ABSTRACT

Archaeologists have been undecided for years on the purpose or intent of ancient lithic caches that have been discovered throughout the landscape in various parts of the world. These caches have varied by morphology, typology, size, and location. This dissertation discusses a brief history of lithic caches, their possible meanings and purposes, and examines four lithic caches that were discovered in the United States of America, for any possible relationships and similarities. These four lithic caches are concentrated on Idaho's south central Snake River Plain within a range of 110 km of each other. Non-professionals discovered three caches; another was professionally excavated. The Cedar Draw and the China Creek Caches have never been placed into the archaeological historical record and are catalogued and analyzed here for the first time. Even though the caches were found at different elevations and landscapes they were all located near a water source that provided visibility of the surrounding terrain. No debitage was found directly at the sites, and osteological evidence was not present. The artifacts in the Simon Cache and the China Creek Cache appear to be made from exotic materials procured from a non-local stone source suggesting long distance movement or trade. Both caches were discovered near possible ancient trade routes. The Cedar Draw Cache and the Rock Creek Cache exhibit the same morphology and typology. A strong probability exists that they were manufactured from the same ignimbrite material source. The four caches vary in age from the Clovis culture (11,200 B.P. to 10,900 B.P.) to approximately 3,000 B.P. The total number of words excluding the bibliography is 15376.

A SUMMARY OF FOUR LITHIC CACHES

ON THE SOUTH CENTRAL SNAKE RIVER PLAIN OF IDAHO

Their Possible Purposes and Relationships

By

Steve W. Kohntopp

(School reference number 083)

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Archaeology and Heritage

School of Archaeological Studies

University of Leicester

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The most valuable person who encouraged me to keep on struggling was James C. Woods, head of the Anthropology Department and curator of the Herrett Center for the Arts and Sciences at the College of Southern Idaho. He provided me with the initial inspiration to write this dissertation, and to record to the archaeological historical record for the first time the Cedar Draw Cache and the China Creek Cache. He has answered many questions and personally accompanied me to the cache sites. He has allowed me to use both the museum's and college's library resources. I am grateful for his valuable service to this project and in helping me see it to conclusion. I thank Phyllis Oppenheim, Collections Manager, who allowed me access to the museum's basement numerous times to physically view and handle the cache artifacts, and Wilma Titmus who helped me countless times in the Herrett Center library. Special thanks go to my wife Gail who helped proofread the drafts and for putting up with the long evening hours without my company. I thank Jack Straubhar for allowing James C. Woods and me private access to the site of the Rock Creek Cache and for providing permission to scan the aerial photograph presented in figure 5.2. I thank Gary and Joan Fay for temporarily loaning the China Creek Cache to the Herrett Center for the Arts and Sciences for my analysis and sharing their discovery. Thanks to Mr. Larry Malberg for granting permission to photograph and analyze the Cedar Draw Cache. Finally, I thank Noemi Sedano for providing computer help in sizing and inserting figures into the text and Lavada Thornton in providing statistical advise.

CHAPTER 1

INTRODUCTION

The Problem

The landscape of South Central Idaho, like other areas of the United States and the world, has yielded to human discovery (mostly by accident) lithic caches that were buried and hidden in ancient history. The true reason for these apparent non-mortuary caches has been a matter of speculation by archaeologists and others. Four such caches, two that have yet to be committed to the archaeological record, will be analyzed and summarized in this dissertation.

Figure 1.1. Northwestern United States of America showing area of study. Family World Atlas. 1981. New Census Edition. Chicago, NY, San Francisco: Rand McNally.

The problem will be to determine the caches possible meanings, purposes, similarities, and relationships between each cache. The lithics in each cache will be measured and cataloged by length, width, and maximum thickness in centimeters to coincide with other data in scientific papers within the United States. Each cache will be analyzed to

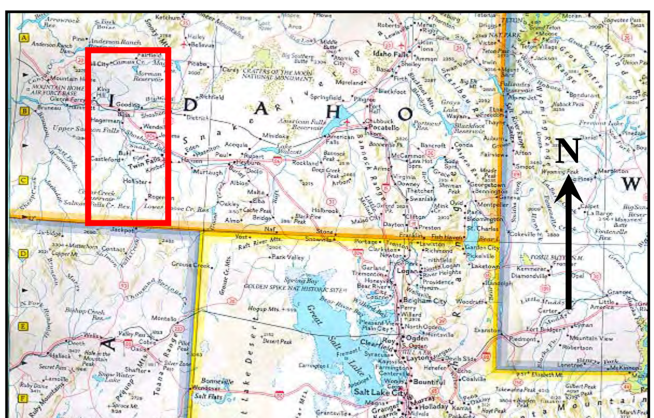


Figure 1.2. Regional map of United States showing area of cache locations. Family World Atlas. 1981. New Census Edition. Chicago, NY, San Francisco: Rand McNally.

determine if correlations exist that may determine any similarities or relationships.

The Geography of the Area of Study

The area of study for this dissertation is located in the United States of America in the State of Idaho (fig.1.1). The four caches are located in the south central region of the state ranging from the Camas Prairie southward to the Snake River and Browns Bench near the State of Nevada (figs.1.2 & 1.3). The study area lies within the Columbia Plateau physiographic province and is characterized by extensive surface tracts of basalt (Freeman et al. 1945). The Columbia Plateau is to the south and the Salmon River Mountains and the Bitterroot Range lies to the north and northeast (Rand McNally 1981). The area of study lies within the south-central Snake River Plain in a region commonly known as the Magic Valley. The valley is bordered on the north and south by mountains as high as 3033 m ASL with the Snake River Canyon bisecting the valley at a maximum depth of approximately 150 m. The Snake River Canyon was formed 14,000 to 15,000 thousand years ago when Lake Bonneville broke over its banks and created the huge Bonneville Flood (Green et al. 1998, p.444; Rhodenbaugh 1953, p.262).

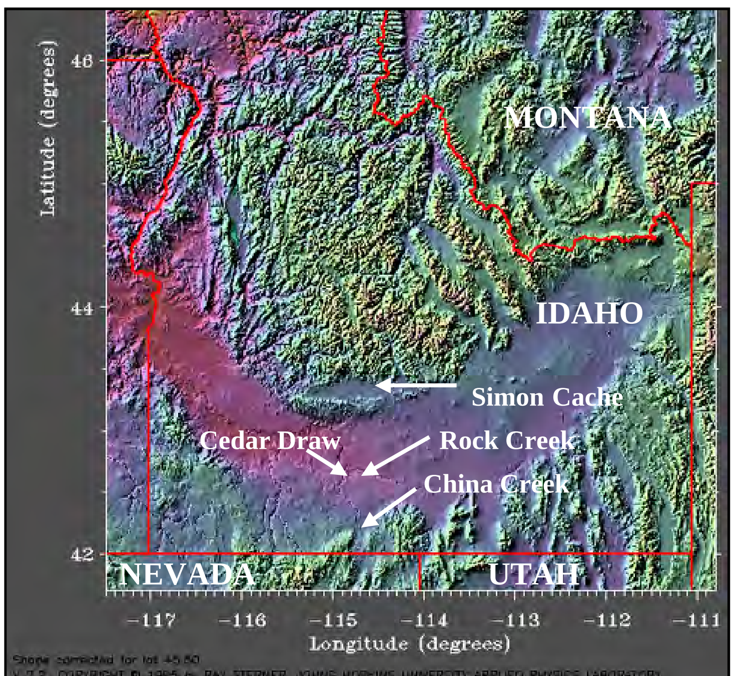


Figure 1.3. Aerial satellite photograph of Southern Idaho showing location of cache sites. Available from: http://fermi.jhuapl.edu/states/maps/id.gif

The Snake River Plain, which did not exist prior to the Mieocene, formed a 65 to 100 km wide arch-like pattern through southern Idaho for a distance of 600 km (fig.1.3). The present surface of the Snake River Plain is dominated by basaltic lava flows that are approximately 2,000 years old with a thin veneer of loess and windblown sand covering parts of the plain (Wood and Kienle, 1990, pp.246-248).

The south-central area of Idaho shares a riparian, canyons, foothills, and a desert environment. One of the world's largest underground aquifers is located on the north side of the Snake River Canyon. This water empties into thousands of springs into the Snake River. Pavesic (1985, p.57) says, "The native anadromous fish populations appear to have been the most important protein resource available to local aboriginal peoples." According to Murphy and Murphy (1960, as cited by Pavesic 1985, p.58), "the river valleys provided an excellent winter habitat for the indigenous peoples: a mild climate, vast stores of available driftwood for fires, excellent positioning for the early spring salmon runs, access to camas grounds and, during the historic period, forage for horses and the presence of a viable commercial trade."

South Central Idaho has a four-season climate and enjoys generally mild winters with annual precipitation approximating 23 cm. The growing season in the Magic Valley is approximately 135-140 frost-free days and is sufficient to grow most vegetable crops. The growing season on the Big Camas Prairie is much shorter due to increased elevation allowing only grain crops and two cuttings of Alfalfa Hay. The Browns Bench area is approximately the same elevation as the Big Camas Prairie but lacks irrigation water and proper soils for cultivation. Cattle currently graze this area. Except in the agriculturally tilled areas the predominant vegetation is big sagebrush (*Artemisia tridentate*) (Pavesic

1985, p.57). Willow (*Salix*) and cottonwood trees (*Populus*) thrive along the streams, which provide cover and forage for mule deer (*Odocoileus hemionuis*) populations. The main indigenous vegetal food was camas (*Camassia quamash*) (Statham 1982, as cited by Pavesic 1985, p.57), which has been discussed as having a stabilizing effect on regional populations (Ammes and Marshall 1980-1981, as cited by Pavesic 1985, p.57).

In the Magic Valley the lowest average daily minimum temperature is minus 6.9°c in January with the highest average daily maximum of 31.7°c in July. The elevation in the valley will range from 975 m to 1432 m ASL and up to approximately 1555 m ASL in the higher valleys of Browns Bench and the Big Camas Prairie. At the higher elevations the temperature ranges will be lower than in the valley.

The History of the Area

Historically, humans have occupied the area for over 10,000 years B.P. (Green et al. 1998, p.440; Bower and Savage 1962, p.20; Green 1972, p.92). The Hagerman Fossil Beds on the Snake River have yielded the skeletal remains of mastodons, saber-toothed cat and other extinct remains of beaver, otter, birds, fish, and the so-called Hagerman horse (*Equus simplicidens*). Native Americans, primarily a number of Shoshoni Indian tribes, occupied the area before the French Hudson Bay fur trappers arrived in the mid 1800’s. In 1871, domesticated cattle started grazing the Magic Valley area around the Rock Creek and Cedar Draw streams (Walgamott 1990, p.197). In 1904, land developers diverted water from the Snake River at Milner dam, previously known as Cedars Crossing (p.319) via canal systems to irrigate the new farm ground on both sides of the Snake River Canyon. The area still remains sparsely populated with small rural towns scattered throughout the Snake River Plain on both sides of the Snake River Canyon.

The city of Twin Falls is centrally located and has become the area-trading center within a 160 km radius drawing over 200,000 people. Today approximately 85% of the local economy dollars comes from agrarian interests.

CHAPTER 2

A BRIEF HISTORY OF SELECTED CACHES

Definition and Origin of Caches

A cache is defined in Webster's Dictionary (1996, p.291) as a hiding place in the ground for ammunition, food, and treasures. Overstreet (1999, p.963) defines a cache as "a group of [lithic] points deposited in the same place, usually of the same type and origin." Kornfield et al. (1990, p.301) quotes another dictionary defining cache as "a place in which stores of food, supplies, etc. are hidden" or "anything stored or hidden." Levy (1982, p.306) aligns caches with the practice of hoarding. She says, "For those concerned with chronological studies, a hoard is simply a collection of artifacts which entered the archaeological record together." Levy continues, "The origins of these practices remain uncertain, although in southern Scandinavia it does seem likely that the earliest offerings in watery locations were made during the Mesolithic period." These caches contained all types of items including food, pottery vessels, antlers, human remains, beads, lithics, and in Brittany the polished axe. Stanford and Bradley (2000, p.55) indicate that the Solutrean people of Spain cached large lithic bifaces from 22,000 to 16,500 B.P. Caches have been discovered with tombs and monuments that were generally associated with fertility (Bradley 1990, p.307). Caches have also been associated with and found in burial sites (Putman 1988, pp.449, 464; Green et al. 1998, pp.449-451; Bryan 1993, pp.89-93). Kuhn (1995 pp.26, 34-36, 136-142) discusses at length the movement of lithic implements and caching across the landscape by Neanderthals during the Middle Paleolithic (Mousterian) Period. Danish flint blanks were also cached along trade and travel routes throughout Europe (Bordaz 1970, cited by Muto 1970, p.112). Over time, humans have discovered a number of caches hidden in the landscape. According to Lahren and Bonnichsen (1974), and Woods and Titmus

(1985, cited by Huntley and Plew 1993, p.19), biface caches occur throughout the Archaic and are also clearly associated with Paleo-Indian contexts (12,000-10,000 B. P.). The existence of caches usually indicated a planned repetitive land use by Paleo-Indians (Smith and Mcnees 1999, p.134). These caches are not always associated with burials or monuments.

A lithic cache that is not associated with osteological remains and is located within the natural landscape of the United States of America is the primary type of cache that will be discussed within the scope of this dissertation. The large number of published caches cannot be discussed adequately in this limited dissertation. I will summarize chronologically selected non-mortuary caches in the United States, ending this chapter with cache sites located primarily in the Great Basin and the Snake River Plain.

Chronological History of Caches

Clovis Caches

The Clovis caches appear to gain the most notoriety due to their size and antiquity. The following is a chronological summary of some of the most significant Clovis caches discovered to date (fig.2.1).

In 1902, The Fenn Cache was discovered near the three corners area of Idaho, Wyoming, and Utah (Frison and Bradley 1999, p.22). This Clovis Cache contains a dramatic array of 56 oversize projectile points, preforms and tools covered with red ochre. Source analysis of the lithic materials indicated that the obsidian artifacts came from a quarry near Malad, Idaho, and the Jasper lithics originated in the Big Horn Mountains of northern Wyoming (p.80).

The Simon Cache near Fairfield, Idaho was accidentally uncovered in 1961. Twenty-nine lithic artifacts were discovered including five Clovis points and 24 bifaces, two of fine quartz crystal (Butler and Fitzwater 1965, p.23; Frison and Bradley 1999, p.20). This cache is discussed in greater detail in Chapter four.

Construction workers uncovered the Anzick Cache near Wilsal, Montana, in 1968 (Frison and Bradley 1999, p.21). This cache consisted of over 100 ocher-covered artifacts including Clovis points and bifaces. The artifacts may have been associated with osteological remains and were covered with red ocher suggesting it was a burial site. This site is currently jeopardized by pending state legislation, that if enacted will prohibit further archaeological study of this privately owned site.

In 1978, the Drake Cache was discovered in north-central Colorado. It consisted of 13 Clovis spear points and small ivory fragments. This cache is unique in that it is made up entirely of finished projectile points (Frison and Bradley 1999, p.21).

The largest Clovis lithic cache (Roberts-Richey) discovered prior to 1987, was found by Moises Aguirre in an orchard near East Wenatchee, Washington (Mehringer, Jr. 1988). In total 14 Clovis points were found along with 46 other bifaces, scrapers, and a decorated bone tool. Some red ocher was found on the artifacts, but no osteological remains were discovered. The lithic tools were oversized proclaiming some to say it was a ceremonial site. Mehringer (1988, p.503) said the Roberts-Richey Cache “was called a simple tool cache, a habitation, the last resting-place of a Clovis chief, a flint knapper’s hut, a hunting shrine, even a shaman’s tent.” This cache is technologically similar to the Anzick Cache and the Simon Cache (Frison and Bradley 1999, p.22).

According to figure 2.1, almost all of the Clovis caches discovered prior to 1988 are located in the Intermountain states.

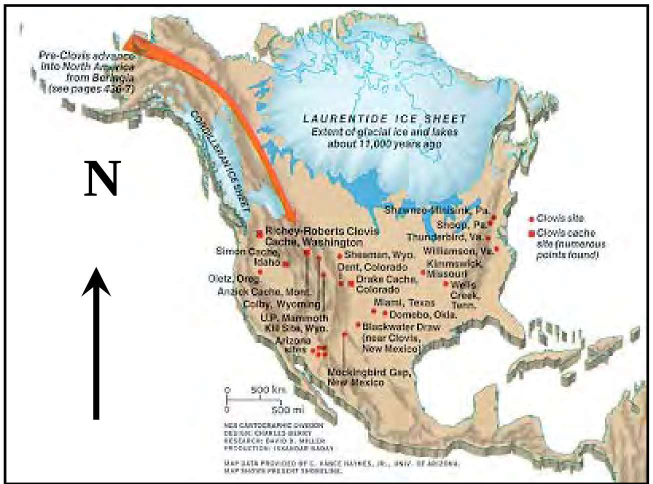


Figure 2.1. Location of Clovis Cache sites in the United States prior to 1988. Reproduced with permission of National Geographic. 1988. 174(4), 503.

Non-Clovis Caches

Several non-Clovis caches have also been discovered. According to Overstreet (1999, p.962) one of the first and finest assemblages of flaked artifacts ever found was discovered in Tennessee in 1894. The Duck River Cache is dated to 1500 A.D. Its assemblage consisted of long blades (68.58 cm), stone maces, effigy axes, and animal effigies (Lafferty 1994, p.197).

Additional caches have been found on the Snake River Plain and Great Basin. In 1960, Mr. George Scott found 14 bifaces in a cache by Givens Hot Springs located near Marsing, Idaho. It was reported by Huntley and Plew (1993, pp.19-22) that all of the bifaces were relatively similar in form and consisted of cherts common to the area. They were triangular with slightly rounded and convex bases (p.20).

In 1965, a farmer near Sterling, Idaho discovered a cache of eight projectile point blanks and one knife blank made of obsidian-welded tuff or ignimbrite (Pavesic 1966, p.52). Pavesic (p.53) indicates the source of the welded tuff is located 32 km southwest of Sterling, and estimates the blanks were probably made between 4,000 and 6,000 B.C. (p.54).

During the summer of 1967, a cache of obsidian and chert blanks was excavated in the Warner Valley-Hart region of south-central Oregon. Weide and Weide (1969, p.28) said, "The cache included 15 obsidian ovates, 5 chert ovates, 1 quartzite ovate, 1 unretouched obsidian flake, 1 projectile point, 1 mineralized bone flaking tool, 1 lump of yellow ochre, and 9 pieces of glassy pumice." Twenty-eight of the 34 items in the cache were discovered *in situ* and had been carefully placed on edge. Weide and Weide (p.28) felt that the presence of yellow ocher and the glassy pumice surrounding the ovates "is not easily interpreted as a group of blanks buried for later use." Weide and Weide also suggested that some similarities were exhibited in length, width, and thickness with the Sterling Cache (Pavesic 1966).

Sometime prior to 1971, the Spring Creek Cache was accidentally discovered near Spring Creek's exit into American Falls Reservoir, on the Fort Hall Bottoms in southern Idaho (Muto 1970, pp.110-111). The cache was located on the surface by Mr. Ron Edgerly of Pocatello, Idaho, and consists of 56 biface blanks, preforms, and projectile points (Muto 1971, p.88).

According to Pavesic (1985, p.65), sometime prior to 1975 over 200 artifacts including several bifaces were recovered from a cache site known as the Rocky Canyon Site near Cottonwood Creek located six km northeast of Boise, Idaho. No osteological materials or red ochre was recovered.

Pavesic (p.65) also reported in the same paper another cache site called The Emmett East Site. The cache site was located on the Payette River 8.5 kilometers northeast of Emmett, Idaho. Pavesic said,

> A minimum of 22 specimens are in the collection, which includes a large, excurvate[d] turkey-tail, a shaft straightener, and several large cache bifaces of obsidian and basalt. No osteological materials were recovered and red ochre staining was not apparent.

In April of 1982, southwest of Twin Falls, Idaho, Gary and Joan Fay discovered ten bifaces at the confluence of Salmon Falls Creek and China Creek near Browns Bench and the headwaters of Salmon Falls Dam. This cache has been named the China Creek Cache and is reported in detail for the first time in Chapter seven of this dissertation.

In December of 1982, the Rock Creek Cache was unearthed by two anthropologists near Twin Falls, Idaho, while surveying an area under contract with an engineering firm for a hydroelectric facility. This cache consists of 32 bifaces made of ignimbrite bearing the same morphology (Plew and Woods 1986, p.22). This cache is analyzed in more detail in Chapter 5.

During September of 1988, the Caballo Blanco Biface Cache was discovered on Robinson Creek near Ukiah, California (Gary and Mclear-Gary 1990). This cache contained 16 large obsidian bifaces, ovoid in shape. According to Gary and Mclear-Gary (p.22) all of the bifaces exhibited heavy wear on the edges and arrises. Gary and Mclear-Gary concluded that the bifaces edges were intentionally dulled for transport. Hydration testing estimated a date of 2,500 B.P. (p.25). Eight of the bifaces exhibited some cortex and three had the striking platform still evident on the artifacts.

In 1989, the Broadbent Cache was recovered which included 35 large, side-notched, stemmed projectile points of chert and quartz found in a rockshelter west of the Flaming Gorge Reservoir in northern Utah near the Wyoming border (Broadbent 1992).

In July of 1990, an obsidian cache was found in Weber County, Utah on the Great Salt Lake Wetlands (Cornell et al. 1992). The cache consisted of 88 primary and secondary flakes found in proximity to a Late Prehistoric site near the edge of the Great Salt Lake northwest of Ogden, Utah. X-ray fluorescence tested samples indicated the flakes came from an obsidian quarry near Malad, Idaho, approximately 96 km north of the cache site (p.158).

Near the eastern seaboard in 1991, the Glazier Blade Cache was discovered in Granby, Connecticut. 30 large blades (11.7-18 cm in length) were found in the Glazier's back yard near an old streambed. The cache was located *in situ* carefully stacked in layers (Feder 1996). Feder said, "The basic form and proportions of the blades are vaguely reminiscent of Paleo points, though none are fluted and none exhibit basal grinding or the typically concave bases of Paleo [Clovis] points especially in the Northeast." The charcoal from the soil matrix in which the blades were found indicated two dates of A.D. 424 and A.D. 450. Petrographic analysis of a thin section removed from one the blades indicated it was made of Siltstone and was determined to be non-local to Connecticut (Feder 2000). According to Feder more analysis is being conducted on this cache.

Sometime prior to December 15, 1993, Mr. Larry Malberg found nine bifaces exposed to the surface near the bank of a small stream known as Cedar Draw located approximately 6.5 km northwest of the town of Filer, Idaho. This is a private cache and is reported for the first time in this dissertation in Chapter six.

It is apparent from this chronological history of selected lithic cache sites that more locations will likely be discovered in the future. In the gathering of information for this dissertation it has become apparent that there are a significant number of unknown caches throughout the United States and the world that have been recovered, and are currently in the hands of private individuals who are unwilling to submit the caches contents to academic scrutiny for various reasons. It is hoped that more studies of lithic caches and their relationships to each other will be undertaken in order to understand more completely the reasons ancient people cached stone tools. Wiseman et al. (1994, p.63) said, “Since caches can provide important clues about population movements, seasonality of occupation, and competition for resource areas, special effort should be made to record and describe them.” Cornell et al. (1992, p.158) said,

> The use of these pits for food storage, hearths, dumps, baking, burials, and in this case, tool caching indicates planning depth on the part of the inhabitants. Planning depth also emphasizes the systematic movements of people, a far cry from the stereotype of aimlessly wandering hunter-gathers.

The results of more comprehensive studies would enlighten our society on how ancient cultural groups interacted and traded with each other in history.

CHAPTER 3

CACHES

THEIR POSSIBLE MEANING AND PURPOSE

The Meaning and Purpose of Caches

Archaeologists have long pondered the existence of lithic caches, their possible meaning, and purpose. When a cache is discovered by intentional or accidental excavation, and the concentration of artifacts is viewed, one cannot help but wonder why ancient people placed the artifacts in this specific manner and in this particular location of the landscape. Tradition, religious beliefs, and superstitions may have required ancient cultural groups to place artifacts into caches into a particular place and position as passed on by their forefathers in order to insure the future survival of the tribe.

Binford (1980, p.15) indicates that caching is the result of extending "the time utility for one of the resources beyond its period of availability in the habitat." Dennis Stanford and Bruce Bradley indicate that biface caches represent a strategy for optimizing raw materials (Hall 2000, p.6).

Kuhn (1995, p.19) said,

> Regardless of how they make [their] living and regardless how long they have been at it, people that move about the landscape must cope with variable access to raw materials, with the need to carry and maintain transported toolkits, and with reconciling the schedules of food procurement with the making and mending of the necessary technological aids.

Kuhn (p.21) continues,

> Because of the uneven distribution of different kinds of activities, factors such as the frequency of residential mobility, the duration of occupations, and the locations of living sites relative to sources of raw materials must have played important roles in determining how Middle Paleolithic populations coped with maintaining a ready supply of "manufacture and maintenance" tools.

According to Roth and Dibble (1998, p.59), recent studies indicate that the production of stone tools and the transport involved was influenced by several factors such as population size, subsistence strategies, resource availability, distance to other raw material sources, raw material quality and abundance, and group mobility.

Abandoned Caches

There are various reasons caches appear to be unused and forgotten. One possible hypothesis was when people's environment and food sources were altered by natural changes, they moved on to a more tolerant climate, abandoning the caches (Hall 2000, p.19; Kelly and Todd 1988, p.234; Stanford 1991, p.6). Overpopulation and declining availability of resource productivity would also necessitate movement of people from the present environment (Jochim 1981, p.59). Another possibility that would make abandonment necessary would be a hostile force intruding their territory (Wiseman et al. 1994, p.70). Ties to reliable resource concentrations (i.e. abundant food, water supply, and quarries) would decrease mobility, the need for long use-life tools, and the need for caches (Jochim 1981, p.121; Kelly and Todd 1988, p.240). When people began to domesticate animals and cultivate the soil they did not need to follow the food source; thereby their need for non-mortuary caches was no longer paramount and this practice was eventually abandoned (Earle 1994, p.425). Several large mammals became extinct during the Clovis period and large lithic bifaces in certain caches no longer needed to be utilized and projectile points diminished in size (Thomas 1978, as cited by Kelly 1988, p.730). Finally, the location of the cache site may simply have been lost to memory of those who originally placed it there.

Hypotheses for Caching

Ten possible hypotheses for caching are suggested that may have been used by ancient peoples.

The first and most obvious purpose of a lithic cache is that bifaces were generally prepared at a distant quarry site, and deposited along various strategic hunting and trading routes to be returned to from time to time to replace lost or broken tools as needed, until the reservoir was depleted, and to be eventually restocked with new bifaces (Kornfield et al. 1990, p.302; Kuhn 1995, p.22; Yeager 1986, p.38). Eleven of the 13 projectiles in the Drake Cache were manufactured from an Alibates Dolomite source located in the Texas Panhandle and transported a distance of approximately 563 km to north-central Wyoming (Frison and Bradley 1999, p.21). It has also been determined that certain bifaces from the Simon Cache in Idaho also originated from the Alibates Dolomite quarry (Haynes 1980, p.118, as cited by Kelly and Todd 1988, p.237). Vehik and Baugh (1994, p.253) indicate the advent of long distance trade exchange activity from the East Coast connecting the Northern Plains to the Rockies and probably the West Coast began at least by the late Archaic. Brose (1994, p.217) explains that rather than significant exchange taking place, the existence of exotic lithic types in domestic assemblages is the result of "fluid social unit composition," such as the movement of groups of people carrying lithic material across the landscape. Kuhn (1995, p.34) said, "Taken in isolation, the observation that an object was moved from one point on the landscape to another shows only that tool users failed to abandon artifacts during the time it took to make the trip."

A second logical explanation of caches in a highly mobile hunter-gatherer culture was to bury and store the lithic tools that could not be transported in order to prevent theft prior to their retrieval (Gibson 1994, p.153; Wiseman et al. 1994, p.70).

A third hypothesis for caching is that they were used for ceremonial exchange with other nearby societies to insure improved relationships in case of future need caused by adverse environmental changes or by temporary resource shortages (Jochim 1981, pp.188-190). In order to insure reciprocation in greater value (concept of debt plus interest) public display of the exchange, with heavy rewards and sanctions, was imposed (p.189). Brown (1977, pp.172-173, as cited by Pavesic 1985, p.81) said, "Distinctive trade goods are now thought to be status-conferring objects that served to sustain trade relations under conditions of irregular local production of foodstuffs and other economic goods for exchange."

A cache could literally be used as a bank for the storage of trade items to be used as primitive money to exchange for other goods and services as needed (Carlton and Allen 2000, p.29; Dunbar 2000, p.41; Frison and Bradley 1999, p.2; Sahlins 1972, pp.228-229). Button (1989, as cited by Wiseman et al. 1994, p.69) suggests that caches may have been used as collateral to back up economic, social, or prestige transactions.

Kornfield et al. (1990, p.302) said, "Caching can also be seen as a strategy for controlling distribution of resources."

A sixth hypothesis for a lithic cache would be that they were used as a tribute to a burial site (Frison and Bradley 1999, p.78). According to Pavesic (1985, p.67) most of the burial sites in his study are located on a rise or crest of a hill, and are associated with red ochre, Olivella shell beads, larger than standard stone artifacts, and human remains. When osteological evidence is associated with a cache it would strongly indicate that the cache would most likely be associated with a burial (p.81). Wiseman et al. (1994, p.69), and Kornfield et al. (1990, p.301) both maintain that burial goods, by definition, are not caches. Wiseman et al. (p.69) say, "However, we presently have no basis for distinguishing the difference between these esoteric uses and the more practical ones suggested by the items themselves."

A seventh hypothesis for the creation of lithic caches is as an oriflamme or symbolic offering never to be retrieved (Bement 1991, as cited by Wiseman et al. 1994, p.69; Frison and Bradley 1999, p.78). Frison and Bradley (1999, p.21) suggest that the Drake Cache in Wyoming may have been a symbolic offering. Certain societies on the island of Gotland (Carlsson 2000, p.51) would purposely not utilize all of their booty and would offer a portion as a sacrifice back to the gods who in theory would bestow a cornucopia of plenty upon them in the future for not exhibiting avarice. Bradley (1990, p.307) also suggested that votive water deposits of coins and weapons were a long time practice in Europe and Brittany.

An eighth hypothesis for a lithic cache would be that they marked the spot of a fallen comrade whose body was lost or removed and laid to rest elsewhere. The cache would be buried on the original death site as a tribute and offering to possibly aid the fallen comrade into the afterworld. This phenomenon is currently practiced among various cultures throughout the world today. From Greece to Mexico, to the United States, we can observe wreaths of flowers, religious crosses, or small shrines placed at various locations along the highways in memory of loved ones departed from this world. It is likely that ancient people also held such emotions for their loved ones and may have left lithic tools in their memory along with other artifacts now deteriorated by the elements. It is well known that the ancient Egyptians provided earthly items to the dead for utilization by them in the afterlife.

A ninth overlapping hypothesis proposed by Wiseman et al. (1994, p.69) is that caches are the result of the historically documented practice of caching goods to facilitate exploration and exploitation of a region.

A tenth hypothesis suggests trade of rare and exotic artifacts between neighboring elites, communicated power and prestige (Gibson 1994, p.165; Lafferty 1994, p.198). Lafferty said, “The information and power gained by political control of sumptuary goods now appear more important than the redistribution of foods to the masses.” Lafferty (p.199) maintains that caches containing exotic artifacts, like quartzite discoidals, are the result of exchange between the elites of different political organizations. Fagan (1996, p.358) said,

> The Paleo Indians of the Great Plains exchanged fine-grained tool making stone over long distances as early a 9000 B.C. Few human societies are completely self-sufficient, for they depend on others for resources outside their own territories. And, as the need for raw materials, or for prestigious ornaments, increased, so did the tentacles of exchange and trade between neighbors near and far. This trade often had powerful political or symbolic overtones, conducted under the guise of formal gift-giving or as part of complex exchange rituals.

It is suggested that ancient people possibly used all of the above hypotheses. It is unlikely that science will be able to determine, without significant new research techniques and evidence, unequivocally the absolute meaning and purpose of lithic caches.

More research in this area is needed in order to enhance our understanding of this phenomenon.

CHAPTER 4

THE SIMON CACHE

Site Location

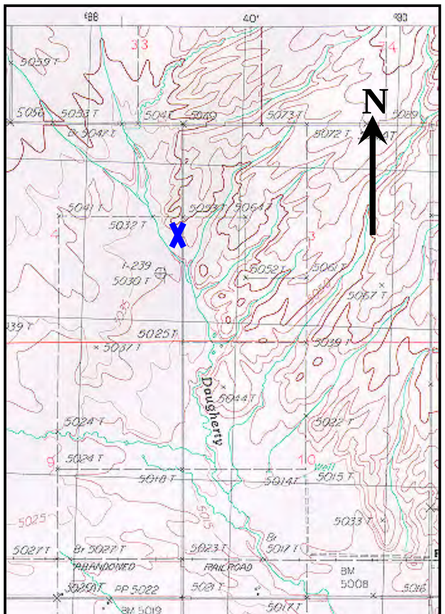


Figure 4.1. U.S. Department of Interior Geological Survey showing location of Simon Cache. Spring Creek Reservoir Quadrangle Idaho-Camas Co. 7.5-Minute Series (Topographic). 1986. Provisional Edition

The Simon Cache (fig.1.3 & 2.1) is located near Fairfield, Idaho, in Camas County near an old streambed terrace of Deer Creek on an ancient pluvial lakebed. The site is located at approximately 1524 m ASL on the Big Camas Prairie (fig.4.1) surrounded by the Mount Bennett Hills on the south and the Smoky and Soldier mountains, as part of the Sawtooth mountain chain, to the north (fig.4.2).

The Simon Cache is likely the most famous of the lithic caches yet discovered in Idaho (fig.4.3). Several publications have been written about the Simon Cache, and several archaeologists have physically examined the site and its artifacts since the cache's discovery (Butler 1963; Butler and Fitzwater 1965; Frison and Bradley 1999; Muto 1971; Woods and Titmus 1985). An exhibit of the Simon Cache artifacts is now complete at the Herrett Center for Arts and Sciences at the College of Southern Idaho in Twin Falls, Idaho.

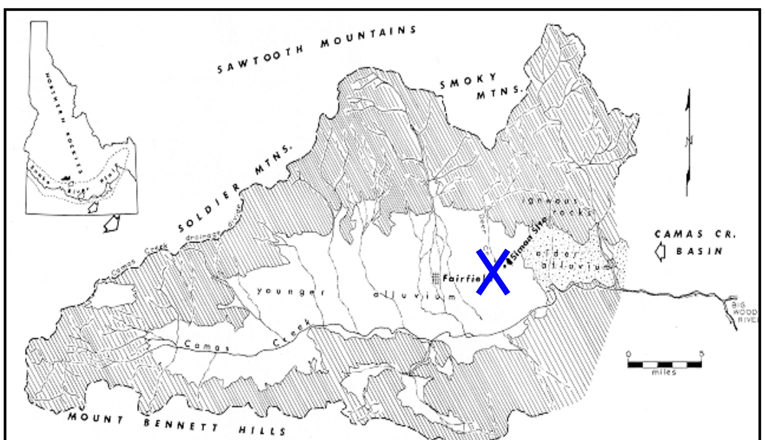


Figure 4.2. Camas Creek Basin, south-central Idaho. The heavy blue "x" on the main drawing indicates the location of the Simon site. (Butler 1963, p.27)

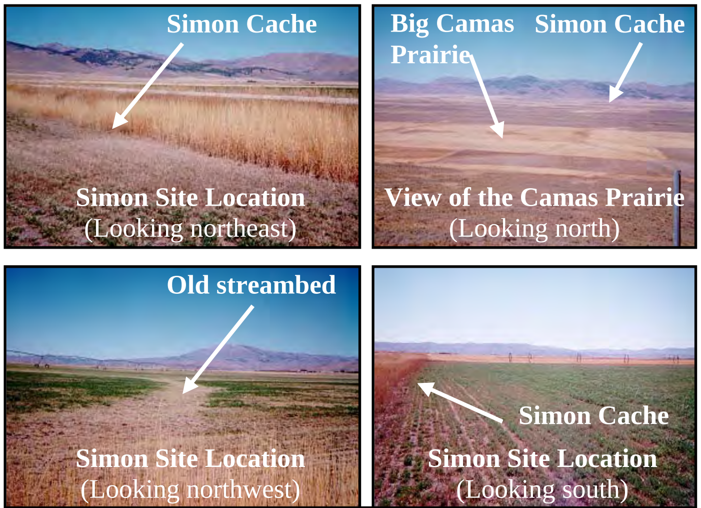


Figure 4.3. Simon Site Cache

The Simon Cache has been identified as a Clovis site (Butler 1963, p.22; Woods and Titmus 1985, p.3) with six lanceolate points in the cache exhibiting both basal thinning and fluting (Butler 1963, p.24). According to Butler, the Simon Cache points are almost identical, except larger, than the Clovis points from the Dent, Colorado collection (Sellards 1952). The Simon Cache site has not been precisely dated due to lack of obsidian artifacts or associated organic remains. It is known that other archeological sites located in the area such as Browns Bench (Bowers and Savage 1962, p.1), Wilson Butte Cave (Gruhn 1961), Birch Creek (Butler 1963, p.23), and Thorn Creek Reservoir (Butler and Fitzwater 1965, p.38) have indicated that man occupied the area from 10,000 B.P. to as long ago as 11,000 years B.P. According to Haynes (1991, as cited by Stanford 1991, p.2) it has been estimated that the Clovis culture occurred in the western hemisphere sometime between 11,200 to 10,900 R.C.Y.B.P.

Figure 4.4. Simon Cache Sequence A, stage one bifaces.

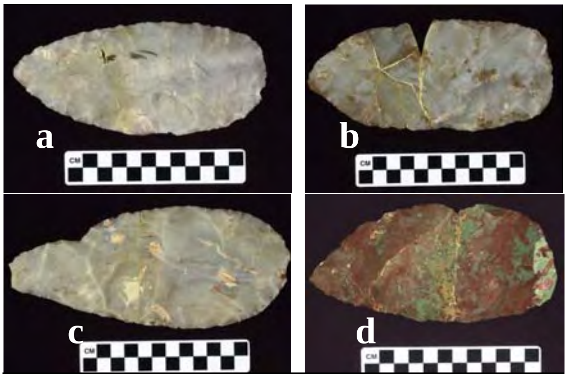


Figure 4.5. Simon Cache Sequence A, stage two bifaces.

Description of Simon Cache

The digitally enhanced images of The Simon Cache are shown in figures 4.4-4.10. James W. Henderson photographed them in 2000 with a 3.1-mega pixel Nikon D-1 digital camera. The Simon Cache consists of 33 bifaces, a convex-end scraper, and one spall made of silica minerals such as chalcedony, jasper, pegmatite quartz, and plasma (figs.4.4-4.11). Drawings (Woods and Titmus 1985, pp.5-8) showing the tool outlines (fig.4.12), and the drawings of the bifaces are shown in figures 4.13- 4.17. Initially, Butler (1963, p.23) reported 29 chipped stone implements, a convex-end scraper, and an un-worked spall fragment. In a later publication R.J. Fitzwater, an Idaho State Highway archaeologist, discovered that two of the artifacts had broken off from a large biface (fig. 4.11) while being accidentally uncovered by heavy machinery (Butler and Fitzwater 1965, p.38). This would have reduced Butler's count from 29 to 27 artifacts. Woods and Titmus (1985, p.3) reported 33 artifacts in their paper entitled "A Review of the Simon Clovis Collection." If Woods and Titmus were not correct, where were the missing six artifacts? With the assistance of Mr. Woods of the Herrett Center for the Arts and Sciences, the Simon Cache was physically reexamined to unravel the puzzle. It has been determined that there are 33 bifaces in the Simon Cache plus a

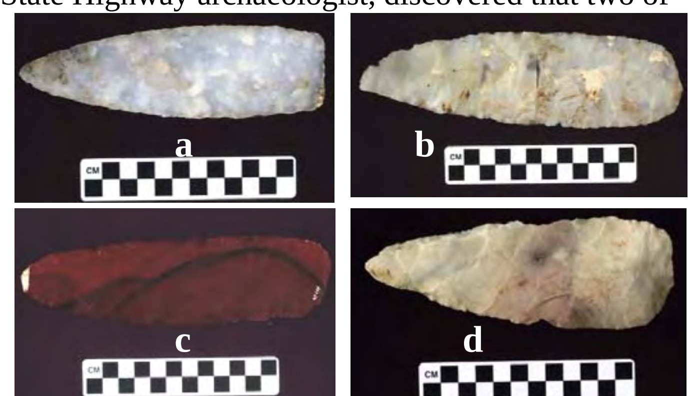


Figure 4.6. Simon Cache. b, c, d, Sequence A, stage three bifaces. a, Sequence A, stage four bifaces.

convex-end scraper and an unworked Spall fragment reported in Butler's paper (1963, p.32, fig.6e & f). The location of the latter two artifacts is presently unknown but they may be with the large biface (fig.4.11) at the Idaho State University Museum in Pocatello, Idaho. The six-biface dimensions that were not reported in Butler's paper (1963) are identified by an asterisk and are shown in table 4.1. Figure number 4.9c and 4.10c are fractured bifaces and their measurements have not been used for analysis in this dissertation. Biface figure numbers 4.8h and 4.10b are made of smoky quartz crystal bringing the total quartz crystal bifaces to four—instead of the two originally reported in Butler's paper (Woods and Titmus 1985, p.5). The reason for this discrepancy is presently unknown. One possible explanation is that the

Figure 4.7. Simon Cache. a, b, c, Sequence A, completed projectile points. d, e, Sequence B, completed projectile points.

Figure 4.8. Simon Cache. f, g, h, Sequence B, stage two bifaces. b, c, d, e, Sequence B, stage three bifaces. a, Sequence B, stage four bifaces.

cache was in the possession of the Simon family until it was donated to the Herrett Center. In the process of discovery by the Simon family and the subsequent excavation by Butler and Swanson, these artifacts were somehow initially overlooked. A broken biface that was previously unknown to Butler or Woods and Titmus, from the cache site was given to the Herrett Center by the Simon family subsequent to their original gift (fig.4.10c).

Figure 4.9. Simon Cache. b, Sequence C, stage three biface. a, c, Sequence C, stage four bifaces.

According to Butler (1963, p.24) all of the artifacts were bifacially flaked. Each artifact was percussion flaked with some pressure retouching evident on almost all of the items. As previously mentioned, no ignimbrite or obsidian is present in the artifacts that would allow hydration dating or trace element source analysis. This is unusual since ignimbrite and obsidian are commonly found and have been used in the Snake River Plain (Butler 1963, p.23). In fact, one obsidian specimen from the Braden or Rosenberger sites was X-ray fluorescence analyzed and sourced with a probability greater than .68 to have come from a quarry near Camas Prairie, Idaho (Pavesic 1985, p.73). It has been determined that the Simon Cache is a major assemblage consisting

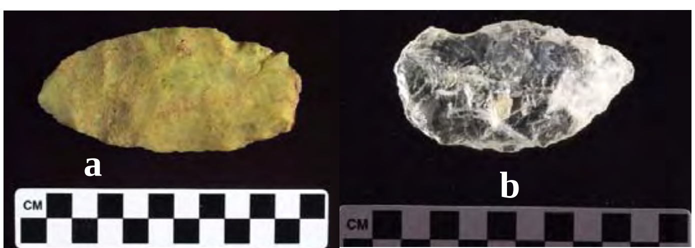


Figure 4.10. Simon Cache. Bifaces not illustrated or listed in woods (1985) or Butler (1963).

entirely of non-local materials, uncommonly large size, no apparent wear, a high degree of thinness, and a high quality of workmanship giving this cache an unknown significance. According to Frison and Bradley (1999, p.79), the Red Jasper artifacts in the cache come from the Big Horn Basin Mountains in Northern Wyoming suggesting long-range travel or trade. Johnson (1994, p.100) also discussed this practice of movement of exotic chert lithics from the Southeast even though a plentiful supply was available locally. Haynes (1980, p.118, as cited by Kelly and Todd 1988, p.237) suggested that one of the bifaces from the Simon Cache was made of Alibates chert that originated from the Texas panhandle.

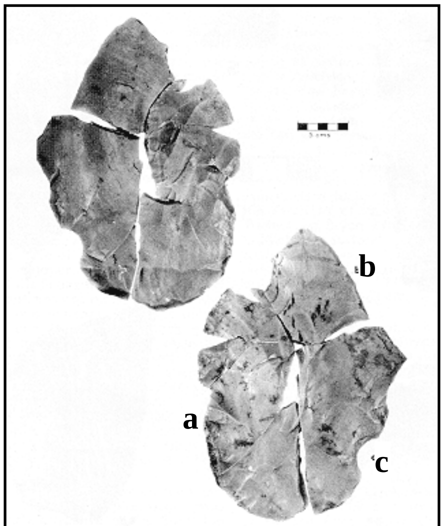


Figure 4.11. Opposite sides of large flake tool from the Simon site. Letter around edge of lower right hand photograph indicate fragments previously identified as tools: **a** as a large flake knife, **b** as a side scraper, and **c** as a spokeshave. This is the largest biface in the Simon Cache and is currently located in the Idaho State University Museum, Pocatello, Idaho. (Butler 1965, p.39).

Discovery of the Simon Cache

In the fall of 1961, the Simon Cache was accidentally uncovered while Mr. William D. Simon was grading a road with machinery. Unfortunately, over one third of the cache was damaged as a result of the road grading activity (Butler 1963, p.24). Due to the oncoming winter, Robert B. Butler, Earl H. Swanson Jr., and a crew of

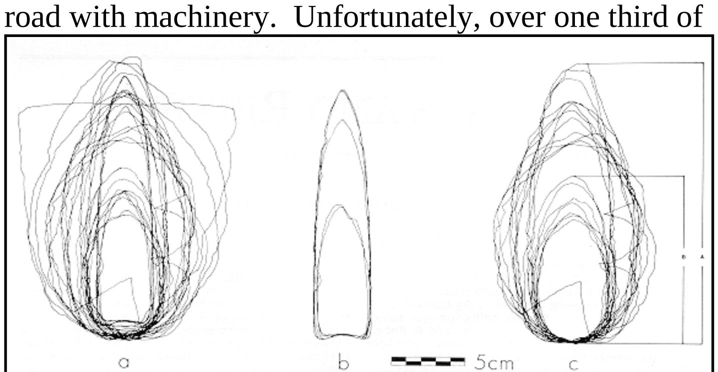


Figure 4.12. Tool outlines for the Simon Clovis collection. a) outline of the entire collection, b) outlines for the completed projectile points, c) outlines for the bifacial blanks in sequence A and B. (Woods & Titmus 1985, p.4).

experienced students from Idaho State University did not excavate the site until August of 1962. This delay may account for the six misplaced bifaces being mislaid and not being reported by Butler. Butler (p.23) said,

> The site was located in the northeast corner of a plowed section (Section 8, Township 1 South, Range 15 East Boise Meridian) on the western edge of a low rise of yellow alluvium somewhat more than a mile east of Deer Creek, one of the intermittent tributary streams at the eastern end of Big Camas Prairie.

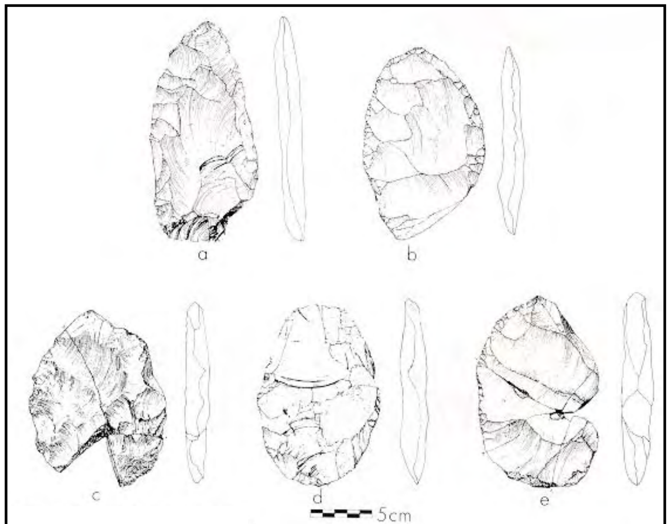


Figure 4.13. Simon Cache Sequence A, stage one bifaces (Woods & Titmus 1985, pp.5-8).

According to Butler, the Simon Cache was located at a depth of 30 to 46 cm beneath the surface in an area approximately 5.5 m in diameter within an area of red stain where the artifacts were presumably laid. Red ocher was discovered on the bifaces (Frison and Bradley 1999, p.20), but no human bones have yet been discovered suggesting that the Simon Cache may have been a non-mortuary cache. It may be that the osteological remains have yet to be recovered or have been destroyed. This site on the Big Camas Prairie has been known in history to be a major trade route and gathering spot by the Indians to harvest the famed Camas Root used in the diet of

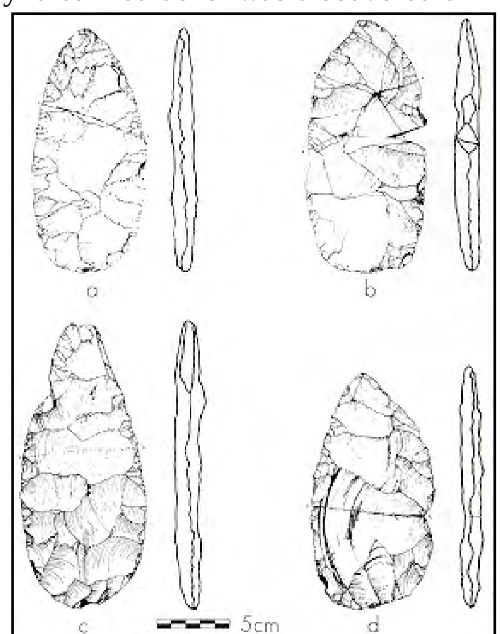


Figure 4.14. Simon Cache Sequence A, stage two bifaces. (Woods & Titmus 1985, pp.5-8).

several Indian tribes (Ames and Marshall 1980-1981). The Bannack Indian War of 1878 started here with the Buffalo Horn Tribe over treaty violations committed by the encroachment of settlers and their destruction of the Camas Root (Madsen 1980, p.84; Walgamott 1990, p.302). The Hudson Bay Company from Fort Boise used this route in the 1860's via mule-trains to exchange staple goods for fur pelts with the trappers located in the nearby mountains (Walgamott 1990, p.292). US Highway 20 is a main arterial trade route today traversing the area between the eastern and western areas of the state.

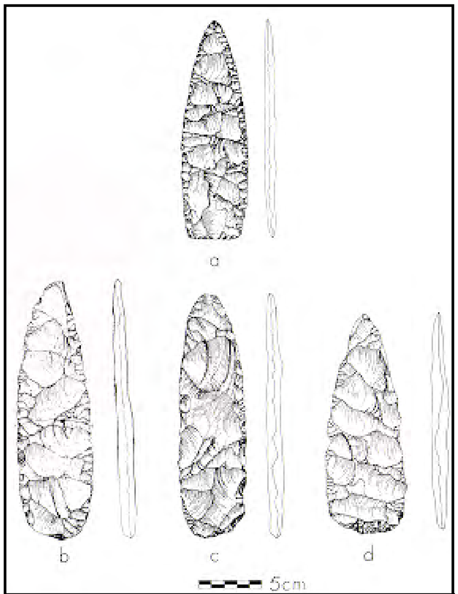


Figure 4.15. Simon Cache b,c,b, Sequence A, stage three bifaces, a, Sequence A, stage four bifaces. (Woods & Titmus 1985, pp.5-8).

Dimensions of the Simon Cache

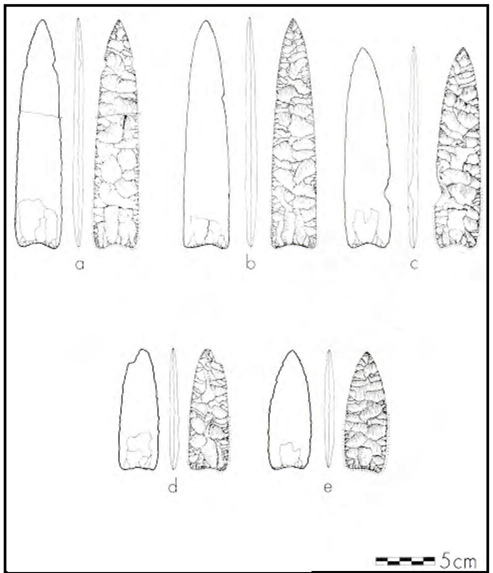


Figure 4.16. Simon Cache. a,b,c Sequence A, completed projectile points, d, e, Sequence B, completed projectile points. (Woods & Titmus 1985, pp.5-8).

The dimensions showing length, width, and maximum thickness of the Simon Cache artifacts are shown in Table 4.1. Figure 4.18 is a scattergram plot showing the length and width ratios of the Simon Cache. It is evident that the cache has widely distributed dimensions. The only apparent close grouping of artifacts is evident near the 10 cm length and 5 cm width dimensions. The length ranges from 8.20 cm to 29 cm and the width ranges from 3.60 cm to 21 cm. Additionally, the maximum thickness ranges from 0.70 cm up to 2.30 cm. The Range is 20.80 cm for the length, 17.40 cm for the width, and 1.60 cm for the maximum thickness. The standard deviation for each mean of length and width indicates how widely the sizes of artifacts vary within each shape category. The standard deviation is 4.65 for the length, 3.67 for the width, and 0.47 for the maximum thickness. Finally, the variance is 21.62 for the length, 13.48 for the width, and 0.22 for the maximum thickness.

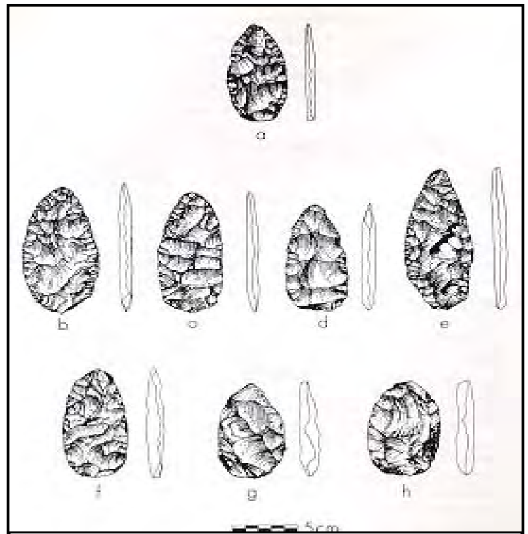


Figure 4.17. Simon Cache. f, g, h, Sequence B, stage two bifaces. b, c, d, e, Sequence B, stage three bifaces. a, Sequence B, stage four bifaces. (Woods & Titmus 1985, pp.5-8).

According to Muto (1970, p.111; 1971, p.86), and Woods and Titmus (1985, p.3) the Simon Cache represents stage reduction from early to late stage manufacture, which may be the primary reason the dimensions are so highly variable. Drawings showing this sequence reduction are depicted in figures 4.13-4.17.

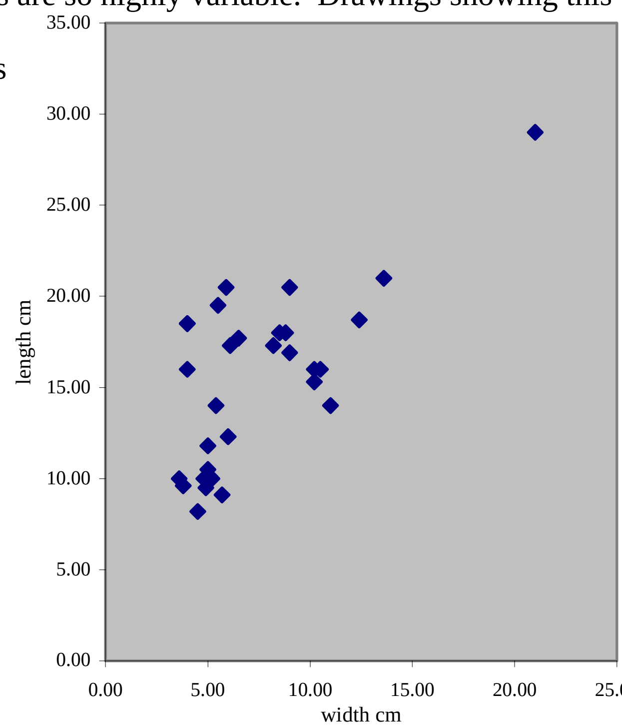


Figure 4.18. Plot showing length and width of Simon Cache

Simon Cache

Figure Number	Length	Width	Maximum Thickness (cm)
4.4a	18.00	8.80	1.70
4.4b	21.00	13.60	1.30
4.4c	14.00	11.00	0.70
4.4d	15.30	10.20	1.80
4.4e	16.00	10.20	2.30
4.5a	17.30	8.20	1.50
4.5b	18.00	8.50	1.50
4.5c	20.50	9.00	1.70
4.5d	16.90	9.00	1.10
4.6a*	17.30	6.10	0.90
4.6b*	20.50	5.90	1.10
4.6c	19.50	5.50	1.20
4.6d	17.70	6.50	1.40
4.7a	18.50	4.00	0.80
4.7b	18.50	4.00	0.90
4.7c	16.00	4.00	0.80
4.7d	10.00	3.60	0.80
4.7e	9.60	3.80	0.80
4.8a	9.50	4.90	0.80
4.8b	12.30	6.00	1.00
4.8c	11.80	5.00	0.90
4.8d	10.00	5.20	1.10
4.8e	14.00	5.40	1.00
4.8f*	10.50	5.00	1.10
4.8g	10.10	5.10	2.20
4.8h*	9.10	5.70	1.30
4.9a	16.00	10.50	1.60
4.9b	18.70	12.40	2.40
4.9c*			
4.10a*	10.00	4.80	1.00
4.10b*	8.20	4.50	1.20
4.10c*			
4.11a	29.00	21.00	2.00
Maximum	**29.00**	**21.00**	**2.30**
Minimum	**8.20**	**3.60**	**0.70**
Mean	**15.28**	**7.34**	**1.29**
Median	**16.00**	**5.90**	**1.10**
Mode	**16.00**	**4.00**	**0.80**
Range	**20.80**	**17.40**	**1.60**
Standard Deviation	**4.65**	**3.67**	**0.47**
Variance	**21.62**	**13.48**	**0.22**

Table 4.1. Shows measurements and calculations of the Simon Cache artifacts. *Artifacts not reported in Butler (1963).

CHAPTER 5

THE ROCK CREEK CACHE

The Site Location

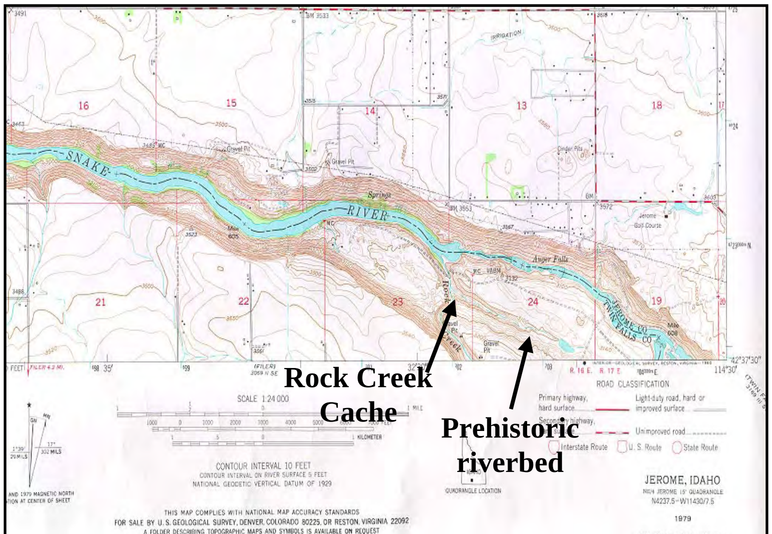


Figure 5.1. U.S. Department of Interior Geological survey showing Rock Creek Cache. Jerome, Idaho Quadrangle. 7.5-Minute series (topographic). 1979.

In December of 1982, two anthropologists, James C. Woods of the College of Southern Idaho and Mark G. Plew of Boise State University excavated the Rock Creek Cache (fig.1.3) in a location near the confluence of the Snake River and Rock Creek (fig.5.1 & 5.2) on a terrace above the old prehistoric Snake River channel (fig.5.3). The Rock Creek is the last tributary that anadromous fish can ascend before reaching Shoshone Falls a few kilometers upstream (Green 1972, p.3). Green (p.92) says, "[the] initial occupation of Rock Creek is estimated to have taken place about 10,500 years ago." The site (fig.5.4) is located in the Snake River Canyon a few kilometers northwest of the City of Twin Falls, Idaho (fig.5.5). The elevation is approximately 915 m ASL (fig.5.1). Both Woods and Plew were under contract with an engineering firm

Figure 5.2. Aerial view looking east of Rock Creek Cache showing prehistoric Snake River Channel. Photograph courtesy of Jack Straughbar.

completing the archaeological survey work prior to the building of a large hydroelectric facility.

The Discovery and Description of the Cache

Figure 5.3. Prehistoric Snake River Channel near Rock Creek Cache.

Figure 5.4. Site of the Rock Creek Cache.

According to Plew and Woods (1986, p.21) they excavated four test pits to depths varying from one meter to 1.5 m below the surface along the proposed pipeline installation and recovered an assemblage of 62 artifacts, and 1,594 items of lithic debitage. Of this total, they excavated from one pit 32 ignimbrite bifaces in a cache located 30-35 cm below the surface (fig.5.6). All of the bifaces are black in color except three that are a reddish brown color, (fig.5.7 & 5.8). Woods and Plew said,

> Their form is generally ovate, cross-sections are relatively thin, and their margins are straight when viewed laterally. It is probable that these were produced entirely by percussion flaking as no clear indication of pressure modification can be detected (p.22).

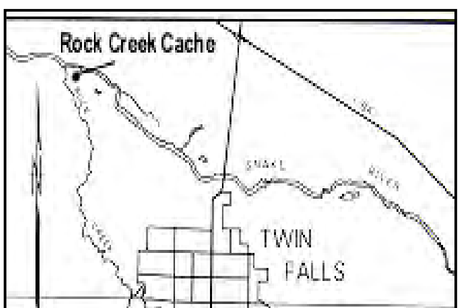


Figure 5.5. Map showing cache location near Twin Falls, Idaho.

The cache showed no visible damage or wear caused by use. One specimen was sent to MOHLAB for source testing and hydration dating. The results indicated that the specimen appears to have been produced from materials from the Hudson Ridge Ignimbrite source near Browns Bench with a hydration date of 872 B.C. ± 181 years (2.94u + 0.97u) (Plew and Woods 1986, p.22; Huntley and Plew 1993, p.20). According to Plew and Woods, the one hydration date that correlates temporally with two probable Elko Point projectiles suggests that the cache of bifaces may have been intended for future production of this type of projectile point (Huntley and Plew 1993, p.20). Nearby they also excavated Desert side-notched, Rose Spring, and Cottonwood projectile points associated with ceramic artifacts suggesting another radiocarbon date at a nearby site between A.D. 1200-1700 (Plew 1981).

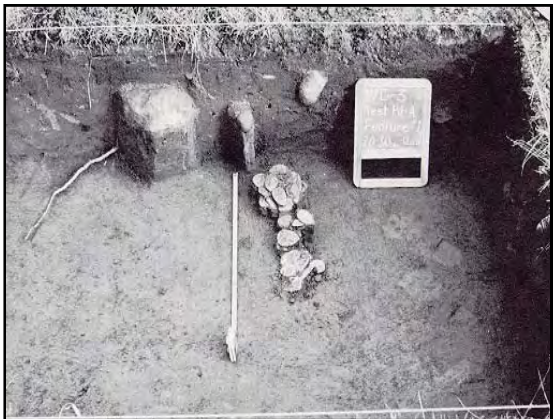


Figure 5.6. Rock Creek Cache *in site*. (Plew and Woods 1986, p.21).

The Dimensions

Table 5.1 shows that the bifaces are very uniform in morphology. The mean length is 5.45 cm with a mean width of 3.48 cm, and the mean maximum thickness of 0.76 cm. The range of length is 1.5 cm with a width range of 0.80 cm, and a maximum thickness range of 0.30 cm. The mean is respectively 5.45 cm, 3.48 cm, and 0.76 cm. The standard deviation is 0.49 for the length, 0.23 for the width, and 0.08 for maximum thickness. The variance is 0.24 for the length, 0.05 for the width, and 0.01 for maximum thickness. The drawing of the Rock Creek Cache produced by Woods (Plew and Woods 1986, p.23) showing the thirty-two bifaces on edge and on side

Figure 5.7. Side A of Rock Creek Cache. (Note: two bifaces are missing)

Figure 5.8. Side B of Rock Creek Cache. (Note: two bifaces are missing)

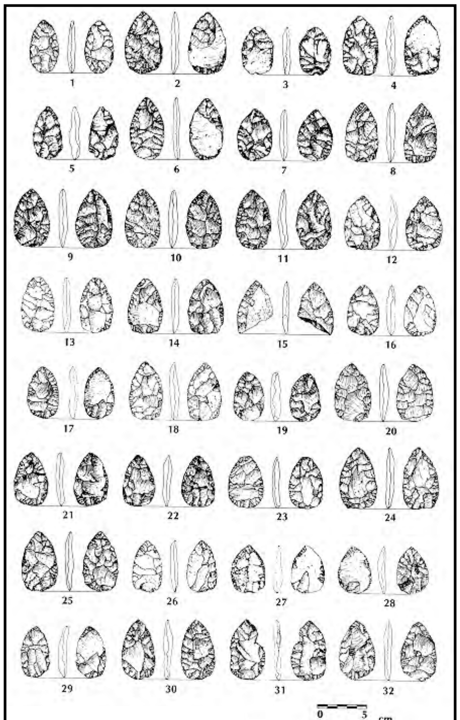


Figure 5.9. Drawings of the Rock Creek Cache. (Plew and Woods 1986, p.23)

is reproduced in figure 5.9. An overlay tool drawing of the Rock Creek Cache is shown in figure.5.10. The drawing is to actual size showing all but two bifaces (10-TF-677-10 & 20, missing since 5/15/92) from the cache. Upon close examination of the tool drawing, it appears that there are two distinct sizes of bifaces with one group being slightly longer than the other group. Whether or not this is significant is unknown. The artificer may have intended that each group of bifaces would eventually be used to produce the same or a different type of projectile point.

Figure 5.11 is a scattergram plot showing the length and width of the Rock

Rock Creek Cache

Specimen Number	Length (cm)	Width (cm)	Maximum Thickness (cm)
10-TF-677-1	5.30	3.00	0.70
10-TF-677-2	6.20	3.80	0.70
10-TF-677-3	4.70	3.40	0.70
10-TF-677-4	6.00	3.70	0.80
10-TF-677-5	5.30	3.20	0.80
10-TF-677-6	6.10	3.50	0.60
10-TF-677-7	5.00	3.60	0.70
10-TF-677-8	6.00	3.40	0.80
10-TF-677-9	5.80	3.70	0.80
10-TF-677-10	5.80	3.70	0.80
10-TF-677-11	5.90	3.20	0.90
10-TF-677-12	5.40	3.70	0.80
10-TF-677-13	5.10	3.40	0.70
10-TF-677-14	5.90	3.70	0.90
10-TF-677-15	5.00	3.80	0.70
10-TF-677-16	5.00	3.40	0.80
10-TF-677-17	5.10	3.20	0.70
10-TF-677-18	5.80	3.50	0.90
10-TF-677-19	4.70	3.20	0.80
10-TF-677-20	5.20	3.80	0.90
10-TF-677-21	5.00	3.40	0.70
10-TF-677-22	5.40	3.50	0.70
10-TF-677-23	5.10	3.50	0.70
10-TF-677-24	6.10	3.80	0.70
10-TF-677-25	6.00	3.50	0.80
10-TF-677-26	5.00	3.10	0.80
10-TF-677-27	4.70	3.50	0.80
10-TF-677-28	4.70	3.40	0.70
10-TF-677-29	5.20	3.00	0.80
10-TF-677-30	6.00	3.50	0.80
10-TF-677-31	6.00	3.70	0.60
10-TF-677-32	6.00	3.60	0.70
Maximum	**6.20**	**3.80**	**0.90**
Minimum	**4.70**	**3.00**	**0.60**
Mean	**5.45**	**3.48**	**0.76**
Median	**5.35**	**3.50**	**0.80**
Mode	**6.00**	**3.50**	**0.70**
Range	**1.50**	**0.80**	**0.30**
Standard Deviation	**0.49**	**0.23**	**0.08**
Variance	**0.24**	**0.05**	**0.01**

Table 5.1. Shows measurements and calculations of the Rock Creek Cache bifaces.

Creek Cache. It is apparent from this chart that the preform bifaces are very similar, and are closely grouped. As shown in the overlay tool drawing (fig.5.10) two distinct groupings emerge in the chart, one group slightly longer in length than the other group.

Figure 5.12 is a plot showing the length and maximum thickness of the Rock Creek Cache. Once again, two distinct groups appear with the longer length group being almost evenly distributed in thickness from .60 cm to .90 cm. The shorter group is almost evenly split in thickness between .07 cm, and .08 cm. Whether or not this is of significance is presently unknown.

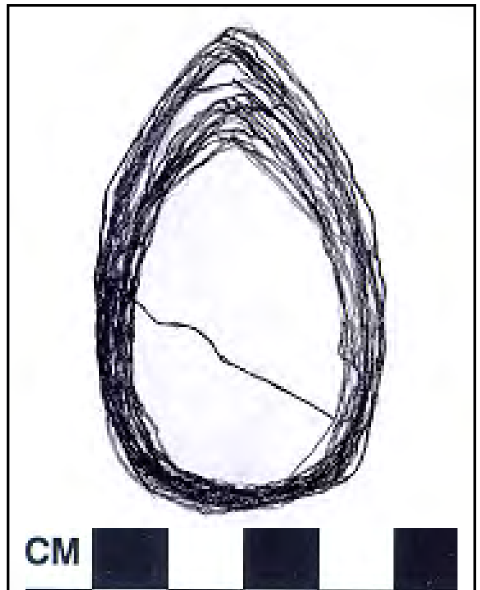


Figure 5.10. Overlay tool drawing of Rock Creek Cache.

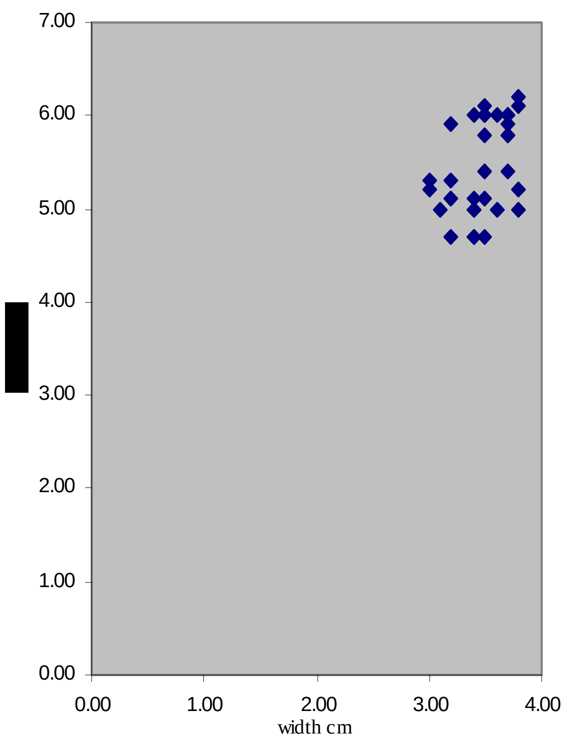


Figure 5.11. Plot showing Length and Width of Rock Creek Cache

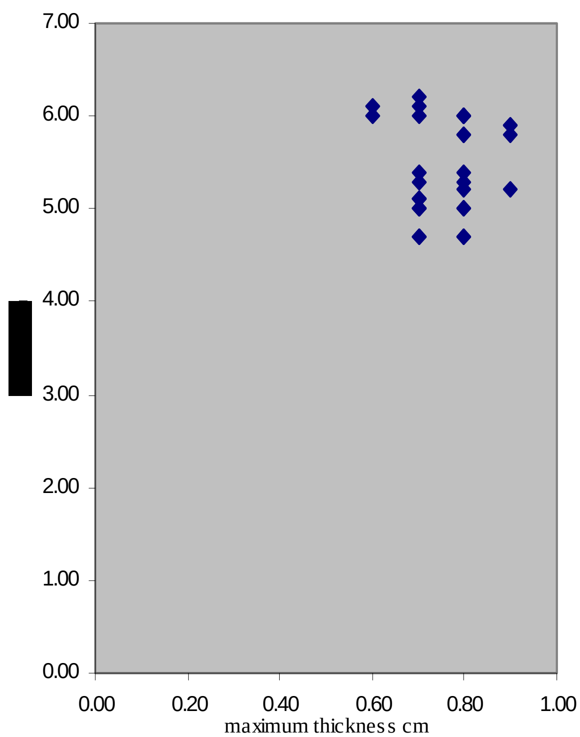


Figure 5.12. Plot showing Length and Thickness of Rock Creek Cache

CHAPTER SIX

THE CEDAR DRAW CACHE

The Location

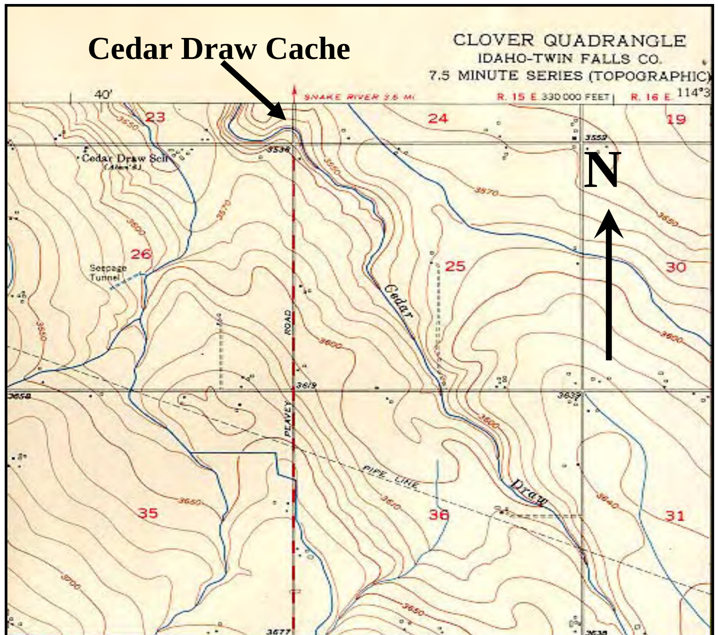


Figure 6.1. U.S. Department of Interior Geological survey map showing location of Cedar Draw Cache. Clover Quadrangle, Idaho-Twin Falls Co. 7.5-Minute Series (Topographic). 1950.

Mr. Larry Malberg sometime prior to December 15, 1993, accidentally discovered the Cedar Draw Cache while he was working on a hydroelectric diversion dam on the banks of the Cedar Draw stream northwest of Filer, Idaho (fig.1.3). According to the U.S Geophysical map (fig.6.1) the elevation at the site is 1296 m ASL. The site (fig.6.2) is located in the southeast corner of Section 23, Township 9 South, Range 16 East Boise Meridian. The Twin Falls County coordinates are approximately 1995 east 4310 north.

Description of the Cache

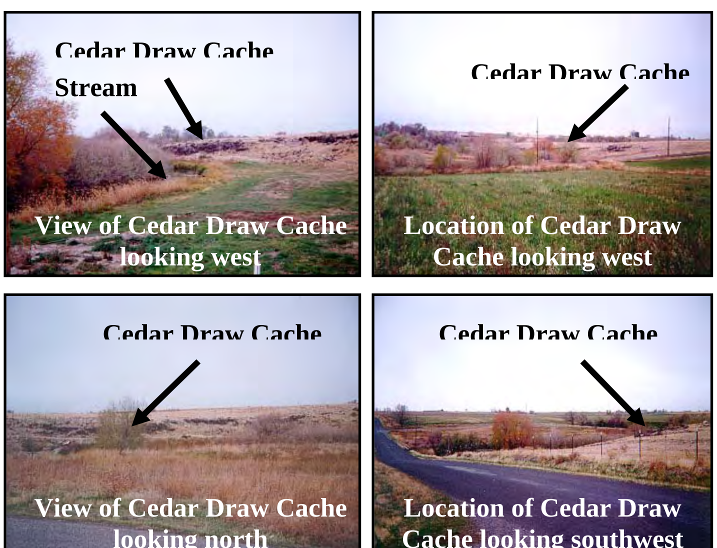


Figure 6.2. Cedar Draw Cache Site.

The Cedar Draw Cache consists of 9 bifaces (figs.6.3 & 6.4). Eight of the ovate bifaces appear to be preforms composed of ignimbrite with one scraper. Due to visible cortex on two of the bifaces, it is suggested that a core flake technology was used in the manufacture of the bifaces. CD-9 appears to be a scraper with a small area of cortex exposed. All of the artifacts show evidence of patination. Preform CD-4 shows a straight flat platform extending from the distal end along the upper right margin of Side A. This straight flat platform appears to be a portion of the original core platform. Preform CD-6 exhibits substantial cortex on one margin (fig.6.4). It is highly probable that the source material for the preforms came from the Hudson Ridge ignimbrite quarry located near Browns Bench approximately 70 km south of the cache site. Source analysis using X-ray fluorescence would confirm this speculation. It is recommended, with Mr. Malberg's permission, that hydration testing be initiated to determine the antiquity of the cache. The workmanship and quality of the cache initially appears to be crude (Crabtree 1972, p.57). On one biface (CD-5) the angle of force appeared to be directed almost straight against the midline with the detached flake leaving a deep termination that almost created a perverse fracture of the biface (p.82). This appears to be the work of a novice manufacturer. It seems that the artificer was impatient and hurried with several step and hinge fractures evident on a majority of the preforms. Upon close inspection the manufacturer removed, in some cases, large flakes—some crossing from one margin almost to the

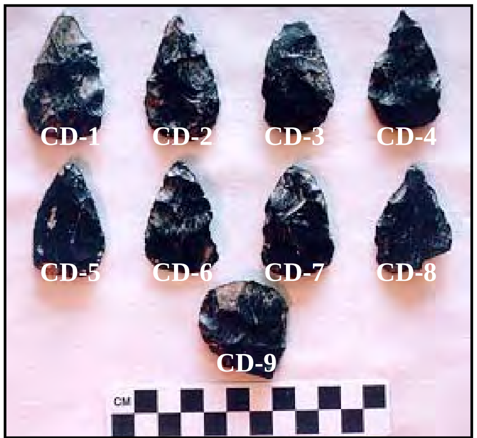


Figure 6.3. Cedar Draw Cache Side A. (Note cortex visible on possible scraper blade CD-9)

Figure 6.4. Cedar Draw Cache Side B. (Note cortex showing on biface CD-6)

opposite margin—in one case completing an overshot flake (Frison and Bradley 1999, p.65) or *outré passé* (Crabtree 1972, p.80). Generally the lateral margins are asymmetrical with most of the flakes being removed in a collateral or oblique fashion. There is evidence of basal thinning. The overlay tool drawing (fig. 6.5) and tool outlines (fig.6.6) of the Cedar Draw Cache indicates the expertise of the manufacturer to produce successive preforms that have small variances in dimensions. The preforms (fig.6.7) are triangular to ovate with almost straight or slightly concave bases at the proximal ends.

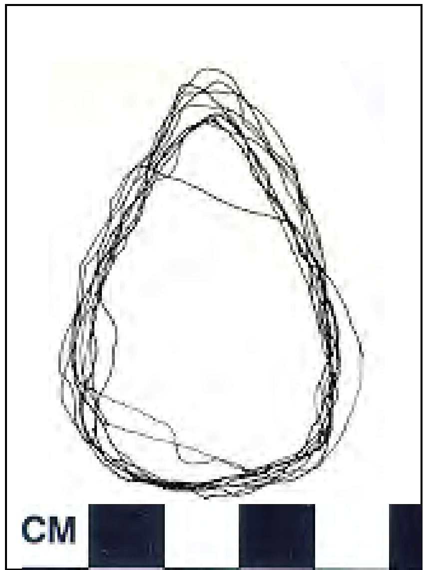


Figure 6.5. Overlay tool drawing of Cedar Draw Cache by J.C. Woods.

The Dimensions

The length, width, and maximum thickness show close correlations suggesting the manufacturer was not an amateur (table 6.1). Artifact CD-3 indicates that the distal end may have been broken. There is no evidence of patina, which suggests the biface surface may have been damaged subsequent to its removal from the cache site. Artifact CD-8 exhibits a fracture of the proximal end. Based on the morphology and typology of the balance of the cache, it is estimated that the original length

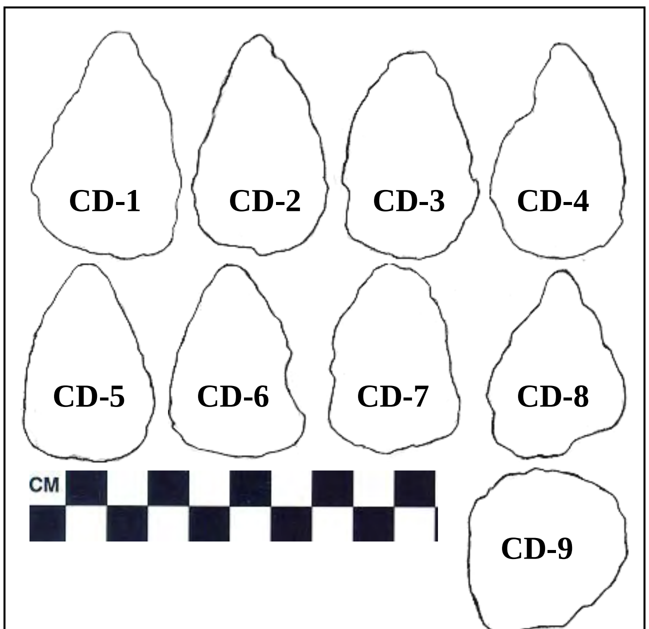


Fig. 6.6. Tool outlines of Cedar Draw Cache.

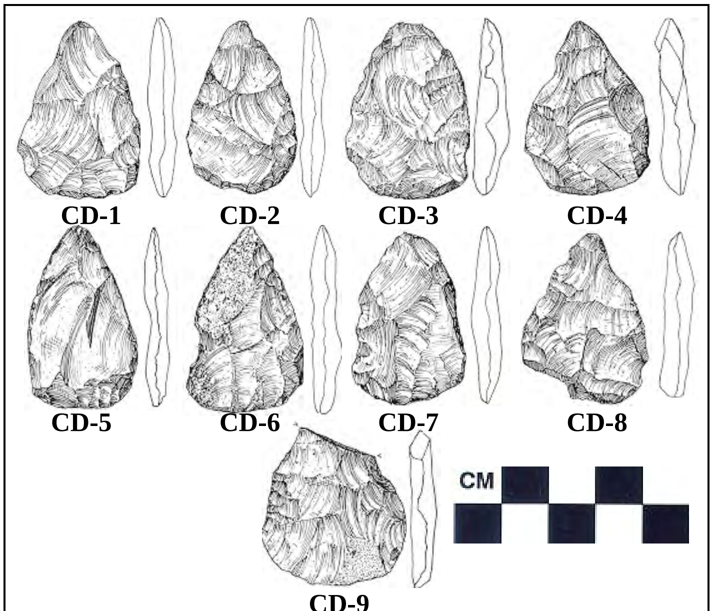


Figure 6.7. Drawings of Cedar Draw Cache by J.C. Woods, Herrett Center for the Arts and Sciences, Twin Falls, Idaho.

of this artifact was similar to the rest of the cache. Artifact CD-9 appears to be a scraper. It does not appear to be a preform for the same type of projectile point as the remainder of the cache.

Statistical calculations (table 6.1) show the mean of the length is 4.97 cm, with the width at 3.39 cm, and the maximum thickness at 0.77 cm. The range of the length is 1.15 cm, with the width at 0.65 cm, and the maximum thickness is 0.10 cm. The standard deviation of the length is 0.37, while the standard deviation of the width is 0.21, and the standard deviation of the maximum thickness is 0.04. Finally, the variance in the length of the artifacts is 0.14, with the variance of the width at 0.04, and the maximum thickness variance is 0.00.

Figure 6.8 is a scattergram plot showing the length and width distribution of the cache while figure 6.9 shows the distribution of the length and maximum thickness of the cache bifaces. The plots confirm that the cache artifacts are statistically very close in shape and size with no significant variance in the maximum thickness. The data indicates that the cache was manufactured by one artificer in a single event who was highly skilled, and was purposely preparing blank preforms for a specific type of projectile point.

In the next chapter, the China Creek Cache will be described in detail examining the morphology, technology, and raw material attributes of the collection. Detailed analyses will demonstrate the probability that this cache was also manufactured in a single event by one toolmaker.

Cedar Draw Cache

Specimen Number	Length (cm)	Width (cm)	Maximum Thickness (cm)
CD-1	5.60	3.70	0.80
CD-2	5.40	3.40	0.70
CD-3	5.00	3.25	0.80
CD-4	5.30	3.30	0.75
CD-5	4.80	3.15	0.75
CD-6	4.80	3.25	0.80
CD-7	4.80	3.25	0.80
CD-8	4.55	3.40	0.70
CD-9	4.45	3.80	0.80
Maximum	**5.60**	**3.80**	**0.80**
Minimum	**4.45**	**3.15**	**0.70**
Mean	**4.97**	**3.39**	**0.77**
Median	**4.80**	**3.30**	**0.80**
Mode	**4.80**	**3.25**	**0.80**
Range	**1.15**	**0.65**	**0.10**
Standard Deviation	**0.37**	**0.21**	**0.04**
Variance	**0.14**	**0.04**	**0.00**

Table 6.1. Shows measurements and calculations of the Cedar Draw Cache bifaces.

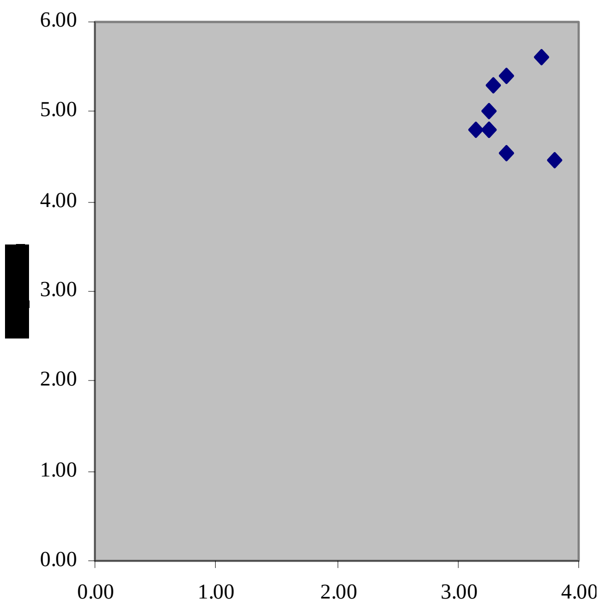


Figure 6.8. Plot showing Length and Width of Cedar Draw Cache

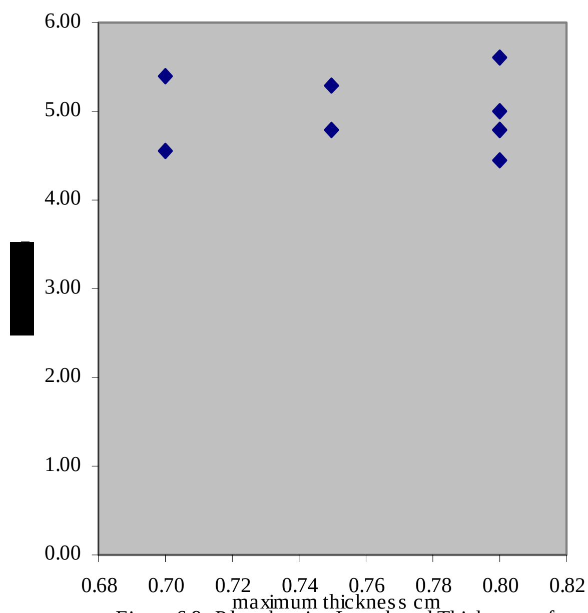


Figure 6.9. Plot showing Length and Thickness of Cedar Draw Cache

CHAPTER SEVEN

THE CHINA CREEK CACHE

The Discovery and Location

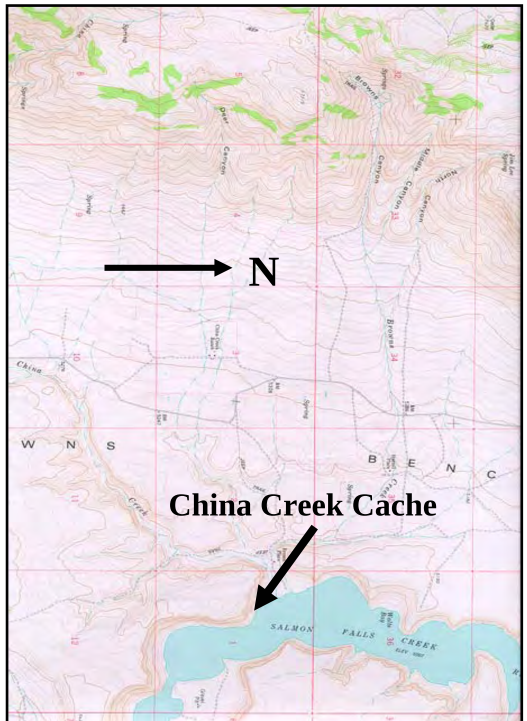


Figure 7.1. U.S. Department of the Interior Geological survey showing location of China Creek Cache site. Browns Bench, South Quadrangle. Idaho-Nevada 7.5 minute series (Topographic). 1977.

In 1982, Joan Fay accidentally discovered the China Creek Cache at the confluence of China Creek and Salmon Falls Creek near the headwaters of Salmon Dam Reservoir (pers. comm. Joan Fay, 10/26/00). This location (fig.1.3) is part of a larger area known as Browns Bench (fig.7.1) located approximately 32 km southwest of the village of Rogerson, Idaho. The cache was located in Township 16 South, Range 14 East Boise Meridian: Section 1, Northeast ¼, Southwest ¼, Northwest ¼, (fig.7.2) on a sandy beach below an escarpment on the south side of China Creek and the west side of Salmon Falls Creek at approximately 1555 m ASL. A large irrigation dam was built downstream in 1910 placing the site underwater—except in the early spring and again after the irrigation season is completed in the fall. The site was personally inspected on October 29, 2000 with anthropologist James C. Woods of the Herrett Center for Arts and Sciences. The site is located on a low slope providing a view up China Creek, and up and down Salmon Falls

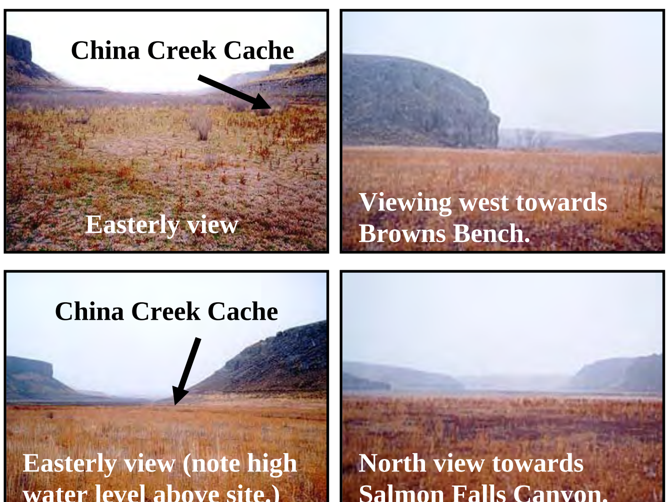


Figure 7.2. China Creek Cache Site.

Figure 7.3. China Creek Cache side A.

Creek (fig.7.2). According to Gary Fay (pers. comm. 10/26/00) this is the only good crossing for several miles across the Salmon Falls Canyon and could possibly have been a major migratory path for the Paleo-Americans. Bowers and Savage (1962, p.18) said, "The broad valley in which Salmon Falls Creek is located must have been desirable as a route of travel for early man between the Great Basin to the south and the Snake River plains on the north."

Figure 7.4. China Creek Cache side B.

According to Gary Fay, the first lithic biface, (CC-1) (figs.7.3 & 7.4) was discovered at coordinates 18.5° north and 4.5° east. Approximately 1/3 of the base was found exposed at an angle to the surface, lying on edge. Lying directly beneath the first biface, another biface, (CC-7) was found on edge. Both bifaces were pointing southeast. The Fays excavated to a maximum depth of 20 cm. Below 13 cm the brown clay was mixed with .6 cm aggregate of sand. On April 4th, Joan Fay discovered, at coordinates 19° north and five degrees east, a cache of three bifaces pointing to the southeast—each lying flat on top of each other, 7.5 cm below the surface. The upper (CC-2) and lower (CC-4) blanks were a moss color with a white blank (CC-3) in the middle (figs.7.3 & 7.4). On April 10th, another blank (CC-5) was retrieved 6.2 cm below the surface at coordinates 18.5°north and 3.5° east. The biface was lying at an angle pointing towards the southwest. On April 11th, a biface (CC-6) was discovered at coordinates 21.5° north and three degrees east lying five cm below the surface. It was gray in color and also pointing toward the southwest. Seven lithic bifaces were found in the cache. The bifaces are exhibited in the tool drawing in figure 7.5. Nearby, a broken biface blank (CC-9) (figs.7.6 & 7.7), a small scraper (CC-10)—dark red in color, possibly made from chalcedony or Jasper—and a gray chalcedony or chert biface (CC-8) resembling a lanceolate point were discovered. A tool drawing of these three artifacts is exhibited in figure 7.8. Even though these artifacts were not directly located with the rest of the cache, it is not conclusive that they are not part of the original cache. Except for the scraper, I have elected to include these artifacts in this analysis.

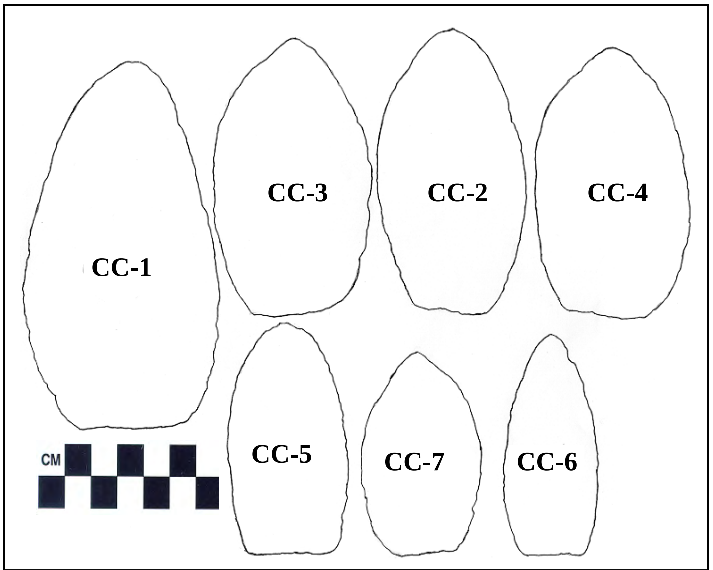


Figure 7.5. Tool outline drawing of China Creek bifaces.

Figure 7.6. China Creek Cache fragments side A.

Measurements and Description of Cache

Measurements of the China Creek Cache showing length, width, and maximum thickness are displayed in Table 7.1. The morphology of the original seven bifaces appears to be somewhat similar to each other (fig.7.5). The distal ends are all broad except one blank that is more obtuse (CC-5). The nine artifacts

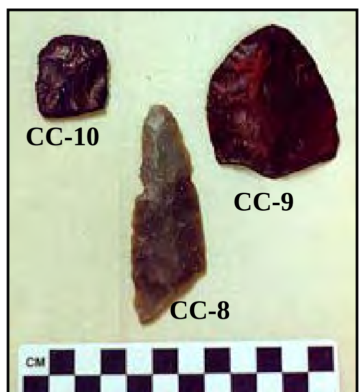


Figure 7.7. China Creek Cache fragments side B.

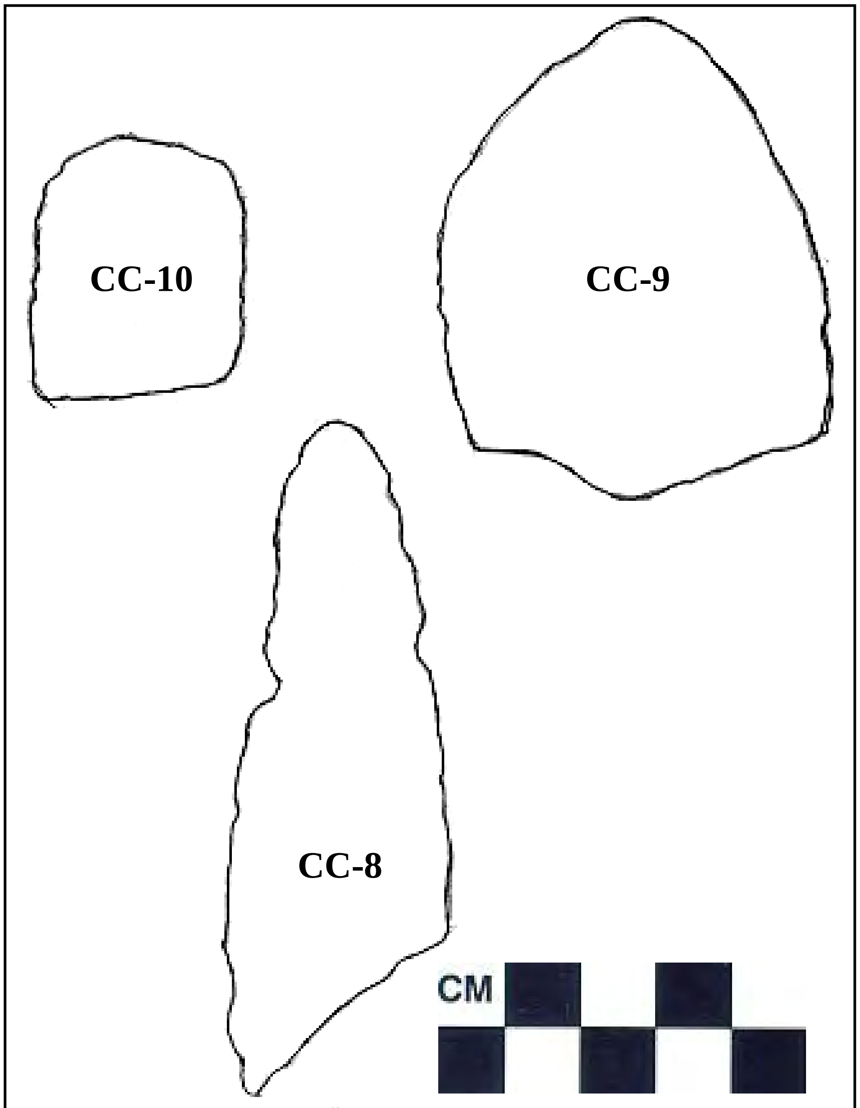


Figure 7.8. Actual size tool drawings of China Creek fragments found at or near cache site.

appear to be made from the cryptocrystalline quartz family, either chalcedony or chert (Overstreet 1999, p. 16). All of the bifaces are translucent. The lateral margins of each blank are asymmetrical, except for CC-6 & CC-8, while the bases are generally straight. According to Woods (pers. comm. 11/8/00) the straight basal form is unusual for this region. The Braden Cache (Muto1971, fig.24) and Weston Canyon Rockshelter (fig.30) show blanks with straight bases, while the nine Sterling Cache biface blanks exhibit straight bases in almost all of the artifacts (Pavesic 1966, p.57). In Muto (1970, p.116), illustrations of the Spring Creek Cache depict several blank/preforms with almost straight bases. Generally, biface bases are concave or convex, but the area cache examples shown above seem to indicate otherwise.

The largest biface in the China Creek cache (CC-1) is white beige in color and appears to be made from chalcedony. The surface has a wax-like luster and is translucent, typical of chalcedony (Crabtree 1972, p.51). Humans may have caused the wax-like luster due to handling, or by thermal alteration (Crabtree 1972). Under magnification, a reddish residue was noted on the surface. The same residue is evident on bifaces CC-3 and CC-7. It is possible that this residue is red ochre (iron oxide) or heating the artifact may have caused the redness (Wiseman et al. 1994, p.68). There is no evidence of pressure flaking along the margins, only collateral flaking, and a few minor step fractures. Initially it appeared that a portion of the margin had been pressure flaked. After careful examination under magnification it was determined this was not the case. On side B (fig.7.4), a pearl-like inclusion is protruding near the distal end. It is evident that the manufacturer attempted to remove the inclusion. One strike from the margin at an approximately 45° angle ended in a step fracture when it reached the inclusion. The manufacturer's failure to remove this inclusion leaves the area nearest the distal end thicker by .30 cm than the balance of the blank. The entire surface is pitted with small vesicular cavities and multiple white circular spots. Side A (fig.7.3) exhibits signs of patination. On side A the artificer successfully removed the embedded inclusion near the distal end.

Blank CC-2 shows no evidence of patina on either side and exhibits a grayish hue with dark-brown banding. The same minute white inclusions and pitting are evident over the surface. The distal end appears to show minimal evidence of pressure flaking. Approximately 3/4 down one margin near the base, a collateral flake was removed ending in a hinge fracture. The proximal end of the flake followed a straight fracture along the entire length of the flake leaving a large, almost vertical, protrusion. The fracture crack extends through the blank for almost one cm., and is most likely an incipient crack. A harder blow by the manufacturer may have destroyed the blank.

The blank CC-3 is almost pure white chalcedony with a waxy luster, exhibiting very few perceptual impurities. Patination is visible with a tint of red-like markings, which under magnification may be ochre residue. The residue appears to be on the surface of the artifact and not embedded (Woods, pers. comm. 1/12/01). Further examination is necessary to determine if this assumption is accurate. The biface has serrated edges on both lateral margins that appear to have been pressure flaked. The lateral margins extending from the distal end towards the base are asymmetrical with one margin more excurvated than the opposite margin. This blank exhibits a high level of craftsmanship by the manufacturer.

Biface CC-4 is almost identical to CC-3 in shape, size, and thickness. This artifact is made of chalcedony with a grayish hue and dark-brown banding. A waxy luster is also evident on the surface. Side B exhibits serrated edges with a large shallow step fracture on the right margin near the corner of the base.

Biface CC-5 is made of white beige chalcedony similar to CC-1, CC-2, and CC-4. Side A has several small-embedded circular white inclusions with some minute pitted cavities. The distal end is obtuse and there is no evidence of pressure flaking. One lateral margin is straighter and asymmetrical to the excurvated opposite margin. Side B (fig. 7.4) exhibits patina with several of the identical characteristics of side A.

Biface CC-6 is symmetrical and is manufactured from a grayish chalcedony with small streaks of beige through portions of the biface. This preform appears to be a partially completed projectile point without notching. Side A shows evidence of patina. Two pitted inclusions are located near the right margin in the medial section. It appears that the manufacturer had difficulty removing flakes in this area, thereby leaving a high point on the surface of the preform and three step fractures. Near the base in the right margin the manufacturer removed several long flakes that extended past the center arrisis. Near the distal end on the left margin is a nick in the edge. It is not known whether this was caused by the manufacturer or damaged at a later date.

Biface CC-7 is made of the same material as CC-6. The artifact exhibits a waxy luster with no apparent patination. The distal end is more acute with Side A showing what appears to be pressure flaking on the right margin. The right lateral margin is more excurvated than the left lateral margin. The left margin has a dominant hinge fracture at the medial section at a 90° angle with a step fracture located directly below at a 45° angle. Upon cursory examination, Side B appears to have red ochre on its surface. The right margin does not appear to be pressure flaked, while the left margin is pressure flaked with a minute hinge fracture at the medial section.

Artifact CC-8 (figs.7.6 & 7.7) appears to be a partially completed lanceolate biface of unknown type. According to Joan and Gary Fay it was discovered within 30 m of the cache. It appears to be manufactured from translucent gray chalcedony and exhibits a more grayish hue different than the rest of the cache. Since it was not found directly with the cache, it is possible that it was never part of the original cache. It is the narrowest and one of the longer artifacts even without the missing proximal end (Table 7.1). The proximal end has been broken off in the past diagonally from the lateral margins. The distal end is obtuse and the surface is embedded with minute circular white inclusions similar to the other cache artifacts. Side A (fig.7.6) shows some minor areas of patination. Above the medial section of the right lateral margin is a hemispherical notch that appears to have been unintentional and may have been a mistake by the manufacturer. No pressure flaking is evident on the artifact. The manufacturer appears to have been experienced by removing several sizable flakes to the piend and beyond. The large collateral flake removal is somewhat indicative of the technique used in manufacturing a Clovis point.

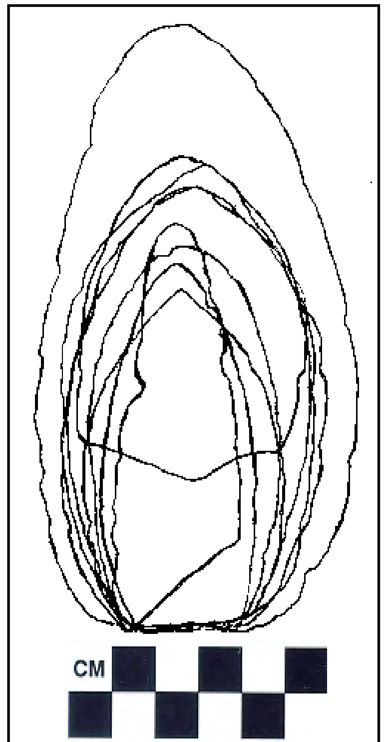


Figure 7.9. Overlay tool drawing of China Creek Cache excluding CC-10.

Biface CC-9 (fig.7.6 & 7.7) is most likely made of a reddish chalcedony or jasper. It appears to be a scraper. This artifact was found approximately 5.5 m outside of the cache site. Upon examination and comparison with the other bifaces in the China Creek Cache it is more probable that this artifact was intended to be included as part of the cache when it may have been accidentally fractured by the manufacturer. When included in the overlay tool drawing with the rest of the cache, its dimensions compare closely to artifacts CC-2, CC-3, and CC-4 (fig.7.9).

Analysis and Measurements

Although the China Creek bifaces vary in length and width, they are similar in their method of manufacture, except for the lanceolate point. The China Creek Cache measurements showing length, width, and maximum thickness is shown in Table 7.1. The means and ranges of the length, width, and maximum thickness indicate that the

China Creek Cache			
Specimen Number	Length (cm)	Width (cm)	Maximum Thickness (cm)
CC-1*	13.20	7.35	1.50
CC-2	10.10	5.65	1.00
CC-3	9.90	6.00	1.00
CC-4	9.60	5.85	0.95
CC-5	8.35	4.50	0.75
CC-6	7.90	3.50	0.70
CC-7	7.30	4.50	0.90
CC-8	8.80	2.90	0.80
Maximum	**13.20**	**7.35**	**1.50**
Minimum	**7.30**	**2.90**	**0.70**
Mean	**9.39**	**5.03**	**0.95**
Median	**9.20**	**5.08**	**0.93**
Mode	**#N/A**	**4.50**	**1.00**
Range	**5.9**	**4.45**	**0.80**
Standard Deviation	**1.71**	**1.36**	**0.23**
Variance	**2.92**	**1.85**	**0.05**

*Without inclusion near distal end thickness would be 1.20 cm.
Table 7.1. Shows measurements and calculations of the China Creek Cache bifaces. (excluding CC-9 & CC-10)

cache artifacts exhibit substantial variation with the exception of bifaces CC-2, CC-3, and CC-4. The scattergram plot (fig.7.10) of the length and width also shows this variation.

The standard deviation is 1.71 for length, 1.36 for width, and 0.23 for the maximum thickness. The variance is 2.92 for length, 1.85 for width, and 0.05 for maximum thickness. The higher standard deviations, and variances indicate the variability of dimensions exhibited within the cache. Like the Cedar Draw Cache, the paucity of sample size is statistically problematic. The tool outlines of the China Creek Cache (figs.7.5, 7.8, & 7.9), and the photographs of the cache (figs.7.3, & 7.6) also illustrate the variability of size within the cache.

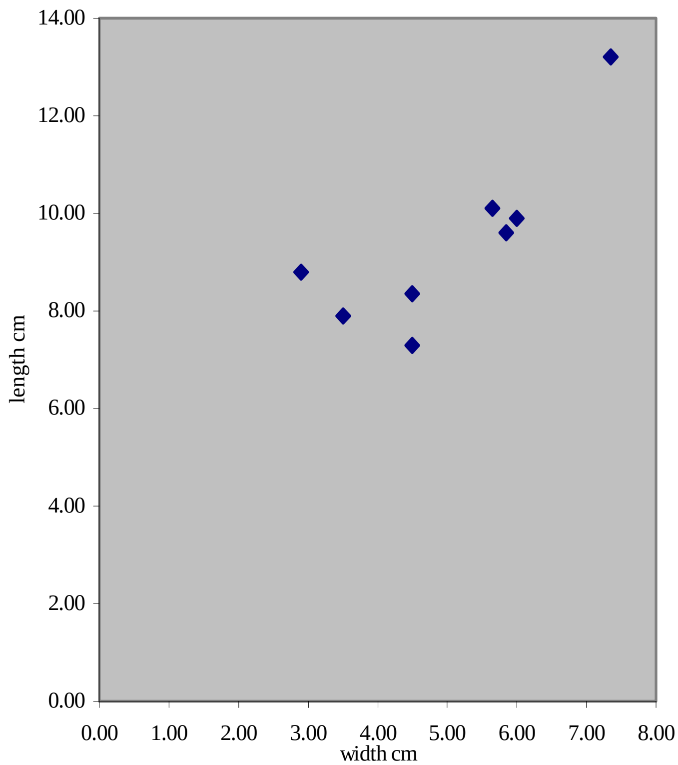
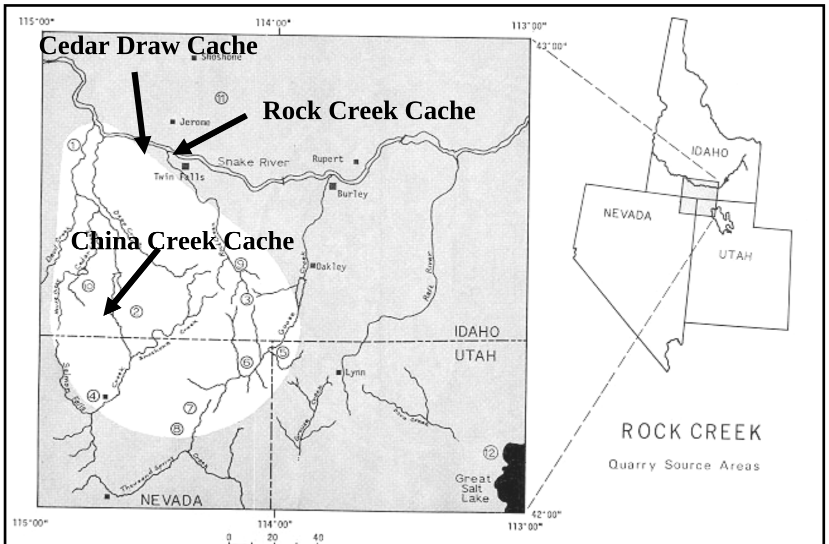


Figure 7.10. Plot showing Length and Width of China Creek Cache.

The photographs show the variability of color indicating that exotic material may have been used in manufacturing this cache. At the Puntutjarpa Rockshelter in the Western Desert of Australia it was found that even though technically superior stone was readily available locally, non-local chert was used for tool making purposes (Gould and Saggers 1985, p.118). Within this study area, the same selection for raw material sources is observed. Some of the Simon Site bifaces are made of fine, imported chert from the Cannonball Mountain source located 19.3 km to the north of the cache. It is also possible that the chalcedony material was procured for the China Creek Cache within proximity of the cache site (fig.7.11), or from the nearby Owyhee area (Huntley and Plew 1993, p.19). The answer to the source of the material used in the China Creek Cache will never be known without accurate sourcing of nearby quarries. Except for the



1. Lower Salmon Falls Creek. Materials: White to white-brown chalcedony.
2. Rabbit Spring. Materials: Mottled red and clear chalcedony.
3. Porcupine Spring. Materials: Yellow jasper.
4. Contact, Nevada Locality. Materials: Quartz crystal, seam and crystal.
5. Elquist Ranch Locality. Materials: Chalcedony, agates and fibrous bog replacements.
6. Rancho Grande Area. Materials: White, brown and brown and white agates and chalcedonies.
7. Opal Spring Locality. Materials: Red chalcedony, bog replacements and opalized wood.
8. Texas Spring Locality. Materials: Petrified wood, chalcedony, agates and fibrous bog replacements.

Archeological Sites Located on Map

9. The Rock Creek (upper)	10. Browns Bench Locality
11. Wilson Butte Cave	12. Hogup Cave

Figure 7.11. Map depicting quarry source areas of cryptocrystalline materials. (Green 1972, Figs. 33 & 34)

lanceolate point, this analysis demonstrates that a single artificer in a single event likely manufactured the China Creek Cache. The number of minor manufacturing errors (step and hinge terminations) is consistent from biface to biface. The general morphological attributes such as flaking technique, tool outline, and basal form are similar, and the materials, even though they vary somewhat in color, all appear to be from the same quarry source as shown by the small, vesicular inclusions and consistency of luster.

CHAPTER EIGHT

CACHE SIMILARITIES AND DIFFERENCES

Cache Similarities and Differences

The Simon, Rock Creek, China Creek, and the Cedar Draw Caches have few similarities with each other. They were all hidden within the landscape to avoid detection, and located near a water source that provided visibility of the surrounding terrain. Little or no debitage was reported near the cache sites, and none of the caches have been associated with osteological matter. With the exception of similarities between the Rock Creek Cache and the Cedar Draw Cache, the caches are significantly different from each other (fig.8.1).

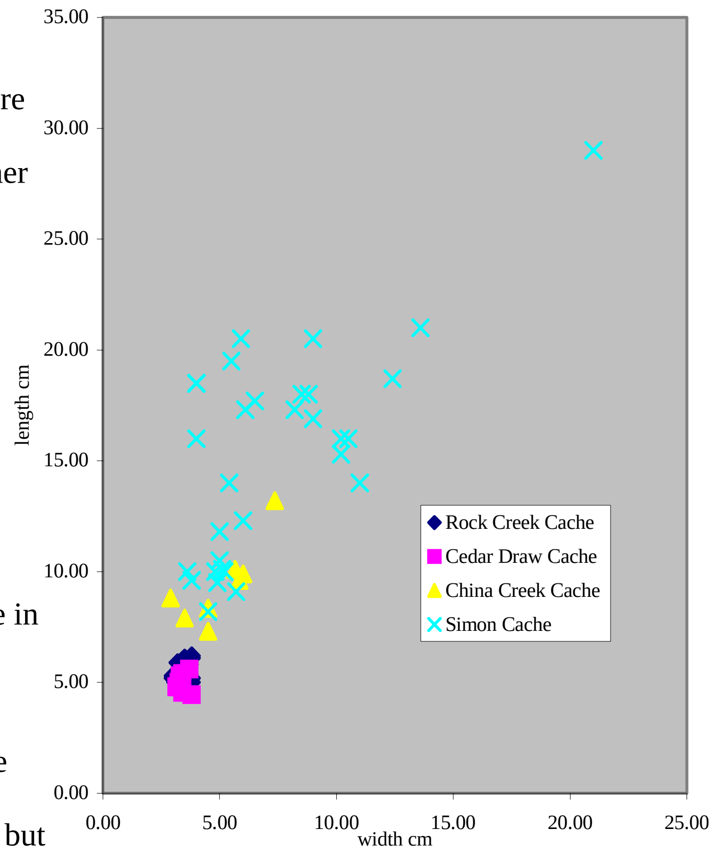


Figure 8.1. Plot showing length and width of caches.

The Simon Cache has been determined to be a Clovis cache placing it in the cultural continuum from 11,200 - 10,900 R.C.Y.B.P., making it the oldest site in addition to being technologically different from the other caches. The China Creek Cache cannot be dated but like the Simon Cache, it appears to represent a different morphological typology than the other caches. Due to tool size and morphology, the China Creek Cache appears to be older than the Rock Creek Cache and the Cedar Draw Cache. The scattergram in figure 8.1 also demonstrates a decrease in size of bifaces through the cultural time continuum from the Clovis culture to 3000 B. P. when the bow and arrow was introduced (Thomas

1978, as cited by Kelly 1988, p.730). The Simon Cache site and the China Creek site were both discovered within 31 m (1524 m and 1555 m ASL respectively) of the same elevation on opposite ends of the area of study (fig.1.3). Both Cache sites were located on a slight slope. Muto (1971, p.85), and Woods and Titmus (1985, p.3) concluded that the Simon Cache artifacts represented a depiction of stage reduction from early to late stage production of projectile points (figs.4.13-4.17). The Simon Cache is more closely associated with another Clovis cache—the Fenn Cache— (figs.8.2 & 8.3) than the other caches. The Fenn Clovis Cache also exhibits a technical sequence from the least-finished

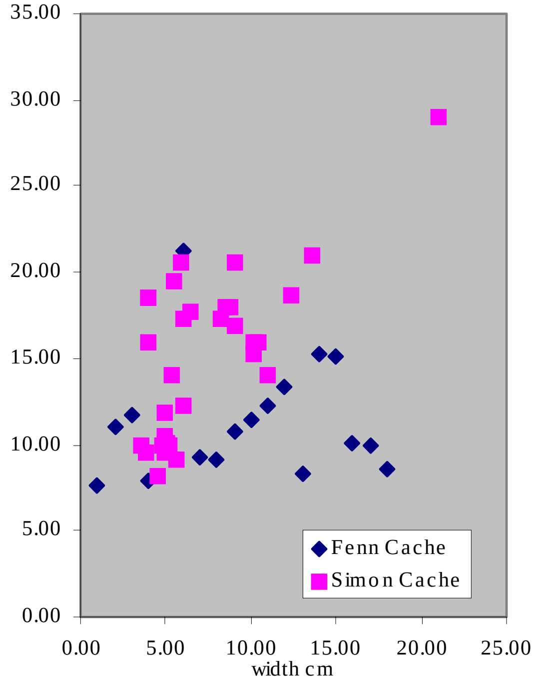


Figure 8.2. Plot showing Simon Cache and Fenn Cache artifacts.

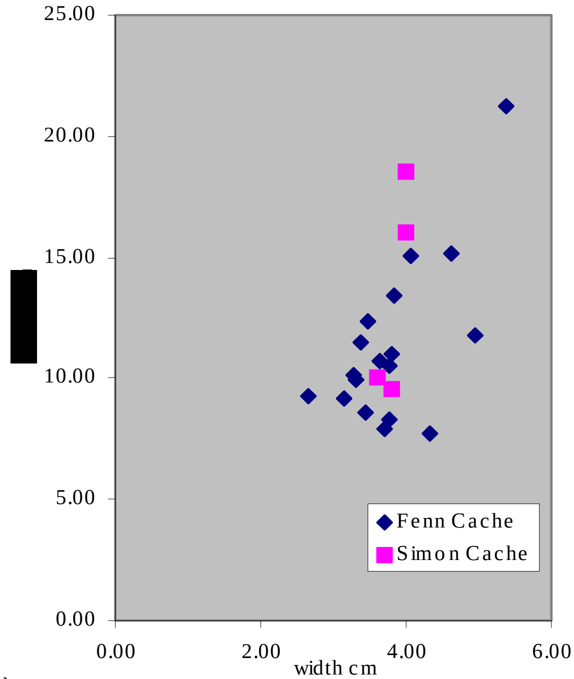


Figure 8.3. Plot showing length and width ratios of Clovis points.

artifacts to finished points (Frison and Bradley 1999, p.78). There are substantial differences in typology and morphology between the Simon Cache and the China Creek Cache (figs.4.4-4.11, & fig.7.3). Both of these caches exhibit a high range in dimensions within their respective caches. However, the China Creek Cache varies in smaller dimensions than the Simon Cache (fig.8.1). Upon cursory examination it appears that the China Creek Cache exhibits stage manufacture reduction characteristics. The early stage reductions have already been completed outside the cache, with the cache representing only final stage blank/preform bifaces. Due to the paucity of the China Creek Cache and the similarity of thickness with all of the China Creek cache bifaces, examination results indicate this may be a premature judgment.

The China Creek Cache is more closely related to the bifaces in the Sterling Cache (see page 11) located nearby than the other caches (figs.8.4 & 8.5). One of the blank bifaces in the China Creek Cache (CC-5) is vaguely reminiscent of a Goshen-Plainview biface sans fluting (Bonnichsen 2000, p.9). Both bifaces exhibit obtuse distal ends, excurvated along the upper lateral margins and slightly incurvated below the medial towards the proximal end. This association is most likely isomorphic or is an anomaly with no supporting evidence. Closer examination by other experts is recommended to explore possible associations with other culture groups.

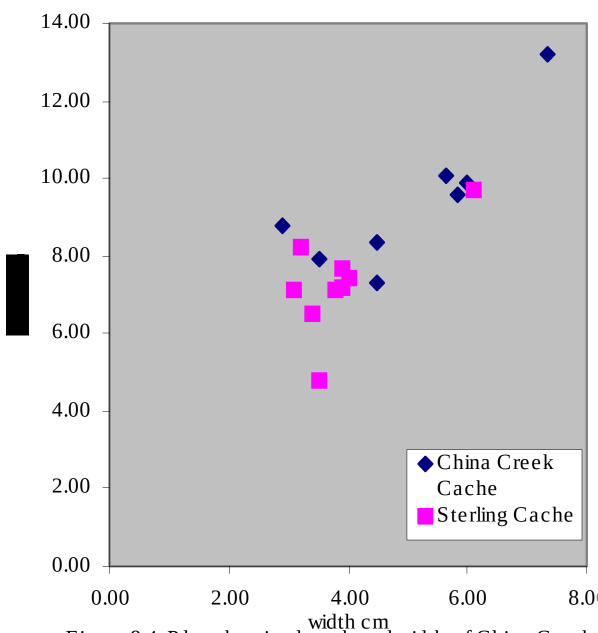


Figure 8.4 Plot showing length and width of China Creek and Sterling Caches.

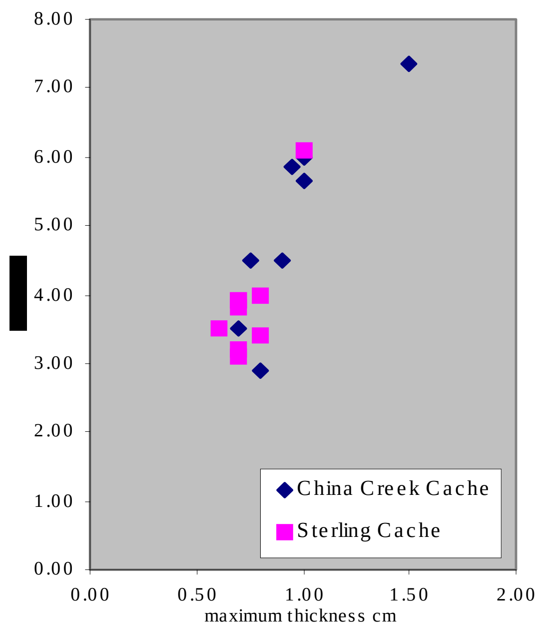


Figure 8.5. Plot showing width and thickness of China Creek and Sterling Caches.

Comparison of the Rock Creek Cache and the Cedar Draw Cache

The Rock Creek Cache and the Cedar Draw Cache is manufactured from ignimbrite, a local variant of obsidian, by a flake core technology. The Rock Creek Cache, based on one source affinity test, indicated it was made from material located at the Hudson Ridge Ignimbrite source near Browns Bench (Plew and Woods 1986, p.22). The Cedar Draw Cache may originate from the same quarry location, but only source analysis of the Cedar Draw Cache will confirm this speculation conclusively. The Rock Creek Cache and the Cedar Draw Cache bifaces are homogeneous and compare very closely with each other in length, width (figs.8.1, 8.6 & 8.8), and maximum thickness (fig.8.7) indicating they may be blanks for the same type of projectile—possibly an Elko point series (Plew and Woods 1986, p.22). Since ignimbrite is a non-exotic material and is

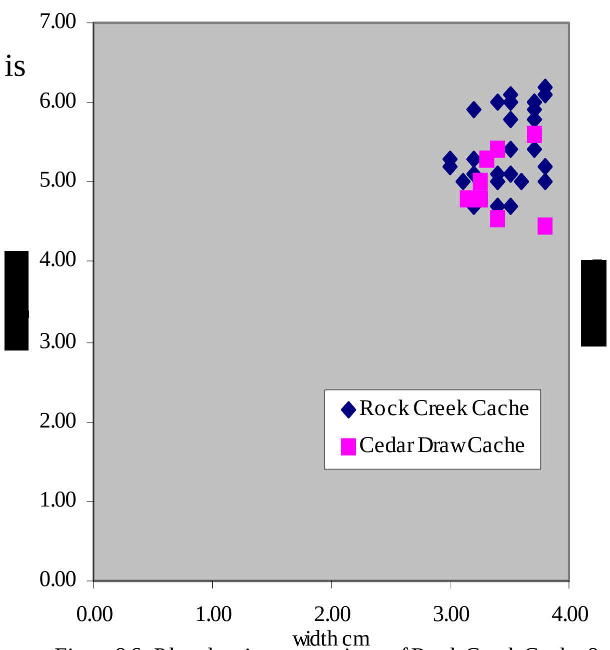


Figure 8.6. Plot showing comparison of Rock Creek Cache & Cedar Draw Cache

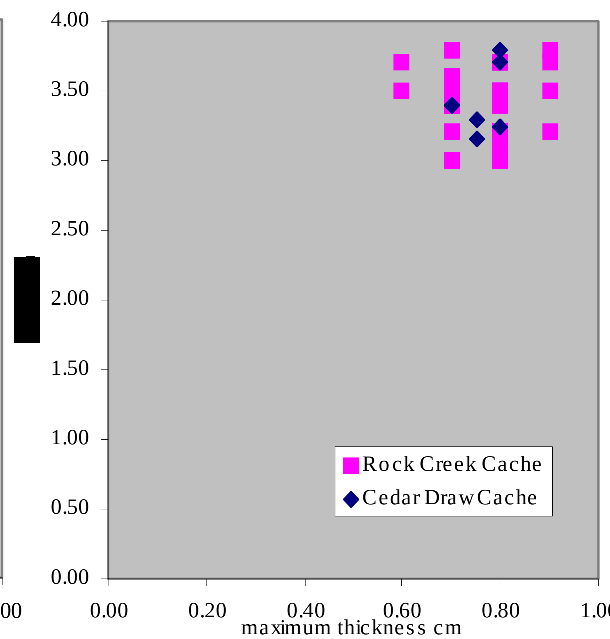


Figure 8.7. Plot showing width and thickness of Rock Creek and Cedar Draw Caches.

obtainable from local sources in abundance, it appears that these two caches were intended to be utilitarian caches to be retrieved for a supply of new projectile points (Hughes 1994, p.371; Jackson and Ericson 1994, p.407). Galm (1994, p.282) said, "In

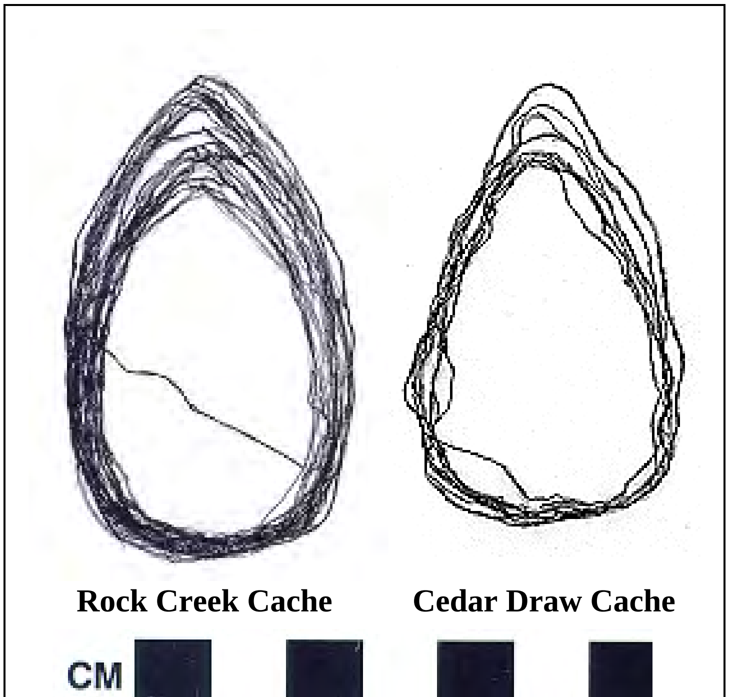


Figure 8.8. Overlay tool drawing of Rock Creek & Cedar Draw Caches

the vast majority of prehistoric contexts obsidian [ignimbrite] occurs as utilitarian implements, particularly projectile points, bifaces, and waste flakes." Both caches were located in proximity to each other (11.2 km), with the Cedar Draw Cache lying almost due west of the Rock Creek Cache (fig.8.9). It is presently unknown if the proximity between the caches is significant.

Statistical Analysis

A level of significance of .05 for hypothesis testing was selected with a double-tailed T test using the statistical data from both caches. The T test results were 0.01072373 for the length, 0.2954079 for width, and 0.794699313 for thickness. The T test analysis shows the closer the value is to 1.0 the higher the probability that the means are not significantly different, and that

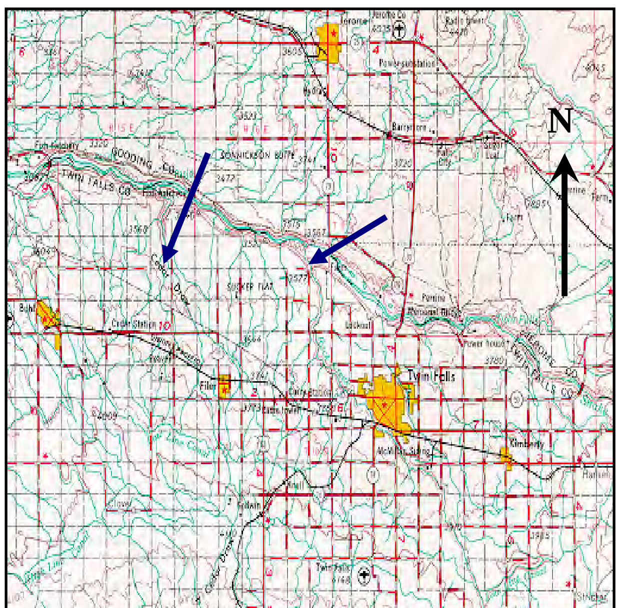


Figure 8.9. U.S. Department of Interior Geological Survey, Twin Falls, Idaho, Quadrangle showing location of Rock Creek and Cedar Draw Caches. 1962 revision.

any apparent difference is attributable to chance alone. The double-tailed T test indicates that there is no significant difference between the width and maximum thickness of the Rock Creek and Cedar Draw Caches. An F Ratio test was used to compare the variances. The closer the result is to 1.0, the more similar the samples are to each other. The F Ratio for length is 1.7, for width 1.22, and for maximum thickness the F Ratio was 3.70. The paucity of the Cedar Draw data is problematic, and may possibly skew the statistical results used to determine similarities and relationships between the two caches.

CHAPTER NINE

DISCUSSION AND CONCLUSIONS

The Simon Cache as a Burial Site

What purpose did these four caches provide for the cultural groups that placed them into the landscape? A preponderance of publications tends to attribute the Simon Cache to a burial site. According to Pavesic (1985, p.59), stone tools that are recovered from mortuary sites in the Weiser Basin of Idaho show little sign of wear and are normally enlarged and out of proportion to artifacts recovered from non-mortuary sites. It has been suggested that several of the Simon site artifacts are much larger than usual, leading to a belief by some that the Simon Cache was a burial site (Pavesic 1985). Pavesic also maintains that the large cache blades [bifaces] associated with burials are believed to represent a finished form (p.68). Pavesic (1985, p.79), and Muto (1970, p.115) suggest that the stage reduction sequence exhibited in some burial caches was intended to be used by the deceased for hunting and warfare in the afterlife with the finished artifacts acting as templates for the unfinished objects.

Pavesic also indicated that burial sites in the Weiser Basin are almost always located on a knoll or high point (1985, p.59). Butler (1963, p.23) reported that the Simon site was located on a low rise on the Big Camas Prairie. The site is actually located on flat ground with very little slope (figs.4.1 & 4.3). Bonnichsen (1977, as cited in Woods and Titmus 1985, p.6) believes the site is a burial location like the Anzick site in Montana where osteological material was present. The presence of red ocher and Olivella beads also suggests a burial site, but these may have been used only symbolically (Pavesic pp.79, 82). Even though red ocher was reported, no osteological material or Olivella shell beads have been discovered by excavation of the site. Butler (1963, p.23) does not confirm Red Ocher at the excavation and only says, “Near the center of the site, apparently marking the former surface on which the artifacts lay, was a red stained area such as one might find beneath a fireplace."

Other Possible Reasons for the Simon Cache

As a Campsite

Butler and Fitzwater (1965, p.25) maintain that the Simon Site is a campsite, not a kill site, but acknowledge this is not conclusive. Frison and Bradley (1999, p.20) said, "This collection, known as the Simon Cache, lacked an associated camp or kill site, which suggests that it may have been a cache that was intended to be recovered by the people who buried it." No charcoal remains were discovered at the site but one artifact shows evidence of pot-lids, which may have resulted from overheating in a fire.

Storage of Wealth Site

Another argument against a burial site is the Big Man (chieftain) system espoused by Earle (1994, p.432) in which wealth is found in nonburial contexts. Earle said, "In Big Man polities, burial of wealth with the dead would be wasted because it could not be used by the survivors to attempt to reestablish exchange relationships."

Storage for Trade Site

Two other possible hypotheses are (1) that the cache was intended to be used as ceremonial trade for future needs, or (2) used as collateral until some type of debt was eventually paid. Both of these possibilities would require eventual rediscovery and retrieval. The retrieval of the caches would be enhanced because the China Creek Cache and the Simon Cache may have been located on major trade routes (Pavesic 1985, p.58; Bowers and Savage 1962, p.18). The Simon Cache contains several artifacts of exquisite quality manufactured from non-local materials and of a larger size than the standard previously discovered. This would suggest that the cache artifacts were brought to the site by traveling long distances or engaging in trade or exchange. Brown (1977, pp.172-173, as cited by Pavesic 1985, p.81) said:

> Distinctive trade goods are now thought to be status-conferring objects that served to sustain trade relations under conditions of irregular local production of foodstuffs and other economic goods for exchange…. The grave goods were status-defining exotics or "wealth" whose internment validated relations among the living. The differences in form and elaboration of burial reflect regional preferences, different degrees of social complexity, and differential participation in exchange.

<u>As a Religious or Symbolic Offering Site</u>

The Simon Cache may possibly have been a religious or symbolic offering to supreme forces as a tribute. Chris Henshilwood, chief excavator of Blombos Cave on the South African coast, saw ocher markings in the cave as signs of early symbolic motifs (Gore 2000, p.100). Henshilwood also questions why exquisitely produced stone biface preforms found in the Blombos Cave were not produced from local quartzite, but from non-local stone from 16 to 32 km distant. He goes on to say, "It was unnecessary to produce an item of this standard simply so it could be thrown at an animal." The same kind of statements could be attributed to the Simon Cache with its four quartz crystal and rare exotic bifaces covered with red ocher. Yeager (1986, p.105) and Gibson (1994, p.152) are convinced that quartz crystals were used for ceremonial or ornamental purposes. It is known that Shamans used quartz for their vision quests. They thought that quartz was inhabited by spirits and possessed supernatural powers that could be tapped by breaking open the stone (Fagan 2000, p.20).

The Simon Cache is too exquisite to be a utilitarian cache. The large size of the artifacts, the selection of rare tool stone, the presence of red ochre, and the skill of the artificers indicate the Simon Cache was of high significance to the Clovis people. If a high value was attributed to the cache, it is likely that its location was restricted to a selected few individuals, and that the cache was hidden in an unlikely place never to be retrieved. The Simon Cache was uncovered in just such a location. Today the site (fig.4.3) lies on a flat featureless plain, the result of sediments from an ancient pluvial lake. Even though the landscape and environment has changed since the Clovis period, there appears to be no outstanding rise, bluff, or promontory point that provided clues to its rediscovery by the Clovis people. It is highly probable that the Simon Cache artifacts may have been a symbolic offering intended to never be retrieved or traded (Bradley 1990, p.307; Button 1989, as cited by Wiseman et al. 1994, p.70).

<u>As an Underwater Deposit Site</u>

Another hypothesis is that the Simon Cache was a votive underwater deposit, similar to watery deposit offerings of non-local material in southern Scandinavia during the Mesolithic Period, and by Neolithic people of Brittany who deposited polished stone axes in watery locations (Levy 1982, p.306). The DeMoss site in northern Idaho (Green et al. 1986, p.33) also indicated this practice. It is theoretically possible that the pluvial lake that once covered the Big Camas Prairie also covered the Simon Cache when the Clovis people made a watery deposit offering. Marvin B. Strope, (pers.comm. 2/29/01) former professor of Geology at the College of Southern Idaho, felt that the pluvial lakes of the Pleistocene started to dry up in southern Idaho about 10,000 B. P., which may place the lakes existence into the same time continuum as the Clovis cultural group from 11,200-10,900 B. P.

China Creek Cache Discussion and Conclusions

It would appear that the manufacturer of the China Creek Cache, like the manufacturer(s) of the Simon Cache, had something more significant in mind than replicating identical blanks for later reduction to the same type of projectile point. The possibility of red ocher on three bifaces, and uncommonly large size within the cache indicates that the China Creek Cache was meant to have a higher significance than just a retrieval cache. Additionally, the China Creek Cache may possibly indicate a sequence display of late-stage biface reduction (Kelly 1988, p.724; Muto 1970, p.112; Woods and Titmus 1985, fig.7, p.8). The stage reduction of bifaces pictured in figure 5 of the Spring Creek Cache (Muto 1970, p.114) appears to be very similar to the China Creek Cache. The China Creek Cache is smaller in size than the Simon Cache, but larger than either the Rock Creek or Cedar Draw Caches. It is more comparable to the Sterling Cache (figs.8.4 & 8.5). Pavesic suggested that the Sterling Cache blanks were destined to become Milnesand or Simonsen points (Weide and Weide 1969, p.29). The Milnesand point (11,000-8000 B. P.) shows a resemblance to the China Creek blanks. Like the Simon Cache, the China Creek Cache exhibits substantial variability in dimensions. This indicates that these two caches did not include utilitarian bifaces for the ultimate manufacture of a single type of projectile point. According to Mr. And Mrs. Fay (pers. comm.) bifaces CC-2, CC-3, and CC-4 were discovered *in sutu* lying on edge similar to the Warner Valley Cache (Weide and Weide 1969, p.28) with the white biface exhibiting possible ochre residue evident on its surface. The unknown significance of the white chalcedony biface discovered between the two almost identical darker stones may have ceremonial or religious overtones. It is known that white chalcedony was a stone of great significance, and was revered and used by the Indians for ceremonial purposes (Gibson 1994, p.152). The China Creek Cache appears to be a deliberate cache site and not an on-site lithic reduction and tool manufacture site. The Fay family reported no debitage, and very little debitage was discovered by a personal cursory survey of the surface area of the site. Additionally, the artifacts were all discovered in proximity of each other within a restricted distribution area. The China Creek site may possibly be a burial location or that of a symbolic offering. Based on the same reasons and logic argued with the Simon site, the China Creek Cache was more likely a symbolic offering site. A future detailed survey and excavation of the site may answer this question.

The Lanceolate Point

The lanceolate point in the China Creek Cache (fig.7.6) closely resembles the Intermountain Lanceolate points exhibited in figure 9.1 both in width and flaking technique (Bonnichsen 2000, p.10). According to Bonnichsen, Intermountain Lanceolate points are primarily located in the Intermountain West and Great Basin (p.7). Bonnichsen (p.8) said, “Radiocarbon dates for Intermountain Lanceolate sites span a great depth of time, starting in Clovis times but persisting into much later periods.” The China Creek lanceolate point also resembles lanceolate points from the Cougar Mountain typology, particularly one located in

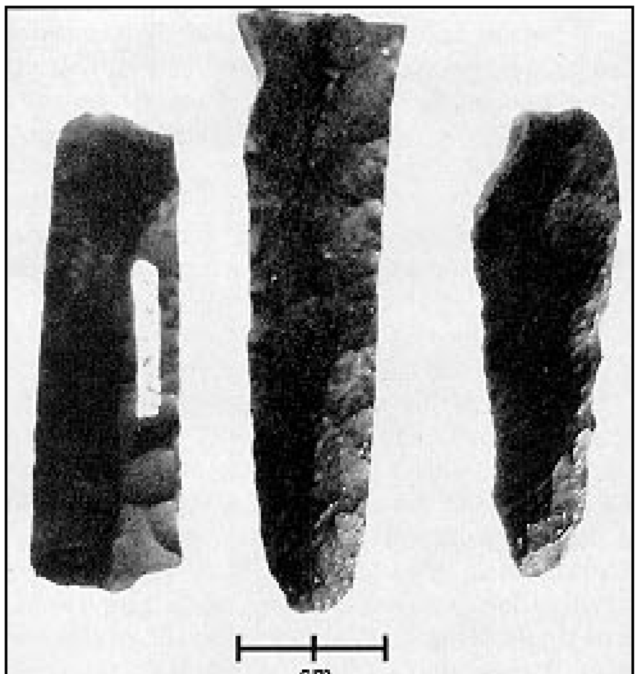


Figure 9.1. Intermountain stemmed lanceolate points. (Bonnichsen 2000, p.10.)

northwest Nevada near the China Creek Cache site dating from 10,000-9,000 B.P. (Overstreet 1999, p.882). Unfortunately, with the base missing there is no conclusive way to determine its possible manufacturer or origin. Neither the material used nor the morphological typology of this point appears to be related to the rest of the cache (fig.7.8). It is evident that the manufacturing style is different than the remainder of the cache and it may be isomorphic to the Intermountain Lanceolate and Cougar Mountain points.

The Dean Site

In excavations at the Dean site located at Cedar Creek on Browns Bench near the China Creek Cache, stemless, unnotched points began appearing at the 1.82 m level. The points recovered had concave bases with basal thinning and collateral flaking, reminiscent of Clovis technology (Bowers and Savage 1962, fig.8, nos.24A, 25A, & 26A). Bowers and Savage (p.15) said,

> One type was slightly oval in outline with a straight or slightly fluted base. This type showed only remote similarity to the classical Folsom forms, because the former indicated no effort on the part of the worker to strike off flakes longer than those across the face of the artifact.

It appears from the photographs that some of these points are obsidian and should be hydration tested to determine age. Bowers and Savage (1962, fig.4 & p.13) believe the points recovered from below 1.82 m are over 10,000 B. P., and the non-obsidian artifacts were exotic and transported to the site (p.11). Large heavy, and broad stemmed points resembling Scottsbluff Type II with concave, straight, and notched bases were recovered from the 1.37-1.82 m level (p.14). These points resembled points discovered at Lime Creek in Nebraska that were carbon 14 dated to 9,524 ± 450 years (p.14). Overstreet (1999, p.858) places the age of Scottsbluff II points between 9,500-7,000 B. P.

The morphology of these points (Bowers and Savage 1962, fig.8, 46A, 47A, & 19A) bears some resemblance to the China Creek blanks, particularly preform CC-6, and CC-7.

Bowers and Savage (p.17) began uncovering what they determined to be knives, first at the 1.82 m level up through to the surface fill. Two bifaces, numbers 3C and 4C (Bowers and Savage 1962, fig.10), are very similar to the larger bifaces in the China Creek Cache except that their bases are not straight. Unfortunately, Bowers and Savage do not indicate in their report the level at which these artifacts were discovered. Unless the cache was manufactured elsewhere from exotic material, it is likely that the China Creek Cache was manufactured sometime during the primary occupation of the area, possibly during the Altithermal between 7,000 and 4,850 B. P. (Green 1972, p.138). Due to the size and morphology of the artifacts, it is estimated that their age would most likely fall near the beginning of the period.

<u>The Altithermal Period</u>

Henry's (1984, p.88) pollen studies on the western Snake River Plain of Idaho suggests that from 6,250 B. P. to 3,500 B. P. a gradual shift occurred "from a very xeric climate to a somewhat cooler and/or moister climate." Fagan (1974, p.102), in his studies of occupation during the Altithermal in the Northern Great Basin, discovered that most of the cultural artifacts collected from the early sites (7,000 B. P.) were located between 1524 to 1829 m ASL. Bowers and Savage (1962, p.19) said, "Archaeological evidence indicates that the time of most intensive occupation of Browns Bench was during the Altithermal (7,500-4000 B. P.) when the lower lands on the Snake River Plain were probably too hot and dry to support wildlife in large numbers." Gruhn (1961, p.152) feels the Altithermal displaced the "hunters of the lanceolate parallel-flaked point tradition" from the area. Excavation of projectile types at the [Upper] Rock Creek Site, 10 CA 33 suggests that these big game hunters migrated to the higher elevations during the Altithermal (Green 1972, p.131). Bowers and Savage (1962, p.19) indicate that during the Altithermal occupied areas began at 1524 m ASL, the same elevations as the Simon (1533 m) and China Creek Caches (1555 m). Due to the proximity of the caches, it is likely, that the same climate prevailed at each site during this time period. Green (1972, p.130), and Bowers and Savage (1962, p.20) believe most of the activity by a hunting and gathering culture in the vicinity of the China Creek Cache began around 7,000 B.P., and ended around 1800 A. D. Activity ranged from 10,000 B. P. to 2,500 B. P. until increased rainfall caused a significant migration from the Browns Bench area (Bowers and Savage 1962, p.20). Bowers and Savage maintain that a cultural shift in diet to anadromous fish may also have contributed to the abandonment of the Browns Bench and the China Creek area (p.20).

The Rock Creek and Cedar Draw Cache Similarities and Conclusions

Based upon the analysis in the previous chapters, it appears that the Cedar Draw and the Rock Creek Caches are morphologically and typologically the same. Statistically, there is a strong correlation between the two caches. However, a paucity of sample population in the Cedar Draw Cache is problematic. Further excavation at the cache site should be considered to determine if other artifacts exist below the level where they were discovered. A hydration sample of the Cedar Draw Cache should also be considered with permission of the owner along with an 'non-destructive energy dispersive X-ray fluorescence' (XRF) test to determine the age of the cache and its source location.

According to Wiseman et al. (1994, p.65), "A major problem with caches is that they are frequently difficult or impossible to date and can rarely be assigned to specific cultures and periods." Sometimes caches will reveal to us their intended use and may provide us a chronological window into a cultural continuum.

Until additional proof and new examination techniques are discovered, we will not be able to conclusively determine the meaning and purpose of these caches. In the late summer or early fall of this year a team will be using a remote sensing (ground penetrating radar) device at the Simon Cache site in hopes of detecting additional artifacts that may still be hidden (pers. comm. J.C. Woods, 02/06/01).

Lithic caches should be analyzed in greater detail in the future, since they provide evidence of early exploitation by humans of lithic resources that may be attributed and traced to specific sources. More exploration is needed in determining and sourcing the locations of the ancient quarries that provided cultural groups with the necessary mineral material to manufacture their tools. These results would provide archaeologists with further evidence of trade routes, and explain and determine the movements of ancient people across the landscape.

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