REPORT
recent archaeological survey along the middle fork of the fortymile river, alaska

Sam Coffman
University of Alaska Museum of the North, 1962 Yukon Dr., Fairbanks, AK; sccoffman@alaska.edu

Robin O. Mills
Bureau of Land Management, 222 University Ave., Fairbanks, AK; rmills@blm.gov

Scott Shirar
University of Alaska Museum of the North, 1962 Yukon Dr., Fairbanks, AK; sjshirar@alaska.edu

abstract

This report provides the preliminary results of surveys and test excavations at recently documented prehistoric archaeological sites found along the Middle Fork of the Fortymile River in eastern-central Alaska. The sites include features and data previously unreported in the drainage, including datable materials, feature depressions, and well-preserved faunal remains. Testing at these sites has contributed to formulating a basic temporal framework for the area relative to basic site function and past behavior. The findings of this multiyear project have begun to shed light on broader prehistoric land-use patterns in this area.

background and purpose of fieldwork

The Fortymile River drainage lies 290 km (180 mi) east of Fairbanks, Alaska (Fig. 1). The main stem of the river is 64 km (40 mi) long and is one of the larger tributaries of the upper Yukon River. Its main tributaries include the North, South, and Middle forks, the Mosquito Fork, and the Dennison Fork. Altogether, the main tributaries of the Fortymile drainage measure 800 river kilometers (500 mi) and drain roughly 14,500 km² (3.6 million ac²) of Interior Alaska.

Ethnographic and ethnolinguistic studies suggest the river was used by the Han and Tanacross/Upper Tanana Athabascans, with the area just downstream of the Joseph Creek confluence with the Middle Fork serving as an approximate boundary between the Han and Tanacross/Upper Tanana cultural bands (McKennan 1959, 1981; Mishler and Simeone 2004; Osgood 1971; Townsend 1981). Mishler and Simeone (2004:91–92) cite the Crow clan (assumed to be the Crow clan from Eagle [*Nahtsiin*]) as building a caribou fence on the Middle Fork. The Alaska Native village of Joseph at the mouth of Joseph Creek, now abandoned, is the only known historical Athabascan settlement on the river (Andrews 1980; Mitchell 1982). McKennan (1981:565) indicated that the people of Joseph Village were culturally related to the Healy River band of Tanacross Athabascans. Little else is known concerning the prehistory of the area, although multiple bands likely used the area through time.

In 2015, the Fairbanks District Office of the Bureau of Land Management and the University of Alaska Museum of the North began surveying the main tributaries of the Fortymile River. The Middle Fork was selected first, with the survey stretching from near the mouth of Joseph Creek in the Yukon-Tanana Uplands to the confluence of the Middle Fork and the North Fork of the Fortymile, a length of about 64 km (40 river mi).

This survey documented six previously unknown prehistoric archaeological sites. Of these six sites, three were selected for testing in the summer of 2016 (Fig. 1). EAG-00863 and EAG-00865 were selected because they contained surface features, and EAG-00866 because it contained a dense buried lithic assemblage. We felt these sites had the greatest potential to produce site-specific behavioral information pertinent to understanding the prehistory of the region.

Initial site discoveries involved shovel testing as deep as possible (probes ~30 cm diameter) and screening the soil through one-quarter-inch mesh. All surface exposures were thoroughly examined. More refined site testing consisted of excavating controlled test units. Permanent datums were established, usually on a north-south grid. Most tests consisted of 50 x 50 cm units, either singly or laid out in trenches. Artifacts were recorded in situ when possible but otherwise were collected according to unit and stratigraphic level. Select stratigraphic profiles were drawn after excavations were completed. The recovered cultural remains are accessioned and curated by the University of Alaska Museum of the North.

EAG-00863

EAG-00863 occupies a bedrock knoll offering near-unobstructed views of the surrounding landscape to the east, west, and south and is 300 m northwest of the Middle Fork, across low-lying flats. The site contains five small semicircular depressions and a single large oval depression (Fig. 2).

Features 1 through 5 are interpreted as cache pits based on their size and shape. The surface expression of all five are round-to-oval and similar in size, measuring between 70 and 140 cm in length, 33 and 110 cm in width, and 10 and 25 cm in depth. Of these, only Features 2

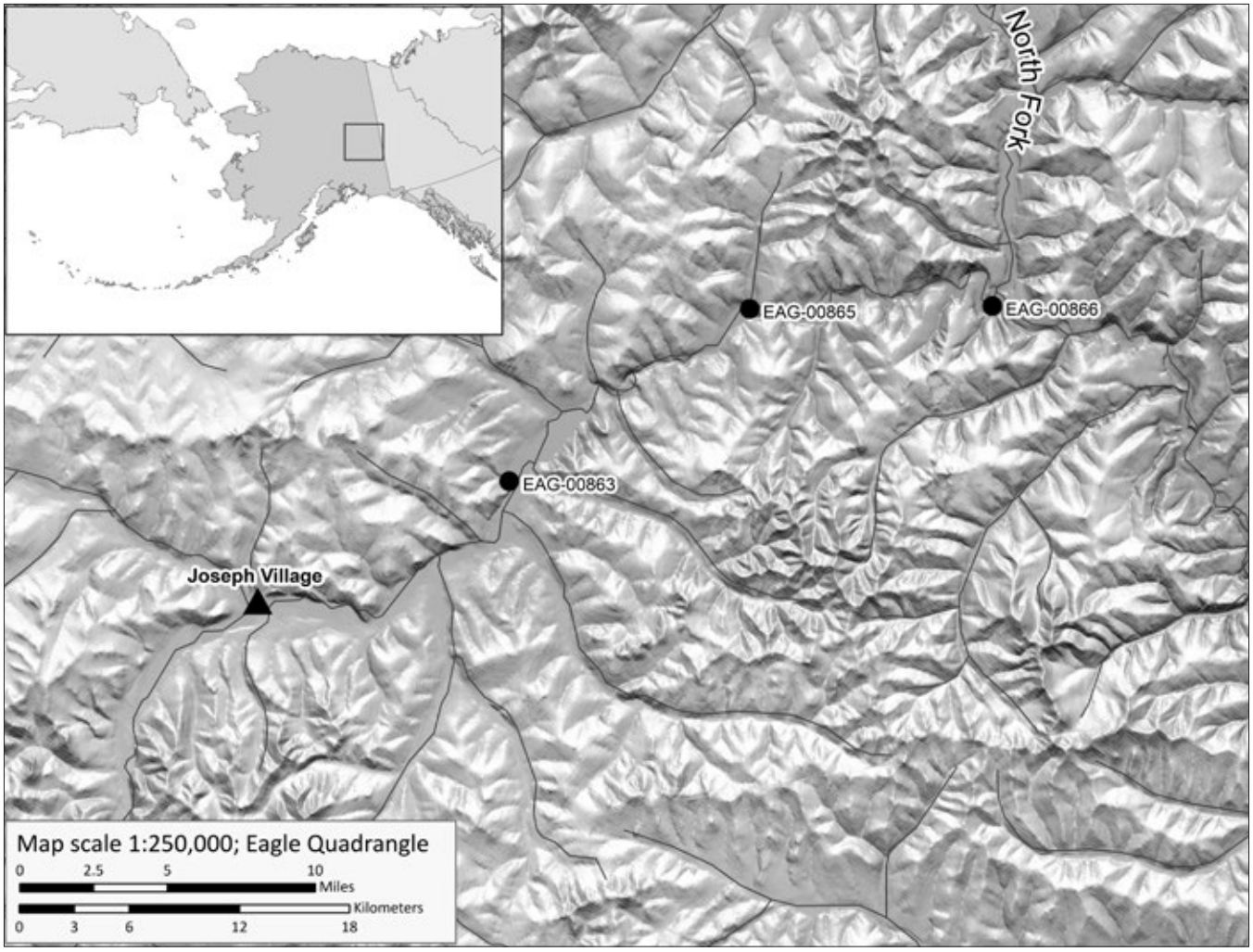

Figure 1. Location of survey results along the Middle Fork of the Fortymile River.

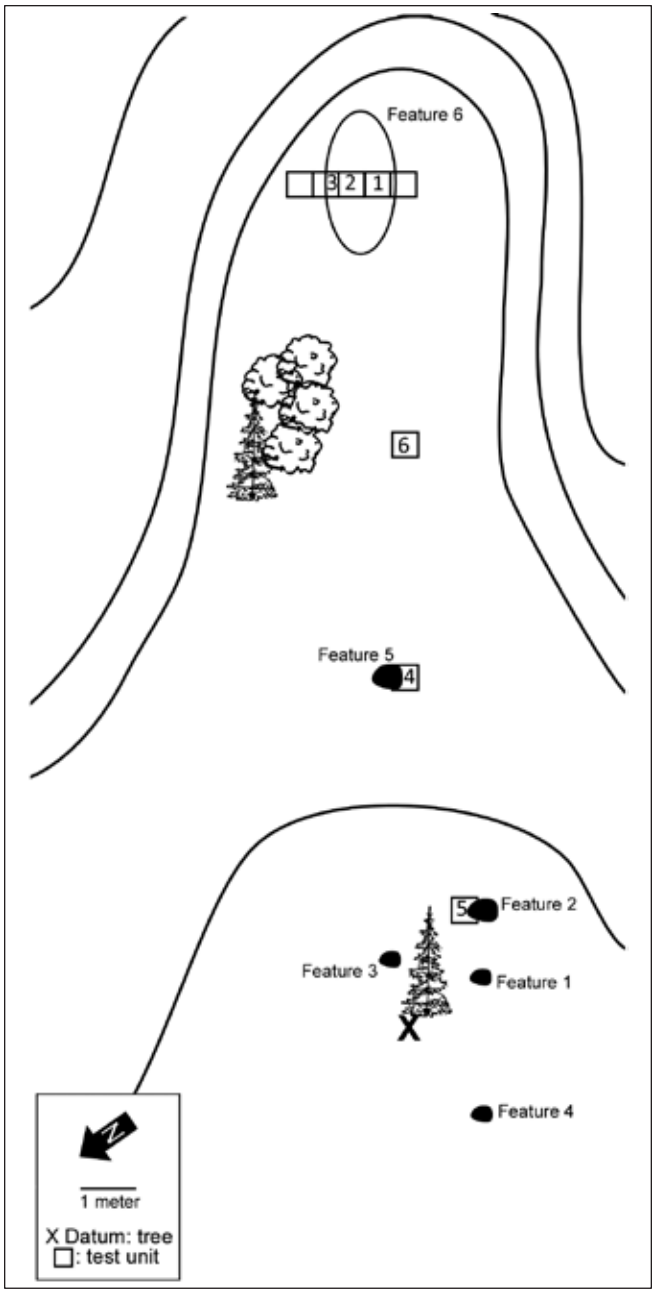

Figure 2. Site map of EAG-00863 with features and 2016 test units labeled.

and 5 were tested. Feature 2 measured 100 x 60 cm and 25 cm deep before testing. About one-quarter of this feature was excavated in 2016. Excavation revealed that the original prehistoric pit measured about 60 x 70 cm in plan view and was dug about 45 cm deep. It was not determined if the original shape was circular or rectangular. The walls of the original pit were vertical, and its base was not quite flat at the bottom of the vertical walls; the base continued to gently slope down 4–8 cm in depth to the center of the pit over a distance of 30 cm.

The test of Feature 2 also uncovered lithic materials in the stratified matrix surrounding the pit, in layers undisturbed by prehistoric digging. The mixed matrix that comprised the pit's fill contained only a few bones and lithic flakes, with the vast majority of the pit's contents coming from a distinct layer at its base. This matrix at the base of the pit was decidedly different than the overlying fill, with the former being black and organic rich. This lenticular layer was up to 4 cm thick and full of broken-up faunal remains, mostly caribou (*Rangifer tarandus*) but with one bird bone, as well as some lithic debitage.

The test of Feature 2 yielded the most lithic material recovered from EAG-00863: 229 pieces of lithic debitage and one utilized flake, consisting mostly of chert. A piece of nondescript ferrous sheet metal was also recovered within Feature 2 at the contact between the O and B horizons. A second piece of this metal, found at the same stratigraphic level about 10 m west of Feature 2, was located with a metal detector. Stratigraphically, the two metal artifacts are not contemporaneous with the subsurface lithic remains or the tested prehistoric features at the site. More likely, they represent the sparse remains of a short-term visit during historic times.

Feature 5 measured 76 x 33 cm and 14 cm deep before testing. Testing revealed that the pit's original dimensions were 45 x 45 cm and 33 cm deep, and that its flat base was lined with birch bark. Its original square shape had rounded corners, and it had vertical side walls. Testing has removed about 95% of the pit.

Well-preserved birch bark was found in situ across 75% of the base of the pit. Square-to-rectangular sheets of bark, each measuring from 15 x 15 cm to 15 x 20 cm, were placed side by side across the flat floor without overlapping. Most of the sheets were oriented southwest-northeast, with one piece oriented northwest-southeast. The bark seems to have been intentionally laid so the edges curled 5 cm up the vertical walls.

Although a few bone fragments were found in the uppermost O and E horizons of the pit, and a few more in the fill matrix, the majority of bones recovered were found in a 9–10 cm thick layer directly atop the birch bark at the base of the pit. Like Feature 2, most of these well-preserved faunal remains were found intentionally broken and splintered, presumably for marrow extraction. Features 2 and 5 are interpreted as subterranean food caches that were subsequently used as refuse receptacles for heavily processed large mammal skeletal remains, bird bones, and lithic debris.

Feature 6 is believed to represent a house pit. This surface depression measured 360 x 190 cm and was 65 cm deep before testing. The 2015 test excavation encountered frozen soil (cryosol) just below the O horizon. In 2016, a 50 x 300 cm long test trench was excavated through the center of the feature. The profiles of this trench clearly reveal cuts through the natural stratigraphy that were made when the feature was first dug prehistorically (see dashed lines, Fig. 3). The original cut measured approximately 193 cm wide and was dug 65 cm deep. The test trench substantiated our initial interpretation that the feature represents the remains of a semisubterranean house, the only confirmed prehistoric dwelling in the Fortymile drainage in Alaska. The trench also uncovered three large wooden logs, all running in an east-west direction and presumably representing structural elements of the house. Each of these structural elements measure about 45 x 16 cm in width and thickness.

Two of these structural elements were thoroughly burned while the third was only superficially charred, resulting in excellent preservation. All three are identified as spruce (*Picea* sp.) (Crawford 2016) and were recovered within a charcoal-rich layer above a coarse-grained sand matrix (Fig. 3). Based upon the small window of our test trench, it is unknown what role these structural elements played in the construction of the house.

The majority of lithic artifacts (n = 111 flakes and debitage; n = 2 unifaces), faunal material (a single caribou lumbar vertebra), and calcined bone from Feature 6 came stratigraphically below the three structural elements, which supports our interpretation that the charcoal-rich layer below the structural elements represents the floor of the house.

The stratigraphy at EAG-00863 is characterized by five soil horizons. The upper O horizon (root mat) was observed across the site. Directly under the root mat is a layer consisting of medium-coarse gravel with a discontinuous ash layer, presumably the White River ash, which is a volcanic ash layer found throughout much of the Fortymile drainage (Clague et al. 1995; Jensen and Froese 2006; Lerbekmo et al. 1975) (Fig. 3). A turbated E horizon may also be represented within this layer but is currently indistinguishable. Below this are culturally sterile horizons: a B horizon composed of a brown sandy silt and a C horizon consisting of coarse sand to decomposing bedrock. The last soil horizon consists of a C/R horizon composed of bedrock and decomposing bedrock.

Excavations around Feature 2 and Feature 5 indicate buried lithic materials in layers outside the confines of the prehistoric pits. Stratigraphically, this indicates that these remains predate the digging of the cache pits, which cut through them.

The two ferrous metal scraps that were located with a metal detector indicate that the site was occupied at some point during the historic period. These metal pieces were found at the base of the O horizon at the upper interface with the underlying soil matrices and likely relate to a later brief visit to the site by people unrelated to the earlier prehistoric occupation(s). As there are no indications of Euro-American trade goods or tool use in the subsurface deposits, we believe that all buried components at the site are prehistoric in age.

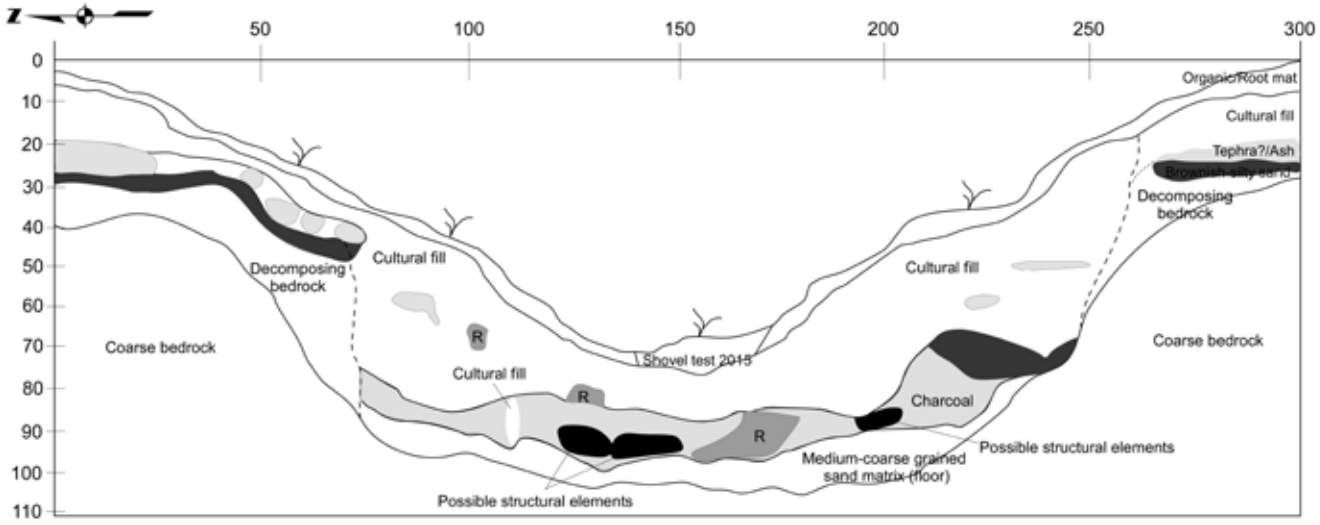

Figure 3. Stratigraphic profile of the north wall of Feature 6 at EAG-00863.

Features 2 and 5 yielded abundant caribou (*Rangifer tarandus*) and other faunal material. A caribou metapodial and a caribou phalange from Feature 5 were submitted for radiocarbon dating and yielded conventional dates of 120 ± 30 and 130 ± 30 RCYP, respectively. A third date was obtained from a caribou lumbar vertebra recovered from the floor layer of Feature 6. It yielded a conventional age of 260 ± 30 RCYP (Table 1). A fourth date was run on a caribou phalange recovered from the faunal layer at the base of Feature 2. This bone yielded a conventional date of 330 ± 30 RCYP, which statistically overlaps with the date from Feature 6 (Table 1).

The two dates from Feature 5 are statistically the same ($T = 0.055$; $\chi^2 = 3.84$; $df = 1$), as are those from Features 2 and 6 ($T = 2.722$; $\chi^2 = 3.84$; $df = 1$), and both pairs are distinct from each other. These data, their two-sigma standard deviation ranges, the lack of historic trade goods, and the general history of Euro-American ingress into the interior of Alaska suggest at least three prehistoric components are represented at the site, falling within the following time frames: (1) ca. AD 1675–1850, as represented by Feature 5; (2) ca. AD 1480–1640, as indicated by Features 2 and 6; and (3) an older, as yet undated occupation, indicated by in situ prehistoric lithic deposits in undisturbed stratigraphic layers that were cut through by the aboriginal digging of Features 2 and 5.

A total of 383 lithic artifacts were recovered from EAG-00863 in 2015 and 2016. When comparing the lithic assemblages that were excavated in or around the three tested features (Tables 2 and 3), chert dominates the

Table 1. Radiocarbon dates from EAG-00863.

Lab Number	Context	Material	$d^{13}C$	Uncalibrated RCYP (1σ)	Calibrated Date (2σ) cal AD/BC
Beta-420103	Feature 5, bottom	Unmodified caribou metapodial (UA2015-132-0003)	–17.7‰	120 ± 30 BP	1679–1764 (0.340314); 1775–1775 (0.001619); 1801–1939 (0.658067)
Beta-420104	Feature 5, near top	Unmodified caribou phalange (UA2015-132-0004)	–19.2‰	130 ± 30 BP	1675–1777 (0.398993); 1799–1893 (0.443948); 1905–1941 (0.15706)
Beta-444374	Feature 6, floor	Unmodified caribou vertebra (UA2016-052-0048A)	–18.0‰	260 ± 30 BP	1519–1593 (0.297429); 1619–1670 (0.568361); 1779–1799 (0.122716); 1943–1949 (0.01149)
Beta-456391	Feature 2, bottom	Unmodified caribou bone (UA2016-052-0045B)	–17.1‰	330 ± 30 BP	1478–1642 (1.0)

Calibrated using Calib v.7.1 (Stuiver et al. 2017).

Table 2. EAG-00863 feature comparison by raw material, total count.

Material Type	Feature 2	Feature 5	Feature 6
Chert	227	33	105
Chalcedony	0	0	2
Fine-grained volcanic	5	1	1
Obsidian	0	6	0
Rhyolite	0	1	0
Basalt	0	0	6
Mudstone	0	0	2
Quartz	0	0	1

Table 3. Summary of lithic artifacts by feature found at EAG-00863.

Feature 2 (cache/dumping pit)	Feature 5 (cache/dumping pit)	Feature 6 (house feature)
n = 229 debitage pieces	*n* = 41 debitage pieces	*n* = 113 debitage pieces
One utilized flake	One biface fragment (ppt tip)	Two microblades
Chert dominates	Higher diversity of raw material (chert, obsidian)	Two unifaces
		Diverse array of raw materials present

assemblage (95%). There is a greater array of raw material types seen within Feature 6, including chert, chalcedony, basalt, and mudstone. Raw material types from Feature 5 show a similar diverse use of raw material, including chert and obsidian. Differences in raw material use may be attributed to different times of occupation at the site or, conversely, occupation by different groups.

Notable characteristics of the lithic assemblage include unmodified lithic debitage. All of this debitage accounts for the majority of lithics represented (n = 378; 98.7%). A single chert bifacial fragment was recovered from Feature 5. Two chert microblades and two unifacial tools were recovered from Feature 6. One additional microblade was recovered from test unit 6, located in the center of the site. Six pieces of obsidian were recovered from Feature 5.

Animal remains recovered from Features 2, 5, and 6 at EAG-00863 reflect on past diet and site seasonality. Relative frequencies of taxa help to evaluate diet, and these frequencies are calculated through the number of identified specimens (NISP) and the minimum number of individuals (MNI). NISP is determined by counting the total number of identifiable bones within an assemblage (Reitz and Wing 1999:191–194). MNI represents the minimum number of individual animals needed to account for the identified elements of each species (Reitz and Wing 1999:194–202). The entire faunal assemblage collected from each feature is included in our analysis.

In Table 4, NISP is shown for each feature according to general animal classes. Table 5 presents NISP and MNI for all specimens identified to the genus and/or species level. The overwhelming majority of the identified fauna recovered from this site belongs to the terrestrial mammal class. Birds are represented to a much lesser extent in Features 2 and 5, and not at all in Feature 6. Caribou, hare, arctic ground squirrel, goose, and duck are the identified species. Fish and marine mammal remains are not present. All the identified caribou bone in Features 2 and 6 can be accounted for by a single animal in each feature. The identified fauna in Feature 5 is accounted for by at least two caribou, two hare, one arctic ground squirrel, one goose, and one duck.

Table 4. NISP calculations for the fauna recovered from each feature at EAG-00863.

	Identified		Unidentified		Total	
	NISP	%NISP	NISP	%NISP	NISP	%NISP
Feature 2						
Terrestrial mammal	20	5.18	366	94.57	386	99.75
Bird	0	0	1	0.25	1	0.25
Total	20	5.18	367	94.82	387	100.00
Feature 5						
Terrestrial mammal	221	3.82	5540	95.78	5761	99.60
Bird	18	0.31	5	0.09	23	0.40
Total	239	4.13	5545	95.87	5784	100.00
Feature 6						
Terrestrial mammal	2	11.11	16	88.89	18	100.00
Total	2	11.11	16	88.89	18	100.00

Table 5. NISP, %NISP, and MNI for identified fauna from each feature at EAG-00863.

	Common Name	Scientific Name	NISP	%NISP	MNI
Feature 2	Caribou	*Rangifer tarandus*	20	100.00	1
Feature 5	Caribou	*Rangifer tarandus*	173	72.38	2
	Hare	*Lepus* sp.	46	19.25	2
	Goose	*Branta* sp.	17	7.11	1
	Arctic ground squirrel	*Urocitellus parryii*	2	0.84	1
	Duck	*Anas* sp.	1	0.42	1
Feature 6	Caribou	*Rangifer tarandus*	2	100.00	1

Given the relatively small sample sizes for Features 2 and 6, it is difficult to extrapolate much information beyond the basic numbers regarding relative frequencies and the presence/absence of specific species. The larger sample size for Feature 5 allows for a higher level of interpretation. Although sampling and taphonomy might play a role, the excellent preservation of all faunal material encountered, along with the relatively sparse amount of small mammal and bird remains relative to caribou in Feature 5, suggests that these latter animals were taken opportunistically at the site. The caribou assemblage in this feature represents nearly every portion of the skeleton, meaning that entire animals were introduced to the site rather than only select parts. Of all the identified elements, long bones are the least represented, likely due to their being highly processed for grease and marrow extraction and therefore difficult to identify in the many fragments collected.

Fauna from all three features is highly fragmented among the terrestrial mammal class, which is particularly pronounced in Feature 5. Out of the 5761 specimens in Feature 5 identified as terrestrial mammal, 96% are small unidentifiable fragments. Even larger specimens that were identified as caribou exhibited at least some degree of fragmentation, whereas the majority of the small mammal and bird remains were complete. This suggests that most, if not all, of the small unidentifiable fragments are also caribou. This extreme fragmentation is likely the result of grease and marrow extraction, as opposed to postdepositional taphonomic processes.

EAG-00865

EAG-00865 is on an open ridgeline affording excellent views of a small tributary valley to the north, east, and west. The sharp drop down to the floodplain of the valley bottom is dramatic to the north and west, falling sharply about 30–35 m (100–115 ft). The Middle Fork is 300 m to the south. The site contains two features. Feature 1 is a small depression, and Feature 2 is a larger depression similar to Feature 6 at EAG-00863.

In 2016, we tested both features and included five additional 50 x 50 cm units outside of the features (Fig. 4). Three contiguous test units formed a trench bisecting Feature 2, and another test excavated about one-quarter of Feature 1. The remaining tests were positioned along the spine of the ridge, in order to delineate the extent of subsurface cultural deposits. All units yielded buried lithic artifacts.

Feature 1 is an oval depression that measured 105 x 130 cm and 27 cm deep prior to testing. In 2015, a shovel test inside the depression yielded seven chert, one obsidian, and two rhyolite artifacts. A second test unit in 2016 removed the northwest quarter of the feature. This test measured 42 x 60 cm and yielded 16 unmodified flakes made of chert (n = 5), obsidian (n = 1), and an unidentified fine-grained volcanic (n = 10). All of these were found within a coarse sandy-silt layer interlaced within an organic-rich silt and charcoal layer. These layers underlie a partially truncated E horizon interlaced with an ash layer, possibly the White River ash (Jensen and Froese 2006), that was cut into by the original digging of the feature. An intact O horizon overlies the depression. The charcoal-rich cultural layer overlies a culturally sterile C horizon consisting of coarse sand and gravel and weathered bedrock.

The tests of Feature 1 indicate that the depression is probably a hearth, consisting of an organic and charcoal-rich layer inside a shallow, artificially dug, bowl-shaped depression. The charcoal layer was about 11 cm thick in the center of the feature and thinned out toward its outer edge. The charcoal-rich hearth layer was oval shaped and measured about 85 x 95 cm. Charcoal (*Picea* sp.) collected from the hearth was in stratigraphic association with the lithics and was dated to 1570 ± 30 BP (Table 6).

Located 4 m south of Feature 1, Feature 2 is a large oval depression that measured 430 x 250 cm and 45 cm deep before excavation. A test pit dug inside the feature in 2015 yielded two chert and two basalt flakes. In 2016, three 50 x 100 cm test units, positioned east to west in a 3 m trench, bisected the short axis of the feature. The trench yielded 71 unmodified lithic flakes consisting of chert (n = 67) and a fine-grained volcanic material (n = 4). All 75 artifacts from the feature consist of small flakes

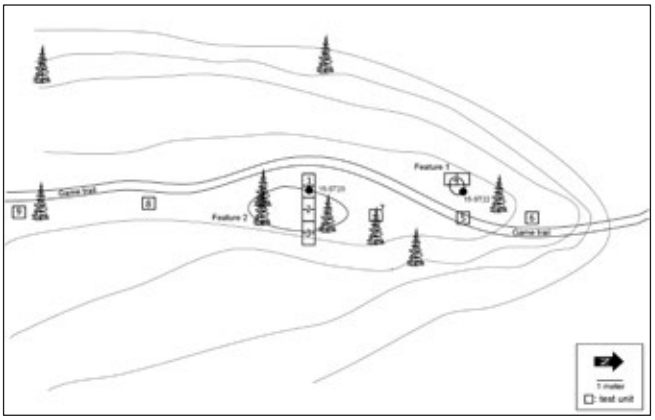

Figure 4. Site map of EAG-00865.

lacking cortex. No faunal remains or formal tools were recovered, which is one of several differences noted between this and Feature 6 at EAG-00863. Also, unlike Feature 6 at EAG-00863, Feature 2 does not contain a discernible cultural floor, and no wooden structural elements were identified (Fig. 5).

Despite these dissimilarities, the stratigraphic profile of this feature is similar to Feature 6 at EAG-00863 in its dimensions: prehistoric cuts indicate that this depression originally measured about 150–175 cm wide. In both cases, the E horizon and an upper profile ash layer (presumably the White River ash) had been truncated during the digging of the features.

All additional test units outside the two features (Fig. 4) yielded buried lithic material but in smaller quantities (n = 13), illustrating that the site continues in a north-south manner along the spine of the landform, with the majority of artifacts concentrated around Features 1 and 2. Only a single tool, a uniface made on chert, was recovered in all of the tests. This artifact was found in test unit 9, the southernmost test unit, excavated 20 m up the ridgeline from Feature 2. Given that no significant faunal assemblage was recovered at the site, it is difficult to gauge what this uniface was actually used for. Small unidentifiable calcined bone fragments were recovered throughout the site.

eag-00866: solstice site

The Solstice site occupies a bedrock knoll overlooking the confluence of the Middle and North forks of the Fortymile. The knoll is 30 m in elevation and provides excellent views of the surrounding landscape. In 2015, a shovel test placed on the south-facing side of the landform overlooking the Middle Fork yielded 34 lithic artifacts. Continued testing at the site in 2016 included the excavation of an L-shaped trench (Fig. 6) consisting of nine 50 x 50 cm squares. These excavations significantly

Table 6. Radiocarbon date from EAG-00865.

Lab Number	Context	Material	$d^{13}C$	Uncalibrated RCYP (1σ)	Calibrated Date (2σ) cal AD/BC
Beta-456392	Feature 1	Charcoal spruce (*Picea* sp.)	–25.5‰	1570 ± 30 BP	415–560 (1.)

Calibrated with Calib 7.1 (Stuiver et al. 2017).

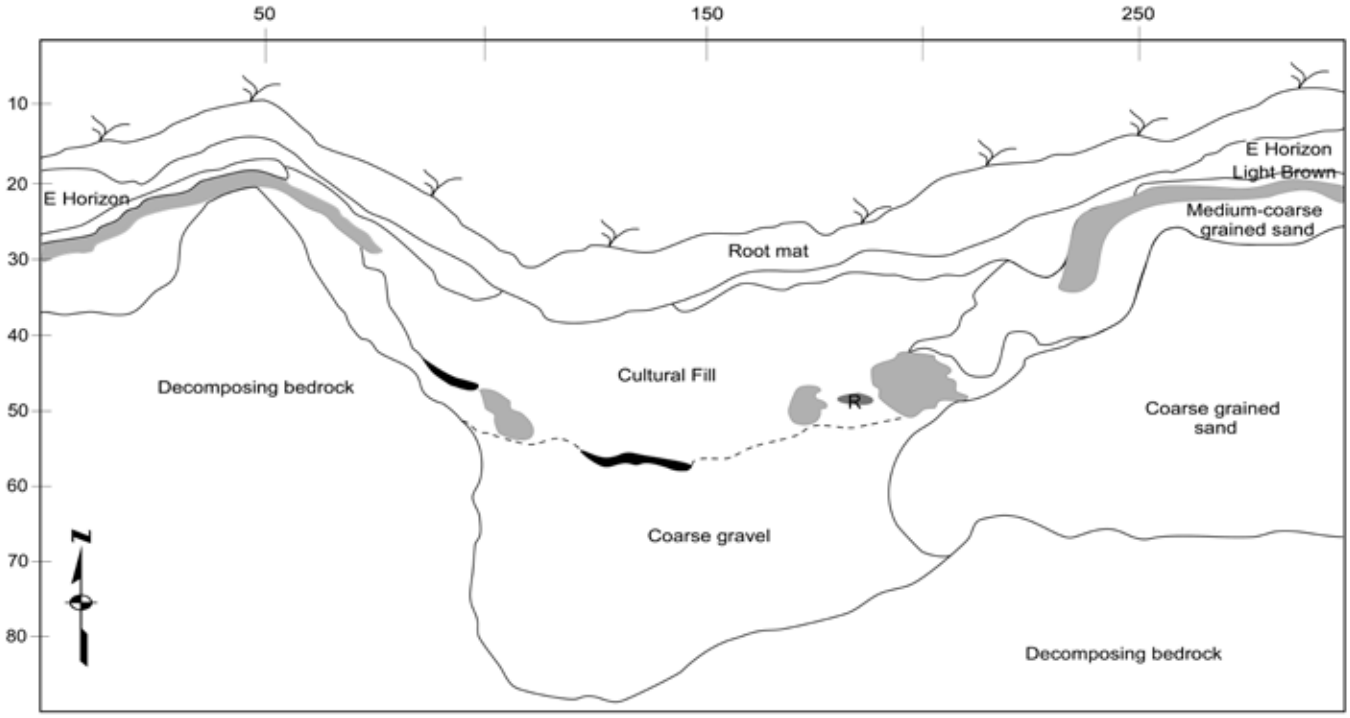

Figure 5. North wall profile of the test trench that bisected Feature 2 at EAG-00865. All measurements in centimeters.

increased the cultural assemblage to 524 artifacts, which consists primarily of unmodified flakes lacking cortex (*n* = 399), 27 chert microblades, and two stone tools. The two stone tools are a black chert biface fragment and a face rejuvenation flake from a microblade core made on blue-gray chert (Fig. 7). The face rejuvenation flake on its dorsal surface exhibits single directional removal of microblades that terminate in a feathering fracture longitudinally along the face of the artifact. The face of the microblade core was rejuvenated along the keel, which resulted in the striking platform of the artifact occurring opposite of the core platform. It is thought that the manufacturer meant to rejuvenate the face; however, this blow resulted in the removal of the flake as well as the semiremoval of the microblade core platform, possibly rendering the core unusable. It is unclear what the original morphology of the core was prior to the rejuvenating of the core face.

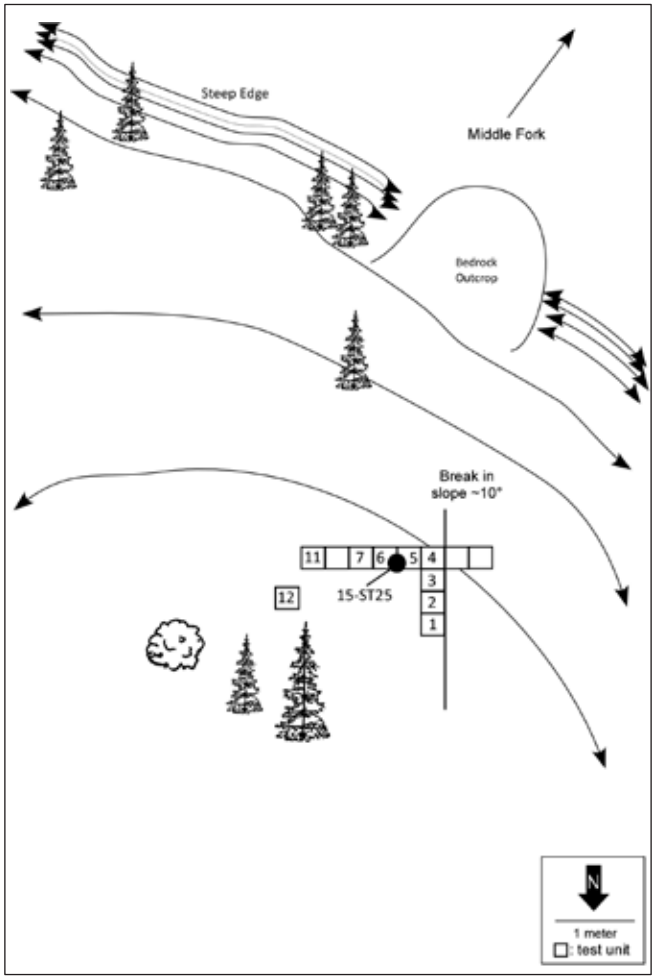

Figure 6. Site map of EAG-00866. Only excavated test units are labeled in this figure.

Site stratigraphy consists of five horizons (Fig. 8). At the top of the profile is an O horizon (root mat), which was underlain by a well-defined white tephra band. The cultural zone for artifacts at this site is at the interface or contact between this ash and the underlying B horizon, although a few artifacts were also recovered from the upper portion of the B horizon, having likely migrated down from above. The B horizon contains medium-to-fine-grained sand. Two river cobbles found intermixed within this horizon may be manuports. Underlying the B horizon is a C horizon containing, in part, decomposing bedrock, and then a C/R horizon consisting of decomposing bedrock down to bedrock.

A single radiocarbon date was obtained from charcoal stratigraphically associated with the cultural zone. The charcoal, identified as spruce (*Picea* sp.; Crawford 2016), did not come from a cultural feature. The charcoal yielded an age of 1650 ± 30 RCYP (Table 7), which may provide an approximate age for the time of occupation at the site. The date also fits with the stratigraphic provenience of the artifacts directly below the presumed White River ash.

discussion and conclusion

After the 2015 and 2016 fieldwork, it is clear that a variety of prehistoric archaeological sites exist in the Fortymile country. The Solstice site (EAG-00866) currently represents the oldest known site along the river and one of the oldest yet discovered in the Fortymile River drainage. However, the lack of reliable, prime contextual datable

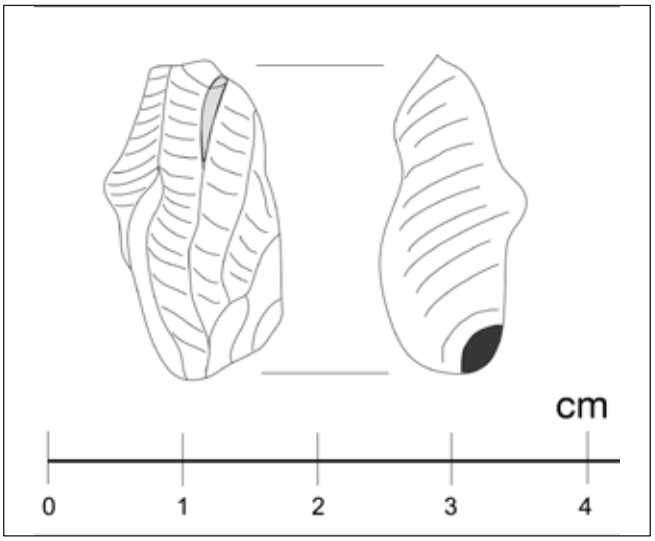

Figure 7. The face rejuvenation flake from a microblade core (UA2016-055-0021).

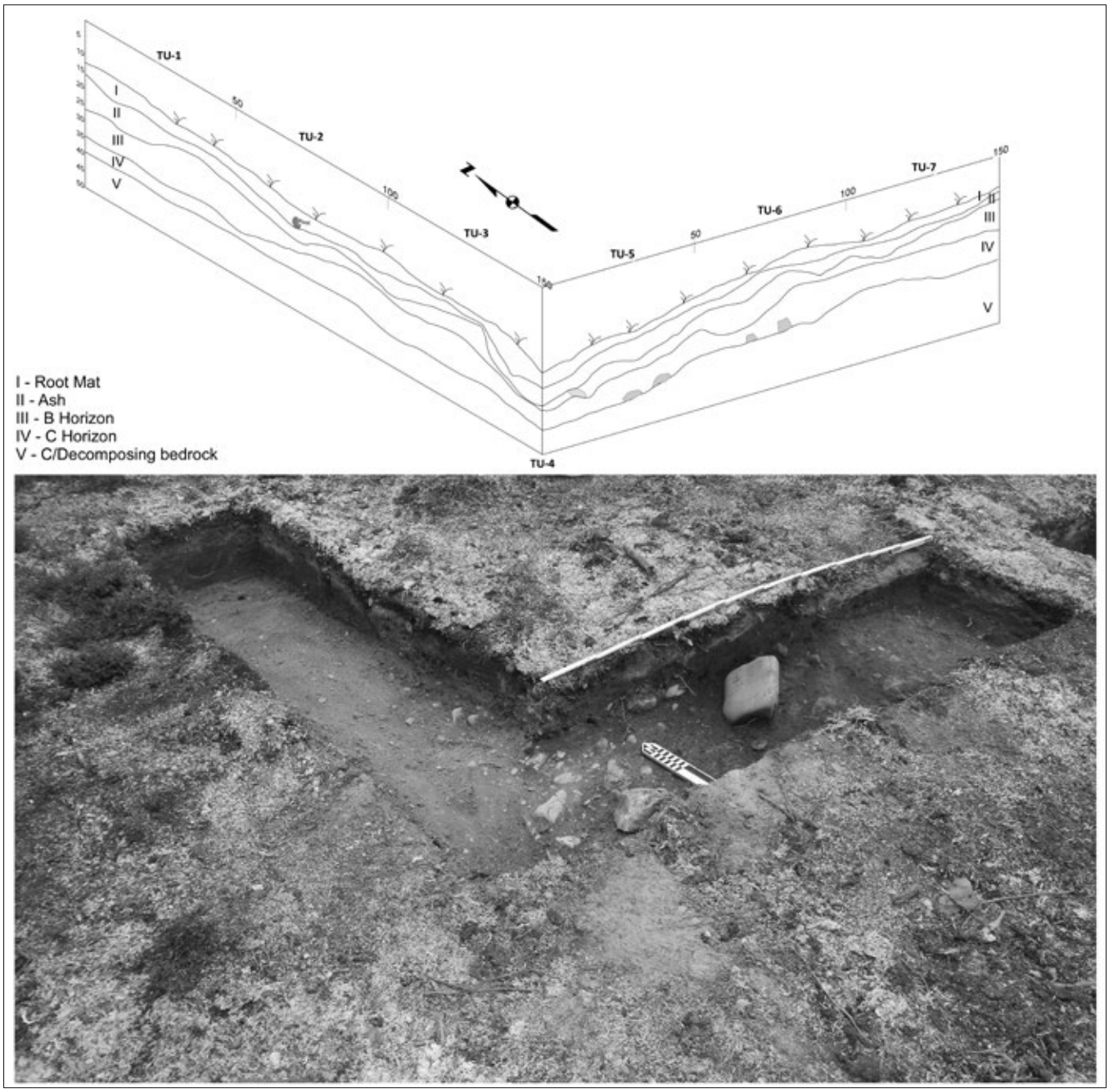

Figure 8. Overview of the L-shaped trench excavation at EAG-00866 facing northeast, contiguous test units 1–7, with drawn stratigraphic profile of the east walls of units 1, 2, and 3 and the north walls of units 5, 6, and 7.

Table 7. Radiocarbon date from EAG-00866 (Solstice site).

Lab Number	Context	Material	$d^{13}C$	Uncalibrated RCYP (1σ)	Calibrated Date (2σ) cal AD/BC
Beta-456393	TU12, interface B & C horizons	Charcoal spruce (*Picea*)	–17.7‰	1650 ± 30 BP	264–532 (1.)

Calibrated with Calib 7.1 (Stuiver et al. 2017).

material makes it difficult to fully gauge the age of the site. The lithic artifacts at the site suggest that a different form of technology involving microblade production was likely employed at older prehistoric sites found in the area relative to later ones, such as EAG-00863 and EAG-00865. The microblades recovered at EAG-00863 might suggest a late use of the technology; however, the way in which these artifacts were produced remains unclear relative to core morphology. It is worth noting that Osgood (1971) and McKennan (1959) make no mention of microblade technology within historic Han or Tanacross (and possible Upper Tanana) Athabascan cultures.

The two large depressions identified at EAG-00863 and at EAG-00865 share similar dimensions to house features as described by Adney (1900:499–501), Osgood (1971), and Clark (1995) in that a common type of shelter among the Han was an elongated, hemispherical skin-covered winter traveling house or tent. These typically measured 5 m in length by 3.5 m in width, with a half-meter banking around the structure. Spruce poles were the chief material used for the structural elements, which were then covered with caribou skins. The skins were tanned with the hair on, made in two sections, and then shaped and sewed together to fit the dome-shaped skeleton of spruce poles (Adney 1900). The two large depressions at EAG-00863 and EAG-00865 are similar in length but are narrower than described ethnographically, likely because a hole was excavated, instead of placing a traveling shelter directly on the ground. No comparable semisubterranean houses are described ethnographically for the Tanacross/Upper Tanana Athabascans; in fact, its absence is noted relative to surrounding groups (McFadyen Clark 1996:161–170; McKennan 1959:74, 1981:569–571).

Overall, this study has demonstrated that the Fortymile drainage is richer in prehistoric archaeological resources than was previously assumed. Some ties between the ethnographic and archaeological records can be made, especially with regard to later sites. The main objective of this report is to illustrate the types of sites present in the area, to provide detailed comparative data for future studies, to introduce some basic research questions, and to begin understanding the broader prehistoric land-use patterns in this area.

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