MITIGATING VISITOR USE IMPACTS TO ARCHAEOLOGICAL SITES IN THE GRAND CANYON BACKCOUNTRY

Ellen Brennan
Vanishing Treasures Archaeologist
Grand Canyon National Park
Human use of the Grand Canyon begins between 11,000 and 12,000 years ago.
As subsistence strategies and land use practices changed through time, human impacts to the canyon environment became more apparent.
The cultural resources of the Grand Canyon backcountry include site types such as artifact scatters,
roasting features and caches of ceremonial objects,
The Cultural Resources of the Grand Canyon Backcountry

pit house and masonry structures,
storage features,
The Cultural Resources of the Grand Canyon Backcountry

agricultural features such as terraces,
The Cultural Resources
of the Grand Canyon Backcountry

special features like wooden bridges,
The Cultural Resources of the Grand Canyon Backcountry

petroglyph and pictograph sites,
The Cultural Resources of the Grand Canyon Backcountry

Native American habitation and special use structures,
The Cultural Resources of the Grand Canyon Backcountry and Euro American sites and features.
• Grand Canyon archaeological sites are the physical manifestation of a varied and long-term human history in this magnificent landscape.
• People continue to be drawn to the Grand Canyon to experience the scenery and the natural, and historic objects the park contains.
• Increased demand for recreational opportunities can result in impacts to cultural resources.
“...to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” 16 USC 1, the National Park Service Organic Act.
NPS Management Policy and Cultural Resources

• When there is a conflict between conserving resources and providing for the enjoyment of them, conservation will predominate.
Program Goals
Based on NPS Management Policy

- Identify, evaluate, document, register, and establish basic information about archaeological resources.
Program Goals
Based on NPS Management Policy

- Ensure that management processes for making decisions and setting priorities integrate information about archaeological resources.
Program Goals
Based on NPS Management Policy

• Ensure that archaeological resources are preserved, protected, and receive appropriate treatments.
Program Goals
Based on NPS Management Policy

- Make archaeological resources available to the public for enjoyment when appropriate.
Visitor Use Impacts to Grand Canyon Archaeological Sites

- Identify sites impacted by visitor use.
- Record impact types.
- Plan mitigation measures and implement them.
Impacts

• Visitor impacts to archaeological sites includes destruction of original architectural elements,

Site B:16:0794 fall 2003.

The same site in spring, 2004.
• Adding features, like windbreaks, to archaeological sites.
• Intentional and unintentional disturbance of cultural deposits.
Impacts

- Sitting and walking on architectural remains.
Impacts

- Piling artifacts.
- Stealing artifacts.
Impacts

- Eroding cultural deposits with foot traffic.

50 cm of loss
Impacts

- Intentional and unintentional digging in site deposits.
Mitigation Measures
Mitigation Measures

- Trail rerouting.
Mitigation Measures

- Stabilizing cultural deposits with erosion control fabrics and revegetation measures.
Mitigation Measures

- Adding sterile fill to eroded surfaces.
Mitigation Measures

- Implementing masonry preservation projects.
Mitigation Measures

- Documenting sites to preserve scientific information.
Mitigation Measures

- Conducting data recovery (artifact collection and excavations) when necessary.
Mitigation Measures

• Educating the public about proper site etiquette practices.
Questions?