller

Phone: (907) 269-5038

E-mail: malia.miller@alaska.gov

*After contact by phone, send e-mail with relevant information and photos to Lt. Fussey and Malia Miller.

Alaska Office of History and Archaeology (State Historic Preservation Office):

Office Phone: (907) 269-8700

*Ask for State Archaeologist

Fax: (907) 269-8908

Email: richard.vanderhoek@alaska.gov or oha.permits@alaska.gov

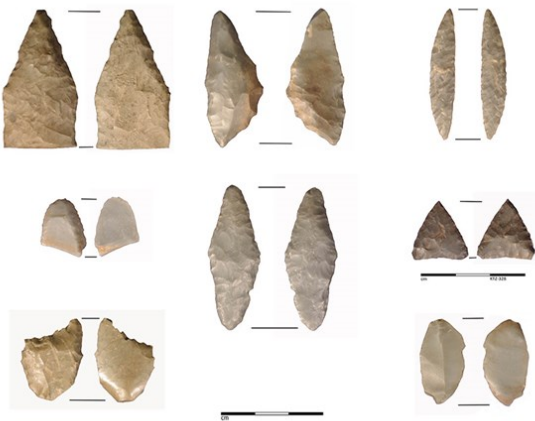
EXAMPLES OF CULTURAL RESOURCES THAT COULD BE ENCOUNTERED: (Adapted from the state of Washington's Department of Ecology's Inadvertent Discovery Plan)

Chipped stone artifacts

- Glass-like material
- Angular material
- "Unusual" material or shape for the area
- Regularity of flaking
- Variability of size



Stone artifacts from Oregon.



Stone artifacts (Source:
<https://newatlas.com/north-america-stone-tool-20000-years/55606/>)

A selection of ASTt tool forms discovered on the oldest beach ridge at Cape Espenberg. Tool types include: (a) spear point, (b) flake knife, (c) end blade, (d) side blade, (e) scraper fragment, (f) burin, (g) harpoon end blade, (i) blade, (j-k) burin spalls, (h, l, and m) microblades. (Source: [Arctic Small Tool Tradition \(U.S. National Park Service\) \(nps.gov\)](http://www.nps.gov/ArcticSmallToolTradition))



Cores and Blades (Source
<http://www.projectilepoints.net/Points/Anagula.html>)



Alutiiq bayonets from Alutiiq Museum (Source [Kodiak Island Borough Donates Artifacts to Alutiiq Museum - Alaska Native News \(alaska-native-news.com\)](#))

Ground stone artifacts

- Unusual or unnatural shapes or unusual stone.
- Striations or scratching.
- Etching, perforations, or pecking.
- Regularity in modifications.
- Variability of size, function, or complexity.



Fishing Weight – credit CRITFC Treaty Fishing Rights website.



Left: A stone pestle found in a midden at Ing'yug in 2019. Right: A small ulu found at Ing'yug in 2019. Ulus are traditionally made and used by women. They were produced in various sizes to accommodate many cutting and scraping tasks associated with hide preparation and food processing. (Source: [Alaska – Hollis K. Miller \(holliskmiller.com\)](http://Alaska – Hollis K. Miller (holliskmiller.com)))

Bone, Antler or shell artifacts, tools, or beads

- Harpoons or other tools.
- Carved figures/art
- Carved Antler Harpoons

Right: Eight Aleut Carved Antler Harpoon Points from Kodiak Island. Below: *Coronula diadema*, aka a humpback whale barnacle, found in a midden at Ing'yug. (Source respective: [Eight Aleut Carved Antler Harpoon Points From Kodiak Island, AK 4 1/4" L. - 5 1/2" L. Good Conditio \(icollector.com\)](http://Eight Aleut Carved Antler Harpoon Points From Kodiak Island, AK 4 1/4), [Alaska – Hollis K. Miller \(holliskmiller.com\)](http://Alaska – Hollis K. Miller (holliskmiller.com)))



Strange, different, or interesting looking dirt, rocks, or shells.

Human activities leave traces in the ground that may or may not have artifacts associated with them.

- “Unusual” accumulations of rock (especially fire-cracked rock).
- “Unusual” shaped accumulations of rock (such as a shape similar to a fire ring).
- Charcoal or charcoal-stained soils, burnt-looking soils, or soil that has a “layer cake” appearance.
- Accumulations of shell, bones, or artifacts. Shells may be crushed.
- Look for the “unusual” or out of place (for example, rock piles in areas with otherwise few rocks).



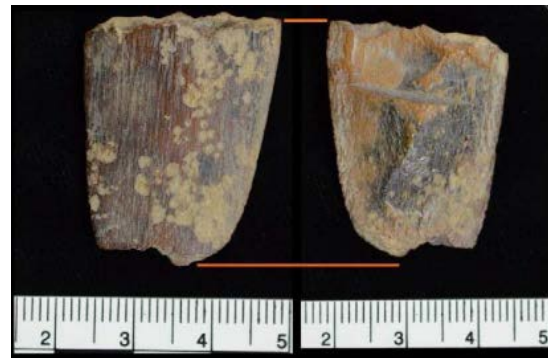
The middens at Ing'yug, including whole bones and shells (Source [Alaska – Hollis K. Miller](#))



Hearth excavated near Hamilton, WA.

Potential human remains

- Grave headstones, markers, or spirit houses.
- Bones or bone tools – intact or in small pieces. It can be difficult to differentiate animal from human so they must be identified by an expert
- These are all examples of animal bones and are not human



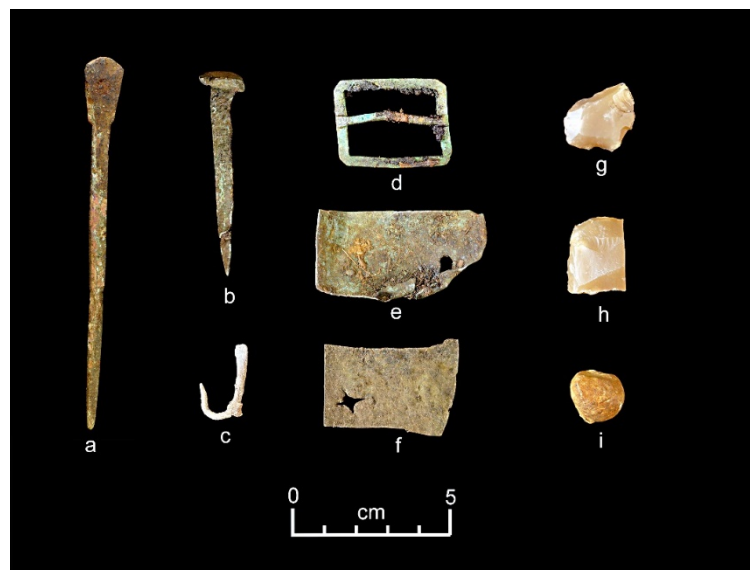
Left: A real discovery at an Ecology sewer project site. Right: Bone wedge tool, courtesy of Smith Cover Shantytown excavation (45KI1200). Bottom: Bear Paws can be hard to differentiate from human remains (Source: <https://boneclones.com/product/black-bear-right-paw-complete-KO-075>)



Sometimes what looks like “trash” might in fact be archaeology:



Left: Historic glass bottles, Right: Gun flints, musket balls, pieces of modified sheet copper, iron and copper spikes, a Russian axe, and a fishhook fashioned from copper (Source respective: [Historic Bottle Website - Homepage \(sha.org\)](http://HistoricBottleWebsite.com), [Archaeologists piece together how crew survived 1813 shipwreck in Alaska - HeritageDaily - Archaeology \)News](http://Archaeologistspiece.together)



REFERENCES:

Department of Natural Resources, Division of Parks and Outdoor Rec. Office of History & Archaeology. (2017). *Mining and Cultural Resources Guidance*. Retrieved from <http://dnr.alaska.gov/parks/oha/pdf/cultresminguide.pdf>

Department of Ecology. State of Washington. (2020). *Inadvertent Discovery Plan: Plan and Procedures for the Discovery of Cultural Resources and Human Skeletal Remains*. Retrieved from <https://apps.ecology.wa.gov/publications/documents/ecy070560.pdf>