# **Research Concerns**

There are numerous data gaps for this area. Archaeological research is in its infancy on the Tavaputs Plateau. A list detailing data needs could fill volumes. Instead I have chosen to focus on what we know and fill in on the edges.

#### **Problems with Data Collection**

Some problems have been created because a variety of individuals using different forms have recorded the sites. Many of the earliest sites were recorded on single page forms by range conservationists. Even some later IMACS forms contain limited data. These early forms contain no data or discussion of tools or features noted on sites. Many of these sites were "completely collected" and the original site forms do not contain site sketches or USGS topographic map locations. Although some of these sites have been rerecorded, it has been difficult to relocate them. Later IMACS forms overcome most of these shortcomings; however, they tend to focus on descriptions of chipped stone tools, but often lack data on groundstone or rock art. Archaeologists need to complete site forms thoroughly.

#### Toolstone

Another problem that has been encountered is description of lithic toolstone. Ashley crews are very familiar with Tiger chert from southern Wyoming. There is a tendency on their part to refer to the dark South Unit chert as Tiger chert. Outside contractors often do not define debitage beyond generic "chert" or "quartzite," when more detail would vastly improve our understanding the movement of prehistoric peoples and goods. Recorders need to be careful and consistent in describing and categorizing toolstone.

Identification of lithic sources is an important step in understanding the movement of prehistoric peoples and goods. Local Bridger Formation cherts are widespread on the Tavaputs, but they have never been adequately described. This material is generally relatively poor quality and in many areas it resembles a siltstone. It occurs in a wide range of colors from pink through tans to gray. In addition to verbal descriptions, a type sample could be shown to contractors to help them understand the range of colors and textures and to help distinguish it from Tiger chert they may encounter.

Another common toolstone on the Tavaputs is a high quality chalcedony that often grades to translucent. Because the majority of this material occurs as finished tools I suspect it outcrops off the Forest and was brought onto the Plateau.

Although much of the groundstone identified is local sandstones, Uinta quartzite commonly occurs as groundstone tools. The nearest this purple or maroon quartzite can be obtained is in the center of the Uinta Basin where it has washed from the Uinta Mountains. Not only manos, but metates of this material where carried onto the Tavaputs. More careful identification and documentation of the distribution of this toolstone will help understand mobility, seasonal rounds, social connections etc.

## **Models for Upland Use**

A model for Late Archaic upland use needs to be developed including, what season of use, what resources were they exploiting, what other areas were involved in the seasonal rounds, etc. The Fremont sites on the Tavaputs bear the signatures of short term residential sites. These are very different from the Fremont logistical sites in the Uinta Mountains to the north. Why was the Tavaputs used differently by the Fremont? A model needs to be developed for this period. Was the Tavaputs just a travel route to get to vision quest or other ceremonial areas, the way traders traveled through the region or some other reason? Does the occupation represent a separate forager group, people that lived on the Tavaputs and traded with the Fremont, but never became farmers?

Data from 42Dc316 suggests there was an intensification of faunal processing. Hunting of artiodactyls in the Late Archaic gave way to lagomorph consumption during the Fremont period. Bones were also processed to a much greater extent during the Fremont era. Were bones processed for marrow and grease production? Had the environment deteriorated so that artiodactyls were scarce or were other cultural factors involved that caused intensification?

Sites on the Tavaputs have clear ties to the Uinta Basin. Tiger chert, Uinta quartzite, Uinta grayware pottery all came from the Uinta Basin or further north. Does this mean the people lived in the Uinta Basin and moved onto the Tavaputs during certain seasons or just traded with people from the Basin? What evidence or trade or interaction is there with people from Nine Mile Canyon? Why does it appear that people from the Uinta Basin dominated the area when Nine Mile Canyon is closer?

The Anthro Mountain site (42Dc1424) is a unique and intriguing location. Located at 8800 ft in elevation with storage pits, possible prepared clay floor, evidence of maize and other features the site is not like anything else recorded on the Tavaputs, or Uinta Mountains. Is it really unique or do other, similar sites exist?

The majority of excavations the Ashley has undertaken on the Tavaputs have occurred in rockshelters. Additional open sites like Anthro Mountain need to be investigated to balance our understanding of prehistoric use of the landscape.

A high rate of artiodactyl teeth have been recovered from excavated sites, especially Anthro Mountain. Does this represent hide preparation (just bringing the feet and heads back to the site) or some other process?

South Unit sites have the first clear evidence of pinyon nut consumption on the Ashley and in the Uinta Basin. Why did these people utilize this resource while others do not appear to have done so?

## Chronology

The earliest dates on the Tavaputs are from the Late Archaic Period (4100 BP). Does this represent the earliest occupation of the region? Although earlier dates are possible, no diagnostic material from the Early Archaic or Paleoindian period have been identified on the surface. Why would this area not have been occupied earlier?

Maize pollen was found in a 400 BC hearth. This is one of the earliest occurrences of maize in northeastern Utah. When did the locals make the transition to maize horticulture and was everyone involved?

The Fremont persisted well after AD 1300 on the northern and northeastern periphery of the Uinta Basin. In contrast, they seem to have abandoned the Tavaputs Plateau before AD 1300. Will additional data support the traditional Fremont demise by AD 1300, or suggest the Tavaputs was occupied by a peripheral group?

# **Paleoclimatic Reconstruction**

Paleoclimatic reconstruction is important to understanding the prehistory of the area because the environment has a significant effect on humans and animals. Preliminary data suggests differences in local environment through time. Perhaps vegetation moved from a more open sagebrush steppe around 400 BC to more wooded environment by AD 900. Is this an isolated situation or the result of climate or disturbance (natural or cultural)?