

Upland Use by Horticulturalists

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The recently published Prehistoric Uinta Mountains Occupation monograph (Johnson and Loosle 2002) presented data from nearly a decade of cultural resource investigation on the Ashley National Forest (ANF). Much of this data had been gathered during Passport in Time or other volunteer projects. When the writing process started there appeared to be limited similarity in the sites investigated and methodological approaches used, except that all the sites were in the Uinta Mountains of northeastern Utah. There was considerable variability in individual project purpose and execution, in site elevation and site function. As analysis proceeded, it became clear that most of the archaeological assemblage dated to between 4200-600 Cal BP. This time frame represents the Late Archaic through Fremont periods, which were an exciting and dynamic age in prehistory. Significant economic, social, demographic and probably ceremonial changes were occurring as the prehistoric occupants made the transition from nomadic hunter-gatherers to more sedentary horticulturalists.

The variability in site type and locations provided a powerful research tool once it was recognized the data came from a limited time frame. The variety of sites provided an opportunity to examine how people from a particular period used different upland resources, elevations, and settings as they made the transition to a more sedentary life-way. The Fremont are the most studied and

documented of prehistoric groups in Utah, however, our data fills an important niche in understanding of this group. The Uinta Mountain sites represent hitherto little known portions of regional settlement and subsistence patterns, and complement the more extensive published research on lowland occupations.

Early Archaic

A brief review of the earlier cultural history will help create a context for the Fremont occupation of the Uinta Mountains. Extensive archaeological survey and excavations preceded the privatization of the small government town of Dutch John, located in the eastern Uintas. Early Archaic components at Dutch John (Loosle and Johnson 2000) consisted of relatively substantial brush structures with internal hearths and pits, activity areas, groundstone and large side-notch points, bracketed by (1-sigma range) dates of 8005 and 6605 Cal BP. The structures were occupied in the late summer or fall season. Activities appear to have focused on a combination of processing plant and faunal (predominantly Artiodactyl) resources. These occupations may represent a strategy of central place foraging (Loosle and Johnson 2000:253-254). No data has been recovered for the time between 6600 to 4600 BP. It is still not clear if people moved into adjacent areas, which have not been investigated, or if their activities left such sparse remains that they have not yet been identified.

The Late Archaic period in the Uintas shows a marked difference from the earlier cultural record. The Dutch John Late Archaic period (1-sigma range) dates between 4610 and 3290 Cal BP. Cultural remains were typically slab-lined

basins in open settings with few associated artifacts. These sites represent a highly mobile strategy focused on late winter or early spring season processing of roots, tubers, and possibly cactus pads. Elko series projectile points replaced large side-notch points during this period. Excavations at Dutch John, and recently in Finch Draw, have found evidence of thermal features (hearths and roasting pits) in rockshelters (1-sigma range) between 2784 to 1880 Cal BP. This is another marked change in behavior and corresponds with the peak and subsequent decline of mid-Neoglacial cool-wet conditions (3000-2000 Cal BP). The dramatic changes in mobility and feature type documented at Dutch John (Loosle and Johnson 2000:255-256) support subdivision of the Archaic era in the eastern Uintas into an Early Archaic period (8000-5000 Cal BP) and a Late Archaic period (5000-2000 Cal BP).

Formative Era

Another dramatic shift in the ANF material culture record starts about 1700 Cal BP. The Formative era is marked by a large increase in sites, which mirrors a similar trend in the surrounding lowlands. Upland sites exhibit several traits (short duration, fall season visits, Rose Spring Corner-notch arrow points, uplands brush structures, targeting of specific resources, and a emphasis on large game) that continue over the following thousand years. During this period other traits (limestone tempered ceramics, specialized groundstone types, above-ground storage features) are added to the cultural assemblage. The people that exhibit this Formative period pattern of relative residential sedentism

are called the Uinta Fremont. The Fremont culture apparently arose from an indigenous Late Archaic population that, over time, adopted a series of new traits and cultural practices. The Uinta Fremont core area was south of the Uinta Mountains in the Uinta Basin, however, Fremont farmers also lived along the Red Canyon of the Green River, on the north slope of the Uintas.

The upland Fremont sites excavated to date, are part of a logistic lifeway that was based at lowlands residential sites and emphasized cultigen production (Johnson and Loosle 2002). There is no evidence of separate forager or hunter/gatherer groups in the Uintas. Remains of maize and other artifacts in upland sites show the people were tethered to lowland locations. Upland Fremont sites show a collector strategy with a focus on acquisition of a limited number of patchy resources such as large mammals and Cheno-ams. Excursions to the uplands were scheduled to avoid conflicts with the lowland growing season and represents a shift in season of use from the spring and summer emphasis of the Archaic era. This pattern of upland forays on the shoulders of the lowlands growing season allowed these peripheral Fremont groups to be more resilient, and survive through at least some periods of drought. Fremont residences were in the lowlands, and since logistic forays were short duration efforts aimed at obtaining rich uplands resources, the full range of tools and personal items expected at residential sites is sparse or absent at upland sites. A number of small storage structures are located intermediate between the canyon bottom lowlands and the upland benches. The purpose of these storage structures may have been to store rations and

equipment used during upland forays. Trade apparently increased during the Fremont period, particularly obsidian, but does not appear to have ever been intensive. There was also increasing use of Tiger chert through the Fremont period. One notable difference for the Fremont of the Uinta Basin periphery is they may have lasted longer than other Fremont groups. Uinta Fremont farming in Red Canyon apparently began as early as in the core area, but persisted for several centuries longer than in the Uinta Basin. This will be discussed in a later paper.

Uinta Mountain Sites

Two sites (42Da545 and 42Da791) help illustrate the logistical or collector pattern just outlined.

Summit Springs

Summit Springs rockshelter (42Da545) is named after a nearby ANF guard station (Johnson and Loosle 2002:Chapter 4). More of a cliff than a true rockshelter, this south-facing site lies at the head of a small, west-east trending, spring-fed drainage on the north slope of the eastern Uinta Mountains. The site is at an elevation of 2500 m (8200 ft) on the north edge of a marginal bench overlooking Sheep Creek Canyon. Sheep Creek joins the Green River (now flooded by Flaming Gorge Dam) 11 km (7 miles) to the east and 600 m (2000 ft) below the site. The shallow rockshelter at Summit Springs extends for about 15 m (50 ft) along the base of the Uinta Formation outcrop (Figure 1). The site

extends about 30 m east-west along the outcrop face, and 30 m south down a gentle slope from the rockshelter to the grassy bottom of the small drainage.



Figure 1. Summit Springs (42Da5454) looking north at cliff face.

The site is at the north edge of the extensive Greendale Plateau, a relatively flat marginal bench on Uinta quartzite substrate. The site is at the boundary of several vegetation zones. Greendale Plateau arboreal vegetation on and east of the site is dominated by Ponderosa pine. The dominant arboreal vegetation west of the site is Lodgepole pine. The Greendale Plateau also features stands of conifer and aspen interspersed with meadows and streams. This bench extends more than 6 km (4 miles) south from Summit Springs, and then the terrain rises steeply in the following 5 km to the Uinta Mountain divide at elevations of 3050-3660 m (10,000-12,000 ft).

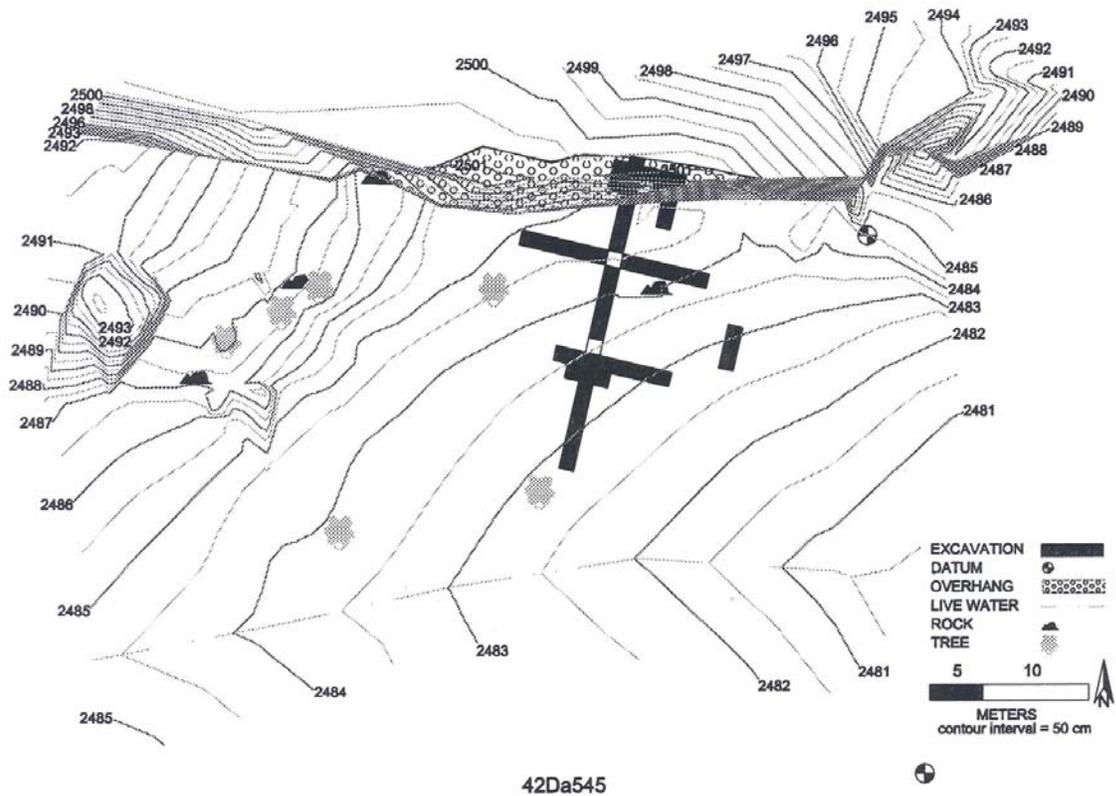


Figure 2. Plan Map of Summit Excavations.

Extensive midden (or possibly toss zone) deposits cover much of the site below the rockshelter. Although these cultural deposits are not of the richness (i.e. variety of artifacts) encountered in middens from sedentary occupations, the deposits are quite thick in comparison to those occurring at many upland sites. Five week-long PIT projects conducted excavations at the site. The excavations opened 52 one-meter grid squares on the slope and in the rockshelter. The crews exposed twelve hearths that date to the Late Archaic era and the Fremont period (Figure 2). Large assemblages of debitage (ca. 45,000 pieces), tools (ca. 850 whole or partial), bone (ca. 17,000 fragments), groundstone (181 fragments), and ceramics (131 sherds) were recovered at the site. A relatively wide range of

chipped stone tools included choppers, drills, gravers, scrapers, utilized and modified flakes.

The Summit Springs site was used as a hunting camp during portions of the Late Archaic era and the Fremont period. Archaic occupation was sparse and consisted of short duration stays associated with hunting, probably representing mobile foraging in the summer half of the year. Archaic use may have been centered several meters away from the cliff face. A compacted use area associated with one Late Archaic hearth suggests that either group size or length of stay was somewhat greater than during Fremont occupation (weeks not days).

The overwhelming majority of material recovered at the site was from the Fremont period, however. Evidence of Fremont use consisted of a range of tools and artifacts associated with logistic hunting forays in late summer or fall, and evidence of embedded activities including staged reduction of Sheep Creek quartzite bifaces. The majority of faunal bone was from medium Artiodactyls, like mountain sheep and deer. Almost no small mammal bone was processed at the site. Additional, inferred activities of the Fremont occupants were hide scraping, meat drying, and acquisition of materials for pigments and ceramic temper. The seasonal availability of seeds and berries, ample groundstone, and processing of bone for marrow and grease suggest pemmican production at the site. There were no formal habitation or storage structures at Summit Springs. The absence of compacted use surfaces associated with the Fremont period features suggests very short duration use. Fremont activity was concentrated against the cliff face,

probably to take advantage of the warmth offered by the passive solar radiation of the cliff face when the site was occupied in the cool autumn months.

In spite of the marked differences in season of use and mobility strategies between the Fremont and Archaic peoples, significant cultural continuity is noted at Summit Springs. For instance Elko corner-notch points were used during both Archaic and Fremont periods. More notable is the transition from Elko corner-notch to Rose Springs projectile points. The size of Elko points diminishes through time, until they are indistinguishable from the Rose Springs variety. As Elko points become smaller there is a corresponding increased preference for chert toolstone, instead of the quartzite favored by earlier people.

Allen Creek

Another Uinta site highlights wild plant processing, but is possibly part of the same seasonal round represented at Summit Springs (Johnson and Loosle:Chapter 5). 42Da791 is located several miles east of Summit, just across the Green River from Dutch John (Figure 3). The Allen Creek site, 42Da791, is on a marginal bench at an elevation of about 2085 m (6840 ft). 42Da791 is situated on a rocky composed of Uinta formation quartzitic bedrock sparsely and sporadically covered with sediments and thin soils. The site overlooks the deep Red Canyon of the Green River a few kilometers to the north and east, and nearby Allen Creek immediately to the east. Allen Creek, a small, perennial tributary to the Green River, flows



Figure 3. Allen Creek site – in Ponderosa Pine grove to right.

past the site on the east. Trail Creek, the most accessible route into Red Canyon, lies about one kilometer north of 42Da791. A large open meadow is adjacent to the site on the west. The meadow, historically altered for hay production, features relatively deep, rich soils and is incised by an ephemeral tributary to Allen Creek. To the west beyond the meadow an open, brush covered slope rises to higher elevation pine forest.

The site contains approximately 80 rock-ringed depressions in open Ponderosa pine forest. The rock rings were formed by clearing rocks (up to one meter across) from an area; the rocks were then piled or stacked around the edges of the cleared areas. The Allen Creek excavation resulted in exposure of six brush structures and a roasting pit. Unexcavated features included additional probable structures and two or three possible slab-lined basins or storage cists. The rock arrangements of cultural origin, most of which probably represent brush structures, are concentrated along the east, west, and especially the south edges

of the bench. Superstructures of branches or poles may have been covered with brush, branches, grasses or hides. There are structures both with prepared floors (Figure 4) and with internal features such as hearths or pits, but the two types of internal construction (floors and hearths or pits) are not closely correlated.



Figure 4. Structure 3 with floor constructed of rock slabs.

Site occupation dates between about AD 645 to 1420. Most of the structures and features appear to have experienced short duration use in the fall season, possibly as part of a logistic strategy. The six structures at Da791 all contained Cheno-ams. In three of the structures Cheno-ams were present in quantities that indicated processing for storage. A very limited amount of groundstone was recovered, which also suggests Cheno-ams were not gathered for consumption. Other macrobotanical remains suggest plants with medicinal or ceremonial uses were also collected. Most of the structures were shallow and

yielded sparse remains. However, two of the structures may have experienced longer-term (seasonal) occupation, or episodic re-occupation.

The Allen Creek site is located in the uplands between environmental zones. The site was generally a short-term camp for people accessing the higher elevations and probably headed for big game hunting, like the camp at Summit Springs. Construction of clay or slab-lined floors in several of the brush structures, which were occupied for such short stays, is a little perplexing (Figure 4). Perhaps the builders anticipated longer stays or frequent reuse. Maize was identified in some structures and was probably brought to the site as travel rations. Ceramic sherds from Allen Creek are locally produced Fremont ware, but lack the characteristic limestone temper of Uinta gray. The temper in the sherds is probably volcanic ash from the Browns Park formation that typically outcrops near the Green River.

Conclusion

The Summit Springs and Allen Creek sites are both located near travel routes on the edges of ecological zones where a variety of resources could be easily accessed. A collector or logistical strategy of gathering only one or two key resources, probably for storage, during a brief stay was employed at both sites. At Summit Springs medium sized mammals were processed and nearby Sheep Creek quartzite was reduced for transport. Cheno-ams were gathered at Allen Creek. Site occupants were tethered to lowland locations as evidenced by the presence of maize, ceramics and other artifacts.

Simms (1986) suggests that some Fremont groups “switched” from farming to foraging if drought conditions prevailed. A more accurate model for the Uintas is an annual fall foray into the uplands to gather a few abundant reliable resources that would buffer or augment cultigens produced in the lowlands. This is not unlike the annual bison hunts the horticultural Pawnee would make into western Nebraska to kill bison and collect toolstone (Loosle 1991). The annual pattern mixing collection of wild and domesticated resources was so successful that it allowed these Fremont groups to persist long after the demise of “the big city folks;” the Fremont in the larger, more agricultural dependent villages in the rest of Utah.

References

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