Ethnohistorical Data

There is essentially no historical documentation the Ute visited the South Unit. The absence of documentation necessitates that this ethnohistoric review must begin with the archaeological evidence that has been gathered from the area. Ashley personnel have documented six sites with diagnostic Ute artifacts (Desert side-notch arrow heads and Intermountain brownware pottery), Ute style rock art sites, culturally modified trees and brush drivelines. Once we identified sites that appeared to represent Ute activity, we attempted to understand what activities and purposes the sites may represent. Accomplishing this undertaking has turned into a formidable challenge and is still a work in progress. The Ute have long been reluctant to give information to anthropologists (Jorgensen 1964:xvi-xvii) and this continues today as our staff has been denied access to tribal members by the Tribal Business Committee. In spite of this obstacle, Ashley Heritage staff have been able to question some Ute elders and have examined the anthropological literature to gain some perspective. In addition, not all information garnered from Ute informants can be shared in this forum because of confidentiality concerns, especially concerning medicinal and ceremonial activities. Other authors attest to a dearth of historical archaeological research, especially in this region. "While the history of the region has been thoroughly documented in scores of professional and popular reports, the historical archaeology of the region has scarcely been addressed" (Spangler 1993a:450). Nickens (1988:3) also felt that historic Ute archaeology has endured a lack of "wide-ranging systematic attempts on the part of investigators to collect field data on Ute remains" and that the "root of our problem lies in the absence of synthetic or holistic approach to the various data". The same criticism can certainly be directed at archaeological investigations in the Uinta Basin, where important historic Ute sites remain largely unidentified, uninvestigated and undeveloped as educational or interpretive resources" (Spangler 2002:475-476).

Initially Utes probably went onto the Tavaputs to collect food and hunt. A literature review indicates a number of plants and animals the Ute may have utilized on the South Unit.

> In pre-reservation days before the government began allotting the Utes food and clothing, their diet consisted primarily of meat killed in the hunt. This was cooked on coals or broiled on a rack of sticks built over the fire. Some of the meat was jerked for future use. They were also fond of the cleansed, dressed and broiled entrails of animals. A limited amount of food to supplement the meat diet was obtained from fishing and gathering wild native plants, such as yucca fruit, camas, tobacco roots, grass seeds, pinyon nuts, wild potatoes, serviceberries, and chokecherries. Chokecherries, serviceberries, and seeds were dried and then ground on metates or pounded in mortars. Pinyon nuts were parched in hot ashes after which the shells were removed and the nuts pounded on a stone (Rockwell 1998:44).

Jorgensen (1964:14) emphasizes the foundation of pre-reservation Ute culture was big game hunting. He argues this lifestyle was even dominant before the arrival of the horse. Today the South Unit is known for the quality and quantity of big game and hunting is the predominate activity in the area.

Fowler (2000) lists a number of foods that were eaten by the Ute, several of which were available in the area. Pinyon nuts were an important crop and would have been plentiful on the South Unit. The only evidence for Fremont consumption of pine nuts in northeastern Utah comes from sites on the South Unit. However, to date, none of the

sticks, basketry or other cultural items associated with nut harvesting have been found. Small seeds from grasses, sunflowers, amaranth, Indian rice grass, greasewood and globe mallow would have been available in the area and the pottery and groundstone that date to the Numic period may represent collection and processing of this resource. Berries of chokecherries, elderberries, buffalo berries, service berries, currants and strawberries were also gathered. The scarcity of perennial water on the South Unit limits the availability of berries. There were much better locations for berry collecting within the Uinta Basin, although a few locations at upper elevations or near permanent water could have harbored small quantities of berry bushes. Roots were also collected by the Ute, but the location of roots that were collected such as Yampa (wild carrots), and Spring Beauty (Indian potatoes) that have been identified are in the eastern Uintas and Strawberry Valley. Lang (1953:8) mentions the Ute collecting sego lily roots and he called these Indian potatoes. It is not clear that these geophytes were ever abundant on the South Unit. Other plants utilized by Utah Utes that were not mentioned by other authors include tule seeds, cactus stems, blossoms and fruit (including a variety of other non-food uses) and the roots of rabbit brush (Stewart 1942:251)

Prickly pear cactus, insects and other items may have also been gathered, but on a much smaller scale than the plants mentioned previously. Clifford Duncan (personal, communication, 1999) explained the way to treat someone with a spider bite or insect bite, especially a serious one from a poisonous spider. The doctor would throw some cactus in a fire and burn the spines off. Once the spines were gone, the pads were taken out of the fire and split in half. The doctor wanted the hot gel that was inside the pad. They would split the pad and put it on the bite, and then wrap it to keep it from falling off. The cactus pad would suck out the poison. This is the only thing he knew why Ute would use prickly pear on humans. It could also be used on animals, for instance if a horse's hoof swelled up you could use the cactus pad to control swelling. Utah Utes (Pahvant, Tompanowots) more commonly reported eating insects like ants, cicadas, crickets and grasshoppers (Stewart 1942:245).

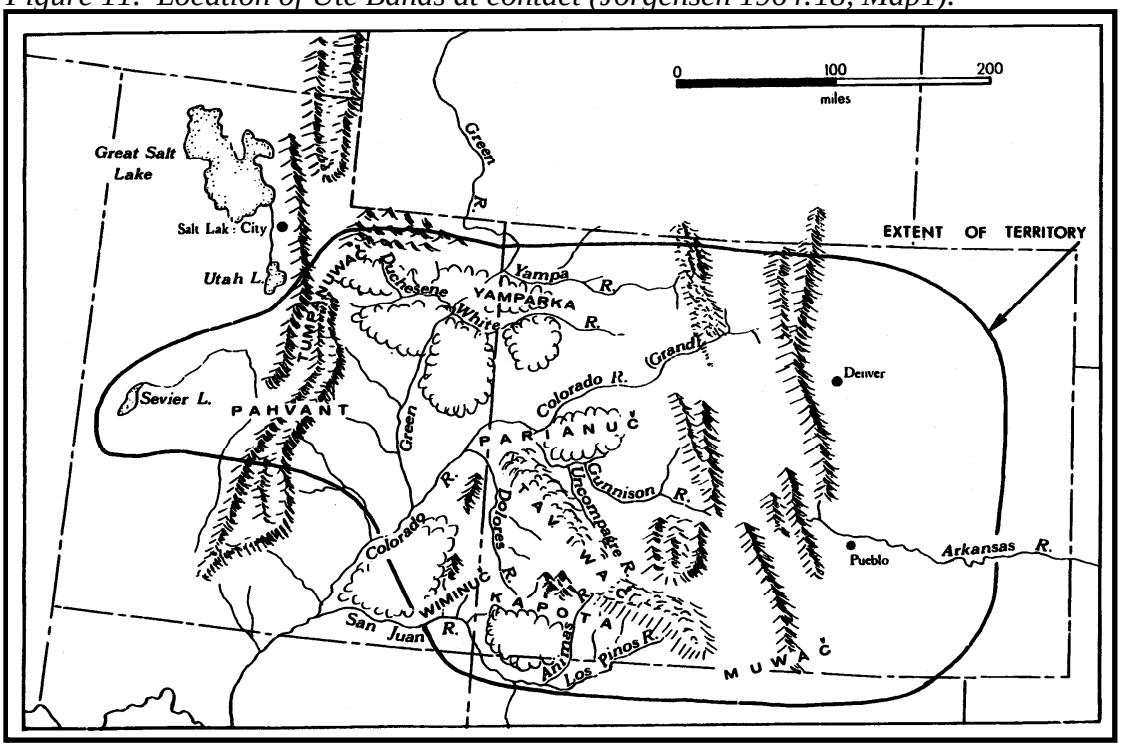
Strawberry Valley

Although the Strawberry Valley is not on the South Unit, it is adjacent to the Tavaputs and was an important center for the Ute. The area was a hunting ground and summer use area for the Timpanogas (Tumpanuwac) band (Figure 11). Historic maps show two Ute horse race tracks in area (Charmaine Thompson, personal communication, 1998). Betting, games and other socializing usually happened in association with horse racing. On September 2, 1998 Forest Service personnel traveled to Strawberry Valley with Sherel Goodrich (Forest Ecologist) and Clifford Duncan (Ute elder) to identify several plants that would have been a reason to visit the area. The following are some of the plants identified in the Strawberry Valley.

Claytonia lanceolata (Spring Beauty, Indian potato) is abundant in Strawberry and the Ute would have come to collect it as the snow melted.

Clifford mentioned they would gather wild onions. Sherel indicated there are several species and wondered which varieties would have been gathered. Clifford suspected there might be at least two kinds. Based on Clifford’s description of the location and timing of gathering Sherel suspected these species that were gathered might be:

Figure 11. Location of Ute Bands at contact (Jorgensen 1964:18, Map1).



Allium acuminatum (taper tip onion) occurs in sagebrush, mountain brush, and aspen dominated zones between 2195-2500 meters (7200-8200 feet) elevation.

Allium. brevistylum (Shortstyle onion) occurs in riparian, aspen, and coniferous communities at 2300-3355 meters (7550-11,000 feet). Both of these onions may have been collected in the Uintas.

Perideridia gairdneri (Yampa, wild carrot) is a tuber that was eaten. It gives the name to Clifford's band, Yampatika or yampa eaters (White River band). Sherel says it only occurs in Strawberry in the Uinta Basin and we noted limited quantities. Sherel felt the small amount was perhaps a result of the time of year we visited the valley, that is, the plants were not as visible in the late summer.

Osmorhiza occidentalis (Sweetanise, Western sweet cicely) Ute would grind up the seed and add to tobacco for flavoring. Clifford found several large bushes of this near a road in upper reaches of the valley.

Ligusticum porteri or *L. filicium* (Bear root) was also called snake medicine. Individuals would use it for a sore throat. It has a numbing effect. Doctors could also make a tea for stomach aliments. Either variety would work, but *L. filicinum* is restricted to Strawberry. We found abundant patches near the divide.

Camassia quamash (Camas) is an important food for many Native Americans. Strawberry is the only place it grows in the Uinta Basin according to Sherel. It does not occur everywhere in the valley, but we noted some substantial patches. It can only be found in the spring. There is a small area of camas on the north slope of the Uintas. *Zigadenus* spp. (Deathcamas) is found throughout the Uinta Basin. Sherel said there are three species of Deathcamas that occur from desert to alpine areas.

Salix exigua (Sand Bar willow) was collected in June or July. They use the tall straight ones for baskets and cradleboards.

Madia glomerata (Tar weed) Clifford had heard it was given to treat diabetes.

Grindellia squarrosa (Gum weed) was used to treat asthma.

Agastache urticifolia (Horse mint, Indian perfume) Ute put this in containers which contains clothes, leggings etc. The scent from the plant permeates the clothes and are not really Indian clothes until they have that smell. Sherel said this variety does not grow much in the Uintas.

Elderberry was collected back in the 1930s to make a wine. Sweetener, like pine sap, is added to make it drinkable. This bush is common in Strawberry and the South Unit.

In 2001 and 2002 Cristina Bailey of the Ashley Heritage Crew worked with Ute elders to identify traditional plant use. Cris gathered numerous plants and identified their uses from willing informants. In the winter of 2007 Sherel Goodrich, forest ecologist, examined Cris's data and identified the plants that would have occurred on the South Unit.

Achillea millefolium (Yarrow, Squirrel's tail) The leaves of yarrow can be pounded and used as poultices for many skin conditions. Cris was stung by a bee on a trip to Paradise Park and the sting location became red and swollen. One of the elders cut some yarrow and rubbed it on Cris's arm. Within fifteen minutes the skin rash was gone.

Alliums spp. (wild onion and garlic) Cris gathered an example of *Allium brevistylum* in her study, but that variety does not grow on the South Unit. Sherel pointed out that other varieties of wild onion occur in the area.

Antennaria microphylla (Pussy toes) When the leaves turn brown the fruit can be collected and mixed with lavender and/or mints to produce a soothing, relaxing smoke. This plant is common.

Artemisia spp. (Sagebrush) A number of species occur on the South Unit and sagebrush had a variety of medicinal and ceremonial uses. Tea from the leaves was used to treat colds, congestion, and headaches. Soften leaves could be used as poultices. Sagebrush smoke was used for purification before prayers.

Asclepias speciosa (Milk weed) The flowers can be boiled and eaten. This plant is quite common on the South Unit. In the Uinta Mountains several pieces of cordage made from Milk weed have been recovered from prehistoric contexts.

Linum lewisii (Blue flax) Buds could be eaten. Flax seed left to soak overnight can be taken before breakfast as a mild laxative. This plant is common on the South Unit.

Cleome serulata (Cabbage plant, bee plant, spider plant) Leaves were boiled for three to four hours to make a dye. A nail should be placed inside the water to take the smell away. One Ute name for the plant translates as stinky armpit, because it smells so bad. This plant is not very common on the South Unit.

Elymus cinereus (Basin Wild rye) Cris gathered a variety of wheat grass that is an introduced species, *Elymus hispidus* (wild rye). The Ute may have gathered this variety once it became common in the area during the historic period. We have also found abundant evidence of Basin Wild Rye in archaeological contexts and this grass is very common in the canyon bottoms of the South Unit. It is possible the Ute also gathered Basin Wild Rye, a native species.

Ephedra spp. (Mormon tea) The leaves were boiled to make a tea that was once used to treat venereal diseases. It is now used for diarrhea and stomach problems. This plant is abundant on the South Unit.

Gilia agregata (Scarlet gilia) Roots and leaves can be boiled to make a tea that was used as a laxative. The flowers have a sweet taste that children sometimes eat. It could also be used like yarrow to treat wounds, cuts and sores. This plant is common in the area.

Ligusticum porteri (Bear root) It could be mixed with tobacco for smoking or chewed for sore throats. This plant is not very common on South Unit.

Lupinus argenteus (Lupine) This could be used as a dye. It poisons cows according to some. Lupine is very common on the South Unit.

Mahonia repens (Oregon grape) When the leaves turn red they can be gathered, dried and added to a tobacco mix. This plant is abundant in the area.

Mentha arvensis (mint) Mint was used to treat stomach aches and could be mixed with other smoke herbs and roots. Mint is very common in the area.

Nasturium (Watercress) This plant was introduced from Eurasia, but it is common throughout the region now. It is eaten raw and sometimes mixed with commercially bought salad vegetables. It tastes good, provides important nutrients and helps prevent blood diseases.

Rosaseae (Rose hips) The fruit was boiled until soft and added to meat for flavor. The fruits can be dried and stored. Today the fruits are gathered around October and boiled for a tea. Rose hips are common on the South Unit.

Rhus aromatica (Aromatic Sumac, Skunk bush) The berries were gathered to make jams. These are abundant in the area.

Shepherdia argentea (Buffalo berries) The berries were eaten and could be added to meat to make pemmican. Bushes may occur in some of the lower elevations of the South Unit.

Stipa hymenoides (Indian rice grass) Seeds were pounded and might be mixed with other seeds to make flour. This plant is common on the South Unit.

Typhaceae (Cattail) All parts of the plant are useful. The young shoots can be eaten raw. The flowers and seeds can be pounded and mixed with other grains to make bread. In earlier periods the flowers were used as padding in cradleboards. Cattails are common in the canyon bottoms of the South Unit.

Yucca spp. (Yucca) Fiber from the leaves was used to weave baskets and other utilitarian objects. The sudsy root was used as a shampoo and to heal the skin on the scalp. Yucca is locally abundant on the South Unit.

While visiting the area, the Ute may have left other evidence of their passing. There are a few Ute rock art panels on the South Unit depicting horses or individuals riding horses. These figures are so scarce that it is impossible to draw any conclusions about typical position, location, style, setting, or execution. Primarily these panels show the Ute were in the area during the historic period. A Ute style rock art horse near the corral at 42Dc1609 may imply the purpose and group responsible for construction of the feature. Although hunting and gathering may have been common activities on the South Unit, the two dominate archaeological site types we have documented are culturally modified trees and brush drivelines and corrals. Many cultural resource specialists are not familiar with these two features. For instance, a recently developed oil pad on Indian land destroyed a portion of a brush drive-line. Although this area may have been cleared by an archaeological consultant, they apparently did not recognize the cultural features. Hence it is important to describe and identify these features for others working in the area.

Pine Trees

Ponderosa pine has a restricted distribution across the Tavaputs and only occurs in a few patchy locations. Yet, a number of culturally modified Ponderosa pine trees (CMTs) have been documented in Sowers and Timber Canyons. There are a few accounts of pine bark eating in the literature. "Small strips of the inner bark of the pine were tied into bundles and later eaten with salt" (Smith 1974:65). Warren A. Ferris (1983:345) offered account of Indians in central Utah, "From the mountains, they bring the nuts which are found in the cores of the pine, acorns from the dwarf oaks, as well as the different kinds of berries, and the inner bark of the pine, which has a sweet acid taste, not unlike lemon syrup." Not just pine, but "sap from quaking aspen trees was considered a great delicacy by all Utes. It was usually collected in June" (Smith 1974:66).

> Leo Thorne, a Vernal photographer and collector, asked members of the Ute tribe about the peeled trees. He was told they were peeled to get the inner bark and pine gum for healing purposes. His family generally referred to the trees as "medicine trees" as a result and the term is still used in Vernal. Clifford Duncan, a Ute elder, said in some areas a medicine man would place the person against the scarred portion of a tree as part of a healing or exorcism ritual.
>
> Bertha Cuch, another Ute elder, remembers her grandmother peeled trees and rolled the inner bark into balls that she gave the children as treats. This is similar to an account from a woman who remembers her grandmother collecting the sap to use as a sweetener. Ute elder, Jonas Grant feels the sap was used to waterproof moccasins. The sap may have also been used as a glue to help repair moccasin soles, as a waterproof basket lining (although I think pinyon was the preferred "pine" for this use), and in healing. Recently Clifford Duncan told me in this rocky, mountainous area unprotected horse hooves could easily be injured. When a person was going to a steep rocky spot they would take a piece of raw hide and glue it to the bottom of the horse's hoof with pine sap. Then they would wrap the edges of the rawhide piece up around the horse's foot and tie it off with a strip of rawhide. These soft horseshoes would help protect the horse in rocky terrain (DeVed and Loosle 2001).

Ponderosa pine sap was collected in vats attached to the trees with rawhide. They especially wanted the light foamy part. The foamy part was scraped off with knives. This was done in May or June as the sap began to rise. They would add to foods as sweetener (Clifford Duncan, personal communication, 1998), such as elderberry wine. Another informant said they used the inner bark as chewing gum.

Ashley crews have only noted cultural scars on Ponderosa trees (Loosle 2003). The scars on CMTs are usually rectangular shaped and start a foot or two off the ground and extended for about four feet (Figure 13). Cat faces, another common scar, are caused by fires (Figure 12). They are usually triangular shaped, start at ground level, and usually fire blackened. Cat faces are caused by burning material resting against the tree for an extended period of time and are usually on the uphill side of the tree. Martorano (1989) cored 40 culturally peeled trees from three different areas of Colorado and found the majority of trees were peeled between 1815 and 1875. In contrast to the Colorado examples, scarring on Ashley trees before 1900 is rare. This pattern roughly coincides with the removal of Colorado Utes to the Ouray Reservation in the Uinta Basin. We suspect the best explanation for this dating pattern is the Ute in southern Colorado commonly stripped the bark from ponderosa trees. When they were forced from

Colorado in 1882 the practiced ceased there, but began on trees near the reservation in Utah (DeVed and Loosle 2001). Martorano's idea that Ponderosa was a starvation food does not seem valid in Utah. We would expect many more trees with large haphazard scars if the peeling was done for survival. Instead the peeling seems more consistent with occasional use as a sealant, glue, medicine, or sweetener as local Ute informants have asserted. Martorano (1989) also noted a tremendous number of scarred trees. Until recently, many of our CMTs were isolated and clusters of three to six trees where the maximum density. During a recent prescribed burn survey in the Yellowstone drainage of the Uinta Mountains, dozens of scarred trees were noted. In 2006 Heritage crews documented 16 CMTs in Sowers Canyon. At Birch Spring, (42Dc2279) we found the first evidence of a camp site associated with CMTs. DeVed (1998) obtained dates between 1931 and 1961 for the tree scarring at this site. The surface trash noted corresponds with this dating (e.g. 1955 trademark on bottle). It would be insightful to investigate this site more rigorously.

Figure 12. Fire scarred tree, cat face.

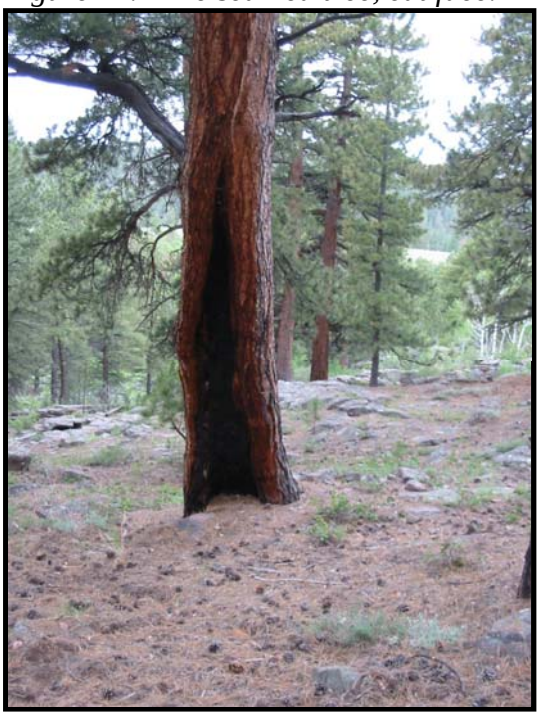


Figure 13. Culturally Modified Tree

The Ute also used pinyon pine pitch for a variety of things. Most commonly it was as a liner for water baskets. The pitch for baskets, which comes from pinyon trees, was gathered in the spring. The person would heat up the pitch, then throw it in a basket. They would then put a rock in the basket and roll the rock around. The rock pushes the pitch around and helps seal crevices (Clifford Duncan, personal communication, 1998). Some Ute informants do not make a clear distinction between pinyon and Ponderosa pine, they just reference pine. Stewart (1942:252) noted that all Ute bands reported chewing pinyon pine pitch as gum. Scars are very common near the base of pinyon trees, but these are usually attributed to porcupines and other animals. Although a few pinyon trees could be old enough to have 100 to 200 year old scars, we do not know what the culturally created scars would look like, or where on the tree they would be located.

Horse Corrals

Sites or features associated with the management of livestock are common on the South Unit with three site types the most obvious; camps, corrals, and drivelines. Camps have an abundance of tin cans, glass, wire, utensils, coffee pots, and other items that typically date to the early twentieth century. The majority of camps are in canyon bottoms and probably result from Anglo cattle ranching after 1905. Brush corrals and drivelines, however, tend to be on ridge tops and generally have few associated artifacts. We believe most of the brush corrals and drivelines are related to Ute horse management. The horse was a critical part of Ute society in Utah by the 1800s and more about the Ute horse culture will be discussed later.

Corral Sites

Six driveline sites have been recorded by Ashley Heritage crews, four on Forest land (42Dc236, 1208, 1606, 1609) and two on Ute tribal lands. Four of the sites appear to have been reused with later or reconstructed corrals and drive-lines. This has created a sometimes bewildering array of features. Extensive firewood collecting at these sites has further complicated the decipherment of the arrangement and organization of the features. 42Dc1609 (Figure 16) is the simplest and most straight-forward of the corral complexes because it contains a single pair of drive-lines and corral. This site layout may help understand the organization of the other sites. The two wing walls were made primarily of juniper branches and limbs that had been metal ax cut. Often entire small trees or large uncut branches were integrated into the walls. The walls were placed between living trees and incorporated the living branches into the matrix of the wall (Figure 14). There did not seem to be any pattern to the arrangement of the branches. Sometimes the limbs were all laid diagonally in the same direction between trees and in other spots they formed more of an X pattern (Figure 15). It appears that the walls were originally three to four feet in height.

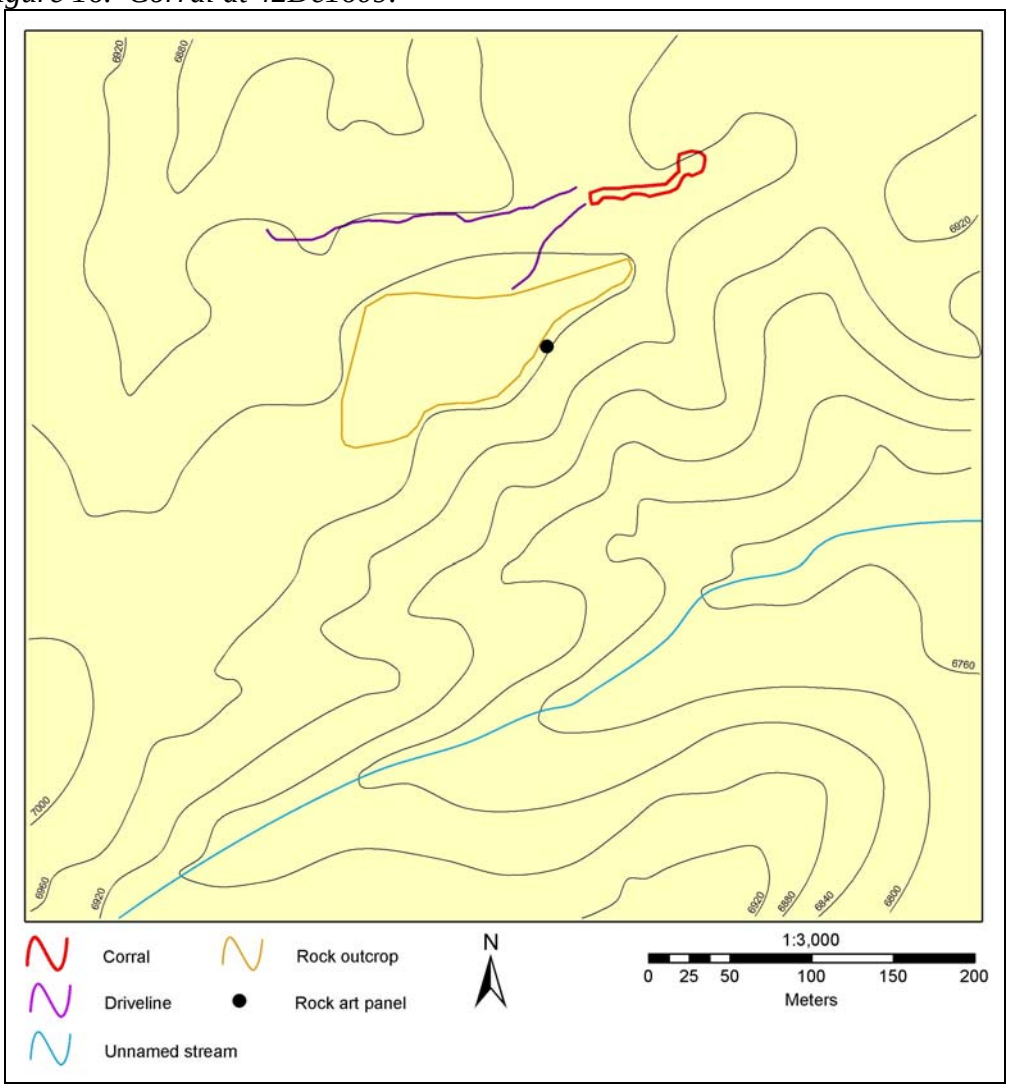
Figure 14. Branches laid against a tree.

Figure 15. Branches forming an X.

The corral and driveline are in gray at the north end of Figure 16. The north driveline wall extends for approximately 275 meters (900 feet). It starts in a sagebrush opening, but after a few meters enters the pinyon-juniper woodland. The driveline generally trends uphill and ends in a saddle between two knolls. The southern wing wall is constructed in a manner identical to the other wall. It begins at the base of a short cliff and trends to the northeast for about 135 meters (440 feet). The wing-walls are quite close together for the last 60 meters (200 feet). After the horses were driven into the corral, a portion of the northern wing wall was taken down and moved to close off the narrow portion of the wing walls to contain the horses in the corral. The

narrow portion of the driveline is about three meters across. The corral is a circular shaped area 16 x 15 meters (52 x 49 feet) in size. The walls are much higher and more substantial than the drivelines. Some of the corral walls were still nearly two meters (6 ½ feet) in height when the site was recorded. The corral is at the high point of the complex, although there are higher points around the driveline and corrals, like knolls on either side. The horses probably naturally ran between the knolls and this is why the corral was constructed there.

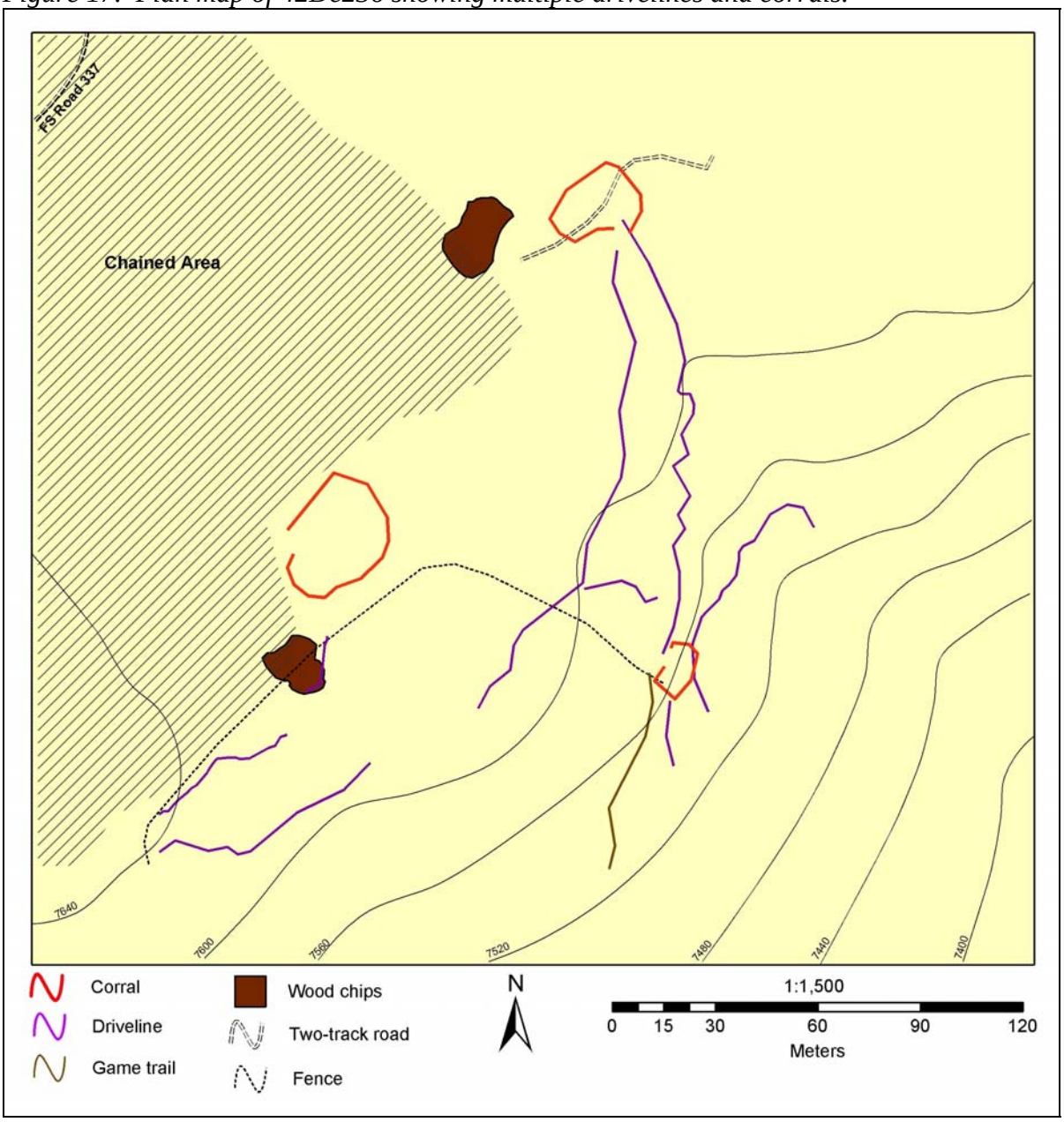
Figure 16. Corral at 42Dc1609.



42Dc236 and 42Dc1606 have a much more confusing array of drivelines and corrals. 42Dc236 has been impacted by a modern fence, firewood cutting and reuse. There are two, maybe three corrals evident, several drivelines, with wire along one driveline. Three central drivelines and the Lower corral are in outstanding condition (Figure 17). Other drivelines and one corral are in poor condition and another corral is mostly guesswork. The best preserved (Lower) corral and drivelines are on the slope of the ridge (Figure 18). The Upper corral on the ridge top is not only in poor condition, but has evidence of multiple occupations including: a prehistoric occupation, a historic tin can scatter that does not appear to correspond with the corral

construction, a limbing episode probably for fence poles (may correspond to the tin can scatter), a 1970's chaining episode which may have destroyed part of the site, and recent firewood cutting.

Figure 17. Plan map of 42Dc236 showing multiple drivelines and corrals.



42Dc1606 (Figure 19) is the largest complex of drivelines found on the forest. No formal corrals like the ones encountered at 42Dc1609 and 42Dc236 have been identified at this site. Firewood collectors apparently removed one corral that would have been in the west center of the site. It appears that two long wing walls originally led to this extinct corral. The north wall is over 600 meters (~1950 feet) in length and the south wall nearly 800 meters (2625 feet). The walls are not continuous in all sections and firewood collecting

Figure 18. Well preserved Lower Corral at 42Dc236.

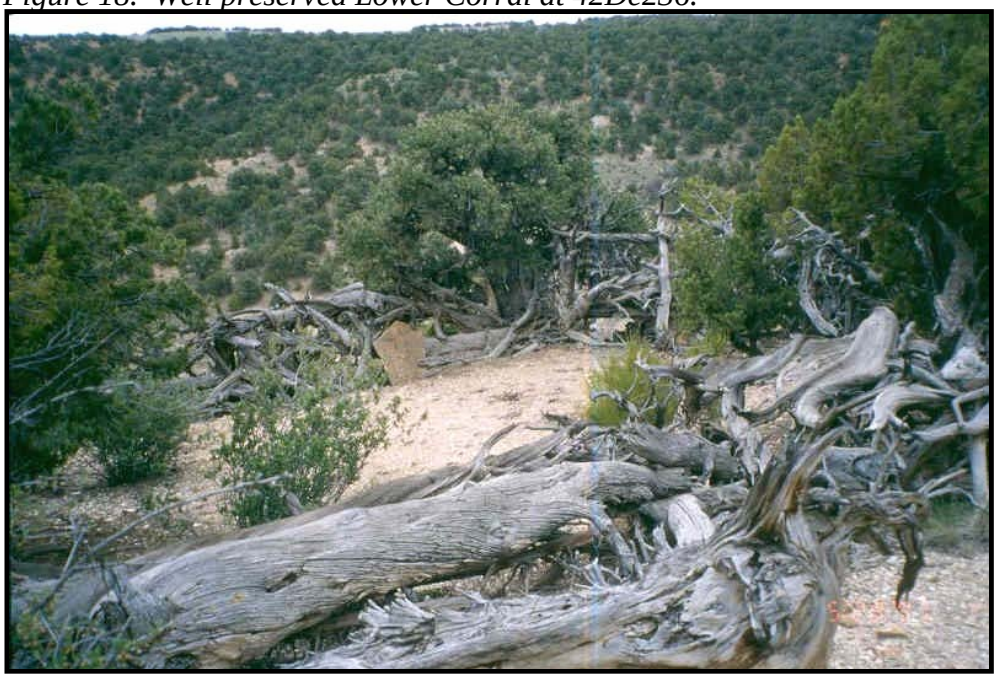
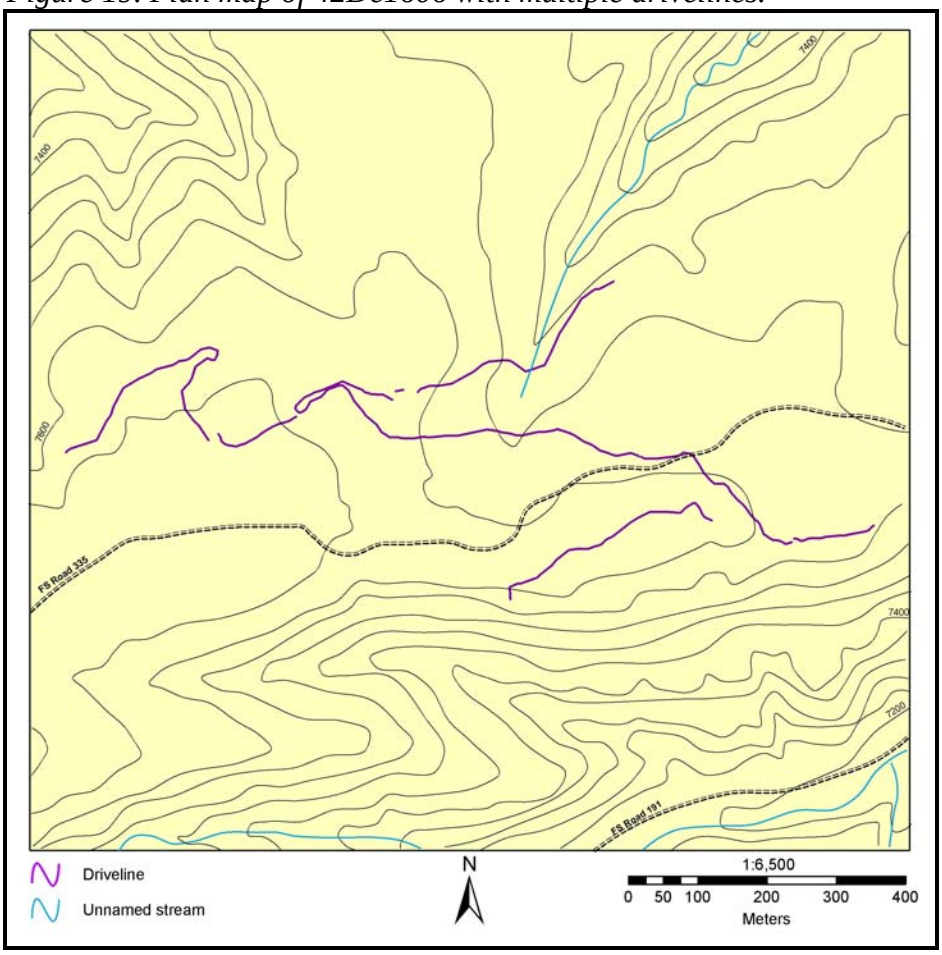


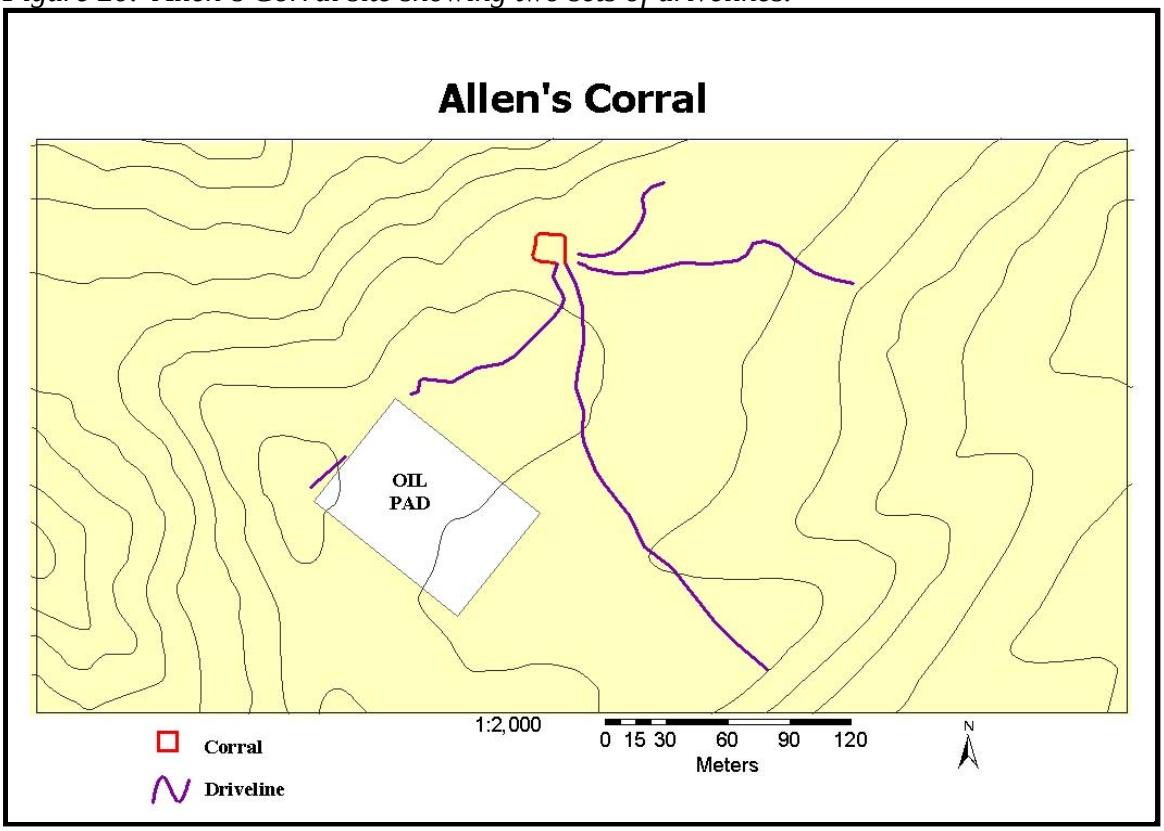
Figure 19. Plan map of 42Dc1606 with multiple drivelines.



and roads have damaged sections of the walls. Perhaps the southern wall started near the steep slope of the ridge edge and directed the horses towards the center of the ridge. The route of this driveline goes down hill for the first part and then upwards the second half. Several other sections of wing walls on site do not appear to tie into any coherent pattern and may represent earlier systems that were damaged or altered by later activity on the site.

The myriad of brush walls at these sites begs the question, why would drivelines be reconstructed or moved over and over again when serviceable barriers still existed? Anglo informants told our crew that horses will only follow a driveline into a trap once. The old herd lead mare would not get caught the same way twice (John Barton, personal communication, 2006). For corrals to be used more than once, the driveline configurations had to be changed with each use. This probably explains why 42Dc236 and 42Dc1606 have multiple drivelines. This practice can clearly be seen at the Allen Corral site on tribal lands (Figure 20). The first drivelines at the site were oriented to the

Figure 20. Allen's Corral site showing two sets of drivelines.



east. These lines were tied to the edges of the ridge top. Later, sections of the drivelines that connected to the corral were removed and two new drivelines were built into the corral leading from the west. These drivelines still lead into the corral. These two later drivelines also tie off to the edges of the ridge top. Although the Upper corral and perhaps the Lower corral at 42Dc236 seem to have had their mouth obscured by large pinyon trees, this clearly appears to have been the case at the Allen Corral. At this site limbs from large pinyon trees completely hide the corral entrance when viewed from

inside the driveline. I believe this was intentionally done to veil the corral entrance from the entrapped horses.

When first documented we assumed the corrals were for mustang gathering. Additional research seems to confirm this initial hypothesis. As outlined in the subsequent section, Ute informants have identified these features as horse corrals. Arkush (1995) has studied numerous game and mustang drive-lines and corrals in the Great Basin. He (Arkush 1995:13) distinguishes between pronghorn and mustang features. "Without exception, mustang traps are much more substantial than pronghorn traps. The drift fences of mustang traps are usually still standing and are at least four feet tall; the corrals are relatively small (often encompassing less than a quarter acre), and typically are constructed of long, thick wooden beams." On the other hand, pronghorn corrals are very large; 10 to 50 acres in size. Drive-lines often begin sporadically of light material (i.e. stacked sagebrush) and only become more substantial as they draw near the corral. Frison (1991:242-244) notes similarly large antelope trap complexes on the High Plains. In contrast, mountain sheep traps in the Rocky Mountains and High Plains have a downward sloping ramp into a small corral, allowing only a single animal at a time. The corral is tall and inward slanting to prevent the sheep from climbing out (Frison 1991: 249-253, James Keyser, personal communication, 2006). The size of the corrals and height of the walls on the South Unit best match the descriptions of mustang traps documented in other areas.

Ethnic Affiliation of the Corrals

Anglo cowboy informants and local historians completely discounted the theory that Ute constructed these drivelines and corrals. Artifact concentrations are not particularly helpful in resolving this issue as few of the driveline sites have diagnostic material, while other sites have multiple occupations. A piece of Intermountain Brownware and some historic cans were found at 42Dc1208, while historic cans were found at 42Dc236. The historic cans at 42Dc1208 are on the ridge top and do not appear to be associated with the site's corrals and drivelines because the artifacts are a considerable distance from these features. The early twentieth century cans at 42Dc236 are probably associated with a later pole gathering and limbing episode at the site since they appear to be adjacent to the limbing area, but inside the Upper corral area. Camping inside the corral during its use does not make any sense, while the flat corral area would be an ideal camping locale at other times, like it is today. We argue the corrals are clearly Ute construction for primarily two reasons. First, this type of brush construction was typical for the Ute of this period. Second, this type of construction was atypical for Anglo cattlemen.

Cowboy informants are adamant that the lazy, shiftless, Indians could never have built these labor intensive features. The magnitude of the construction was beyond anything an Indian would attempt. Local historians have bought into this view and argue that these corrals and drivelines were built by Anglos. We feel these corrals were built between 1870 and 1905 by the Ute continuing a centuries old tradition of using brush drivelines and corrals for a variety of purposes. Beyond the illogical bias of the notion that the Ute were not capable of building these drivelines is the simple fact that Anglo informants seldom mention building brush fences themselves, and never of this

magnitude. Yet, there is abundant evidence the Ute built drivelines and corrals in this manner.

In the summer of 2005, Ashley Heritage crew members Cristiana Bailey and Gilbert Burkman were taken to a brush driveline complex on tribal land north of Roosevelt. Constructed by the Ute informant's grandfather, this complex is very similar to the one at 42Dc1609 described earlier.

Ute elder, Clifford Duncan, accompanied the senior author to 42Dc236 in 1998. The figure below is an attempt to draw a wild horse trap as described to Mr. Duncan by his father. Mr. Duncan said the horses were semi-wild and roamed unrestricted. From time to time the owners would need a new saddle horse or wanted to sell or give a horse away so they would need to gather their livestock together to select the appropriate ones. His father would build the trap in a forested area along a trail used by the horses. The wings would start wide and then narrow until they got to the corral. The opening would be small and designed so the horses would not see it and not know they had entered a corral as they circled around the enclosure.

The average size corral was about 15 meters (50 feet) in size. Clifford's father would place poles between trees to form the frame of the corral. He would then place willows up right to form the fence. They would be about six to eight feet high. The wings were made of stacked wood, branches and other things. Mr. Duncan felt the corrals and wings we showed him (42Dc236) were unmistakably a wild horse trap like the one his father described to him. The main wing walls are clearly along a current trail. The trail

Figure 21. Clifford Duncan's drawing of a Ute horse trap.

```
                X  X
              X       X
             X           X
            X             X
            X             X
              X           X                    X - corral and wing walls
                X X X   |  X                    |  - trail
                      X |  X
                     X  |  X
                   X    |  X
                 X      |  X
               X        |  X
             X          |  X
            X           |  X
          X             |  X
        X               |  X
       X                |  X
      X                 |  X
     X                  |  X
    X                   |  X
   X                    |  X
  X                     |  X
X                       X
```

almost looks like a formally constructed trail as it comes out of the canyon. The wing walls narrow into the Upper corral. However, this arrangement dumps the horses into the middle of the corral, it does not create the circular motion that supposedly confuses the

horses. It looks a lot like Figure 21 above, except for the entrance to the corral. Perhaps at 42Dc236 the horseman used the natural terrain, horses were run off the top of the ridge into the Lower corral on the side of the canyon. Horses did not want to jump down the steep slopes and cliffs and instead ran into the wing wall and corral. Mr. Duncan thought the walls of the intact Lower corral (1 ½ - 2 meters, 5 to 6 feet) were kind of short to contain horses.

"A Ute elder related that in the early days the Utes kept their horses in corrals made out of tree branches, brushwood and twig that where easily available within walking distance. She mentioned that those living by Myton and Ouray used to build their corrals in that fashion. The more prosperous families would trade work or produce for timber to build more sturdy corrals" (Bailey 2005).

Brush drivelines were not just used by the Ute for horse roundups. "In late fall when antelope were fat, a stout corral was built below a low cliff, possibly ten feet high, and the edge of the cliff was disguised with green brush. Long converging wings were constructed of piles of brush at intervals, with people standing along the lines of the V, between the brush piles. When an antelope herd was located, hunters would drive it to the area enclosed by the wings and over the cliff. Sometimes as many as 200 antelope were driven over the cliff into the corral, where they were killed by arrows, spears or clubs" (Smith 1974:55). Arkush (1995) has identified a number of late prehistoric antelope drivelines in the Great Basin made by ancestors of the Piute and Ute. In the mid nineteenth century Brigham Young sent a survey party into the Uinta Basin. In February 1852, George Washington Bean (1945), who was a member of this party, noted "we discovered some Indians in a small valley on the other side. We went down to their Camp & found it to be Tabby and Grospene busy building pens for to snare Antelope."

The Ute also used corrals to hunt other animals besides antelope. "For example, deer were often chased into the converging arms of a sage brush enclosure" (Jorgensen 1964:11). Utah Utes also hunted rabbits with corrals, "a low brush corral was built into which rabbits were driven and then killed with sticks" (Smith 1974:56). Only Colorado Utes told Stewart (1942:240-241) they used V-wings and enclosures to hunt deer and elk, while reports for the use of V-wings and enclosures for antelope hunting was more wide spread among the Ute.

Initially the corral at 42Dc1208 on Gilsonite Ridge appeared to be an example of an antelope enclosure. At the site a corral of juniper limbs and branches was constructed below a sandstone cliff that is approximately four meters in height. Branches were stacked between boulders and trees to create an oval shaped area approximately 25 by 100 meters (~325 by 80 feet) in size. Additional field work in 2006 found one poorly preserved driveline across the ridge top down to the corral, additional sections of a better preserved driveline and perhaps a corral section on the north side of the ridge. Instead of guiding animals over the cliff, the main driveline appears to have brought them around the edge of the rock outcrop into the corral. This driveline and corral pattern is similar to the practice Duncan described earlier for wild horse drives. The poor state of driveline preservation and recovery of Intermountain Brownware from a rock overhang near the mouth of the corral suggest this may be the oldest driveline recorded to date. Spangler (2002:459) argues that the Ute made pottery when they were pushed onto the reservation, but had ceased to construct it by 1870. This may place the construction of the primary driveline at 42Dc1208 before 1870.

Corrals at early Anglo homesteads and ranches were constructed very differently from the loose branch construction of the South Unit drivelines. In addition, Anglo informants mention other fence construction methods. Anglo constructed corrals tend to be more formal and substantial with multiple poles anchored in the ground and connecting poles that are either horizontal or vertical (Figure 22). Preston Nutter and

Figure 22. Corral at Allen homestead patented in 1919, located in Sowers Canyon, 42Dc2276.

other cattlemen commonly used "wire net" fencing for holding corrals, even transporting the material a considerable distance (over 15 miles) (Barton 1972:31, 33). Barbed wire fences with juniper poles were also common. William Barton (1972:25, 31), a local homesteader and cattleman, only mentions building short "brush fences" to keep cattle from leaving switchback trails and to block areas escape routes while cows were encouraged to leave snowbound pockets. These short brush barriers have commonly been used by Anglos. In the 1960s Anglo cowboys would identify an area where they could round up horses and then use dead trees and brush to augment natural features to guide the animals (Clayton Johnson, personal communication, 2007). In northeastern Utah where sedimentary deposits have created numerous deep canyons with countless short ledges, short sections of poles and brush closing off gaps in the ledges to block livestock are ubiquitous. Ashley heritage crews have documented these throughout the Red Canyon area, especially near Swett Ranch and the nearby homesteads. They are also common on the South Unit. These brush and log constructions only augment natural ledges and cliffs and rarely exceed ten meters (35 feet) in length.

Arkush (1995:13) notes, "mustang traps typically are composed of axe cut timbers secured with wire, nails, and even cables. Although the posts of some early historic pronghorn traps may have been felled by axes, they do not contain anywhere near the amount of mass-produced hardware typically exhibited by mustang traps." One significant difference between the corrals and drivelines that Ashley crews have noted and the Anglo corrals is the absence of posts and poles. Arkush (1995:14) found, "these traps share numerous features with Trap 3 at CA-Mno-2122, as the drive wings consist of live trees, brush, rocks, and log fences, and the corrals consist of pinyon and juniper posts reinforced with smooth wire and wire nails." Even Arkush's (1999) prehistoric pronghorn trap complexes made frequent use of juniper posts. The South Unit corrals are exclusively branches, trees, and rock. We have yet to note any posts and only a handful of very crude poles (i.e. gate on Lower corral at 42Dc236).

There was another type of fence commonly encountered on the South Unit. One Anglo informant said they would tie strips of cloth to a wire that had been strung through the woods. The fluttering cloth would scare the horses away from the wire. This technique is still practiced as fields in Maeser, outside Vernal, have cloth strips on the wire. Bundles of wire are common at camp sites on the South Unit and validate the informant's comments. We have also noticed lines of wire still in the trees, most notably several yards of wire a couple hundred meters (650 feet) south of 42Dc1609. This wire may correspond to a nearby incised name, "Bill Hadden 2/15/41." The wire on the driveline at 42Dc236 may indicate reuse of the site by later Anglo cattlemen. Wire offers a significant advantage over brush drivelines. Because drivelines could only be used once before horses became familiar with their direction and purpose, wire allowed the rancher to easily move and rebuild lines. Wire would have been a significant improvement over the labor intensive brush drivelines.

The Importance of the Horse

There was also a significant difference between the Ute and Anglo views of these semi-wild Indian ponies.

> Perhaps the most important single possession of the Ute was his horse. The Utes had been for a long time the intermediaries between the Spaniards to the south and many of the Plains Indians to the north and east in the distribution and spread of the horse. As a result they were raided often by their northern and eastern neighbors while the Utes, in turn, raided the Spanish settlements to the south. In 1824, Ashley while traveling through the Uintah Basin, commented on the good quality of the Ute horses; he also commented on the great number of horses per Indian, but here again we must make a distinction between east and west. The central Utes seemed to have the greatest number of horses as reported by Ashley. In both the extreme eastern and western sections the number seems to have been much smaller as indicated by the early reports of Indian agents in Denver and in Utah Valley. The horse was not only import in the subsistence activities and in warfare, but served as a status symbol (Lang 1953:8).

A number of cultural practices show the value of the horse in Ute society. "Adultery was punished by beating the wife and, according to an old Uintah informant, the injured husband would shoot the adulterer's best horse. But according to several other informants, if the husband only shot the adulterer's horse and ignored the woman, it was a sign the adulterer could have the

woman" (Lang 1953:9). "It was not customary for a husband to fight with the man who took his wife, but he would take a horse belonging to the lover. This left the wife free to go with the other man." (Smith 1974:133) "A deserted wife might ride up to her former husband and stick her spear (the one she carried to balance herself with if her saddle slipped) in her husband's horse. This gives him away. Or she might kill the horse belonging to her successful rival" (Smith 1974:134). One informant told Smith (1974:140) that a new father (after a baby's birth) could not ride his good horses for 10 days after the baby was born. He had to ride ones he was not proud of. It was common to kill horses when individuals died. "A man's horses were killed at the gravesides. If they saved one horse, they would cut his tail and mane short and make him look like a mourner" (Smith 1974:150-151). Horse racing was a favorite pastime of the Ute, and ultimately played a part in the revolt that lead to Nathan Meeker's death at the White River Agency near Meeker, Colorado.

"It is thought that when they acquired horses in the early seventeenth century (the historic period), the Ute greatly altered their mode of subsistence, and the size and organization of their groups" (Jorgensen 1964:6). Wealth and status for Ute men was tied to the number of horses they owned. "Both the Uintah-White Rivers and the Uncompaghres owned huge herds of horses. During the 1880s the Uintah-White Rivers herds were variously estimated to contain between 5,500 and 7,000 horses; whereas the Uncompaghres were said to own 5,300 head" (Jorgensen 1964:119). There was a significant decline in horses on the reservation between 1885 and 1910 from 12,720 to 3,605 a drop of over 9,000 horses. "The horse herds had dwindled in size because the Utes could no longer afford to feed them, and because they found that they could sell them to the whites who were moving into the territory" (Jorgensen 1964:133-134). However, Forest Supervisor DeMoisey (1925) explained it this way:

> at one time the Indians had several bands of semi-wild horses running on these ranges. They were small and of little value and consumed range needed by domestic stock. They caused lots of trouble to White settlers, campers and stockmen whose horses would get away and into a wild bunch and be hard to get. These wild horses were finally rounded up by the Indian Department who gave a man by the name of Clark Elmer permission to capture them for what he might be able to get for them. Most of them went to hatcheries for fish food, but many of the Indians mourned the loss of their ponies.

This quote from Forest Supervisor DeMoisey characterized the Anglos' view that the Indian ponies were small and worthless. A Vernal Express article in 1929 claimed that some of the horses that the county had paid Earnest Eaton to destroy were the size of sheep. Barton (1972:34, 51) had a particular disdain for the wild horses and shot a number of them throughout his life. Barton was not the only rancher that killed wild horses. "We decided to make a run for a wild band of horses that ranged around the Avintiquin rim and were a nuisance on the range because they chased the cattle back from the springs; pawed the water and made it muddy so the cattle wouldn't drink it and those fifteen head of horses ate about the same amount of feed as twenty five cattle" (Pope 1972). Beginning in about 1928, regional newspapers tell the story of herds and bands of hundreds of wild horses eliminated by order of the Farm Bureau, Indian Services, Cattlemen's Associations, BLM and County commissioners because they were a nuisance. Preston Nutter (Barton 1972:37) and Indian agents brought in stallions in an attempt to improve the bloodlines of the local horses.

In addition to killing the nuisance animals, Anglo cowboys rounded them up for whatever reason they felt they could produce a profit; meat, money or rides (John Barton,

personal communication, 2006). During the early twentieth century horse roundups were very common all over the Basin, including on Diamond and Blue Mountains, all along the Green River south, along the Colorado/Wyoming border north and on the South Unit. A US Indian Service permit was issued in February of 1912 to "trap wild horses." A notice in local newspapers in 1932 advertised the government's need to purchase remounts for the cavalry. It is unknown how many local mustangs were appropriated for the government. In the winter, weak feral horses were usually gathered individually by cowboys with well fed horses. Anglo horse round-ups used a variety of materials to construct corrals besides the wires and poles mentioned earlier. In central Nevada Anglo cowboys usually used some combination of poles, wire, sagebrush, natural features, and even a special canvas and pole corral and driveline to gather horses (Russell 2006). The absence of poles, and especially wire, at all of these brush drivelines, except 42Dc236, argues against their construction by Anglos. Anglos were undoubtedly in the area and may have reused some of these features. However, evidence suggests these trap complexes were initially created by Ute for their horses. Although wild horses still roam the area, (a heritage crew noted a herd in Sowers Canyon in 2006) these corral complexes have not been used for several decades.