K & E

TOPOGRAPHICAL BOOK

385

2.60

Robert F. Burgh
University of Colorado Museum
Boulder, Colorado

C9.D1.F1
Burgh 1947: Castle Park, Yampa Canyon

THE ARCHEOLOGY OF CASTLE PARK, YAMPA CANYONS, NORTHWESTERN COLORADO.

NOTES

1947

Archaeology of Castle Park, Yampa Canyon, Colo.

Problems:

Culture allocation of pictographs & petroglyphs.

Statement from Dr. Anderson on age and genetic significance of maize.

Stratigraphic study of Hells Midden, and relationships of midden artifacts to artifacts from Mantle's Cave.

Possibility of house remains on open terraces in the canyon.

Significance of tree-ring dates, and search for further wood specimens.

Probability of ancient disturbance of cave deposits by transient Pueblos.

Possibility of occupation of cave prior to Basket Maker III.

Presence and significance of masonry rooms and circular granaries.

Presence and significance of pottery in cave sites.

Location of burials.

Possibility of finding a very deep occupational stratum in Mantle's Cave.

Identification of textile materials and foodstuffs; with particular attention to beans and cotton.

Comparison of cave and midden artifacts with material culture of

Boulder, Colo. October 1, 1947
R. B.

Problems – continued

historic Ute and Shoshoni tribes.

Identification of animal remains: hide, buckskin, antler, bone, pelts, feathers, etc.

Association of Castle Park occupation with cave remains in Nevada and Oregon, as well as with classic Basket Maker and Pueblo.

Probability of the use of mantle's Cave as a seasonal shelter at harvest time for agricultural tribes in the region.

Possibility of a pre-agricultural horizon below the Basket-Maker occupation.

Possibility of contact with prehistoric Plains Indians along northern buffalo routes.

Provisional opinions on Mantle's Cave Deposits after the first review of C. E. Scoggin's Notes.

Unclassified:

Absence of bead-work, long lance, and horse trappings, as well as other objects of European manufacture, rules out possibility of occupation by historic tribes.

Absence of decorated pottery does not rule out occupation by Pueblo people, because transient bands of agriculturalists would not transport fragile pottery for summer camps.

Absence of smoke stains on cave roof; absence of house remains and living areas; and the northern exposure of the cave are proof that the cave was not ~~permanently~~ continuously occupied by a tribe for a long period of time. The shallowness of deposits, the prevalence of storage chambers, and the scarcity of midden material confirm this conclusion.

An impression of stratigraphy (subject to careful scrutiny) is as follows:

1. Culture remains (related to Lovelock Cave ?), Non-agricultural; economy based upon hunting and fishing.

2. Deposition of a stratum of silt, sand, and rock-falls from cave roof over the

non-agricultural remains.

3. Excavation of deposits for construction of storage chambers for corn (typical Basket Maker slab-lined cists, bell-shaped cists, and pot-holes) by agricultural people. This excavation unearthed pre-agricultural remains and mixed them with the later horizon.

4. Further excavation, amid further silting and scaling of slabs from cave, by agricultural people contemporaneous with late Basket Maker or Early Pueblo. These people left pottery and beans. They modified earlier cists with masonry, and used early baskets as "bee-hive" covers for granaries. Their excavations failed to uncover all earlier cists and pot-holes, just as the earlier Basket Maker excavations failed to overturn all remains of the pre-agricultural stratum.

5. Presumably ancient objects discovered by later peoples (such as snares, projectile points, fish-hooks, etc) would be valued and preserved for practical use or for magical value.

6. Occupation of the canyon, but not the cave, by later nomads (possibly historic tribes) who left a record in pictographs beside pictographs and petroglyphs of earlier peoples.

Unclassified:

A bunch of tapered snares was found 30" below the surface, underneath a layer of compacted silt. Snares of the same type exactly occurs at the highest level of occupational debris in association with Basket Maker material.

Basketry, interlocked and uninterlocked on a half-rod foundation, occurs in Mantle's Cave (where it is the prevalent type) and in the Durango Rock Shelters. Presumably, the split rod (flat side down) gave stability in manufacture, and was later replaced by two rods in the foundation to achieve the same ease of manufacture, with a fiber bundle for securing the stitches. This is a conjecture based on typology, and is not to be considered conclusive.

A study of the Lovelock Cave deposits is required to determine whether all artifacts are associated with twined basketry, the absence of which, in Mantle's Cave, rules out any close relationship to cave cultures of the northern Great Basin.

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The occurrence of two polished stones presumed to be atlatl weights is an anomaly, in view of the absence of the atlatl itself. ~~The nocks of the arrow fragments from the cave show~~ atlatl shaft present in the collection.

The absence of tanned-women bags, women sandals, and the prevalence of leather moccasins suggest a very early horizon for the Basket Maker stratum, compared to the San Juan river region.

The presence of snares having a "keeper" or "trigger" ~~of~~ (a reed or hollow stick) indicates a relationship to Nevada cave remains.

The tapered cord used for Yampa canyon snares should prove to be a diagnostic trait, to be carefully examined by archeologists in other areas. The literature, when carefully studied, may contain evidence of other occurrences.

Features in common with the "Fremont River Culture" are:

Cists: Pot-hole, bell-shaped, slab-lined.
Feathers: Plumes of flicker feathers
Corn
Snares
Sheep-horn wrench
Masonry granaries.
Interlocked basketry.
Shallow cave deposits.
Presence of pottery.

Clusters of pot-holes on cave slope and around marginal areas is characteristic of Basket Maker culture in Durango Rock Shelters and Talus Village.

Cache of seven leaf-shaped blades, duplicated at Durango Rock Shelter.

Absence of bone dice, scored on one surface, is puzzling.

Presence of tubular stone pipe in Hell's Midden is suggestive of Pueblo occupation.

Boulder, Colo. October 1, 1947

Necklace of bone tubes and juniper berries is straightforward Basket Maker.

Feather headdress on ermine band could be ancient, in view of occurrence of flicker feather plumes and ermine pelts in other cave sites to the south and west.

Miniature basket-ladle is exact duplicate of pottery ladles of Early Pueblo III in Four Corners region.

Miniature baskets (except above) characteristic of Basket maker II & III.

Fur-cord blanket characteristic of Basket maker II. Feather-cord is Basket maker III & Pueblo III.

Cradle is characteristic Basket Maker II.

Pottery appears to be Basket Maker III, grit-tempered, fire-blackened, unslipped, but shows scar of handle attachment. Possibly a bag handle. Pottery occurs in Kelli midden.

Journal

Oct. 3 University car #41 Licence 7-1569.
Starting mileage: 01350.

Drove to Denver from Boulder. Met Dr. Jesse Jennings, National Park Service Archeologist, Missouri River Basin Surveys, at office of Mr. Hubler, National Park Service, 1621 18th St. Denver.

Discussed Colorado-Big Thompson Project with Jennings and Hubler. Gave Hubler copy of my report on preliminary survey of Reservoir Areas in C-B.T., sent to Frank Roberts Oct. 2.

Jennings and I drove to Craig. Received copies from him of Cooper report on Randall reservoir, South Dakota, and report on Farm Creek Project, Illinois.

Obtained following information on River Basin Surveys:

U.S.C. personnel utilized on River Basin Surveys must be loaned to Smithsonian Institution and paid by it. Salary from University for period of loan may be utilized for operating fund, supplies, etc.

Operating funds from University during

October 3, 1947
Craig, Colorado

period of loan desirable for use without restrictions of governmental accounting.

Map reference: Erwin Raisz: Physiographic map of the U.S. Harvard University Press. 50¢. 1939.

See about free maps of Colorado Counties — State Highway to U. of C. Museum.

Make plans to give summary of Yampa archaeology & Dave Canfield for inclusion in Information Bulletin of Dinosaur National Monument.

Notes on artifacts

Curved flake is characteristic scraper in Hells Midden and in Cave.

Leaf shaped blade with square base, used as knife or blank for notched point, is characteristic of Cave and of Basket maker.

Miniature arrow-points characteristic of Anasazi. Occur in Hells Midden at all depths.

Thorne Museum has some hafted knives like one from Mantle Cave.

Mrs. Mantle has arrow point with side-notches and arched base. Delicately made. Surface find. Identical with three specimens found in Hells Midden by Scoggin.

Mrs. Mantle reports no iron arrowpoints anywhere in the region. Thorne Museum has some iron arrowpoints of recent Ute origin.

Investigate possibility that wood self-arrows were used with bow, and reed arrows (compound) were used with atlatl.

October 2, 1947
Boulder, Colorado.

10-27-47 Butterfly drills absent in canes of Castle Park.

Tentative Organization of Monograph

Preface
List of Text Figures
List of Plates
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Introduction

Part I Physiography, Climate, & Ecology
Historic Occupation
Prehistoric Occupation
Association of Structures & Artifacts
Cultural Relationships.

Part II Description of Sites
Description of Structures
Description of Artifacts
Function of Structures and Artifacts

Appendix 1. Prehistoric Corn
Appendix 2. Identification of Plant Remains
Appendix 3. Identification of Animal Remains

Bibliography
Provenience of Specimens
Index.

October 2, 1947
Boulder, Colorado.

Oct. 4

HQ Dinosaur National Monument
Jensen Utah.

References: U.S.G.S. Professional Paper # 183
A.A. Baker, C.H. Dane & J.B. Reeside Jr

G.E. & B.R. Unterman. geology ?
Dinosaur Nat. Mon. in preparation.
Vernal, Utah. Ph. 339 W.

William Titsworth. Episodes
of Yampa & green River territory.

Oct. 4, 1947
Vernal, Utah.

Journal:

Jennings and I drove from Craig, Colorado to HQ of Dinosaur National Monument at Jensen, Utah. Spent day with Custodian Jesse Lombard and Ranger G. L. Sneddon. Returned to Vernal for the night. Dinner and talk with Jesse Nusbaum.

Nusbaum has seen two pictographs of Indians using atlatl: one in Nevada and the other in southern Utah. Both show figure using left hand to hold arrow, and right hand holding atlatl.

Visited museum in Vernal City Office:

Basket fragment shows standard B M III design on half-rod foundation, presumably in one color.  approx. design.

Mummy wrapped in cedar bark robe. Skull undeformed. ~~Sandals~~ Moccasins with hair side out. ~~Nusbaum thinks it is from Eight Mile Canyon down the line~~ [Thorne says it came from Douglas creek south of Rangely

~~Two~~ One carrying basket - same shape as one from Mantle's Cave - with, presumably ancient coarse coiling ~~Pima Coarse Coiling~~, and modern California ~~tt~~ basket. Yes, according to Thorne.

Purchased U. S. G. S. Map of Dinosaur National Monument.

Spent night at Vernal, Utah.

Journal.

October 5, 1947
Mantle's Ranch.

Left Vernal with Jesse Mosbaum and Jesse Jennings. Drove with Mosbaum, Jennings, and Lombard to Mantle Ranch. Camped at old Mantle Homestead. Talked to Charlie and Evelyn Mantle.

Looked at petroglyphs on Blue Mountain and on road to Pats Hole.

Warm, windy, dusty.

October 6, 1947
Castle Park

Journal

Visited Mantle's Cave with Nusbaum, Jennings, Lombard, and Charlie Mantle. Nusbaum confirmed evidence of BM II occupation.

Dutch oven lunch.

In afternoon, dug test pit at Nellis midden. Will complete test later in week.

Visited Mantle family in evening. Looked at Mantle collection of artifacts. Their collections suggest occupation of terraces as well as of caves.

Oct. 7, 1947
Castle Park

Nusbaum and I went with Charlie Mantle to Marigold Cave. Nusbaum puzzled by masonry in use with slab cists and turtle back of mud. Found slab smeared with hematite paint. Visited small canyon ruins on way home. Charlie Mantle says there never were masonry rooms in Marigold cave.

October 8, 1947
Vernal, Utah.

Journal.

Nusbaum and I drove to Vernal, Utah from Mantle's Ranch in Castle Park. Saw Lombard and Miller at H.Q. Dinosaur National Monument.

Visited Thorne's museum at Vernal with Nusbaums.

Thorne has worked caves on Douglas Creek south of Rangely.

Items in Thorne's museum:

Mummy in cedar bark robe is all right for B.M. II.

Thorne has never found a bow in caves in the region.

Spectacular pictographs are at Dry Fork, 10 miles south of Vernal; not at Andersons ranch.

October 9, 1947
Mantle's Ranch.

Nusbaum left for Santa Fe.
Returned to Cattle Park. Camped again at old site of Mantle's Ranch.
Visited Mantle family in evening.

Review of Cattle Park archaeology with Nusbaum confirms my belief in a "pure" occupation of the region by early Basket Maker. Lack of heavy occupation does not mean late survival into Pueblo era.

Mrs. Mantle says that terrace above Bell's midden has been plowed in times past — chance of finding houses is very slim.

October 30, 1947
Mantle's Ranch

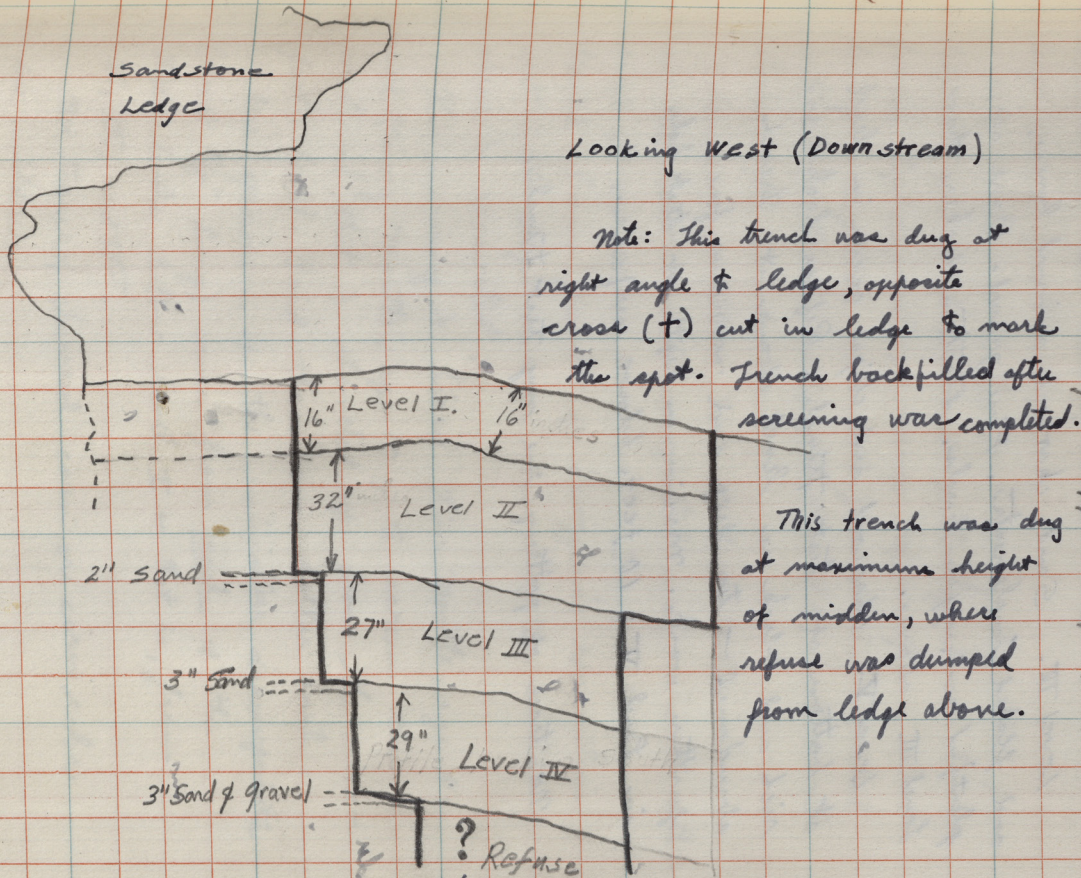
Began trench in Bell's midden. Screened debris by levels.

Level I. Upper stratum. At apex of midden this is a light brown sandy loam, overgrown with enormous sage, up to 6 inches in diameter. This stratum deposited by natural erosion from ledge above. Occasional flakes, bones, and one arrow point intact. Toward wall of small cave under ledge the loam grades to sand and sandstone fragments from cave.

Level II. Rich black, ashy deposit. Mammal and fish bones (burned and broken) in profusion. Numerous flakes. Fragments of metates (or other stones) pecked, grooved, and curved. One mano from original pit dug Oct. 6. This stratum grades into level, sandy, indurated lens found by Scoggin along wall of cave. Evidently storm wash carried materials back from core of midden into cave, producing clear laminations shown in his photograph.

Level III Light, fine sand mixed with abundant charcoal. Ash pockets rare. Profusion of bone and flakes. Burnt fragments of rock rare. Gravel abundant.

See next page


Sandstone Ledge
Looking West (Downstream)
Note: This trench was dug at right angle to ledge, opposite cross (+) cut in ledge to mark the spot. Trench backfilled after screening was completed.
16" Level I. 16"
32" Level II
2" Sand
27" Level III
3" Sand
29" Level IV
3" Sand & gravel
? Refuse Level V
This trench was dug at maximum height of midden, where refuse was dumped from ledge above.
Fish bones occur only in upper half of Level II
Sketch of Hall's Midden
Scale: 1/4" = 1'

Level III. Sand, charcoal, animal bones, and flaked implements. Fine gravel. Bone as plentiful as in upper levels. Stratum darker than Level III, above.

Level IV Charcoal and chips occur in level at bottom of test trench. Refuse looks as rich and black as level above it. Trench abandoned — too deep and narrow for further work. Maximum depth of test hole in Level IV: 10 feet, below surface.

No trace of pottery in my test trench.

October 11, 1947

journal.

Completed test of Hell's midden. Recommend excavation of east half of midden to obtain large series of artifacts.

Hell's Midden evidently formed by deposition from ledge above. Level II and probably lower levels formed by disposal of camp refuse from above during occupation. Level I formed by washed material (artifacts, soil, plant mold, and small stones) after abandonment.

Lenses in midden extend back into cave on the east — much compacted and mixed with sand from cave erosion. Lenses were traced from point of Scoggin's excavation west into dry loose mass of the midden where I excavated.

This morning I hired Jim Mantle, age 8; and Nancy Mantle, age 10, to screen the material that I shoveled up from the nine-foot level. Paid them one dollar each.

One specimen of the miniature arrowpoints (about 5/8" long) came from each of the three levels below level I — that is, from II, III, and IV.

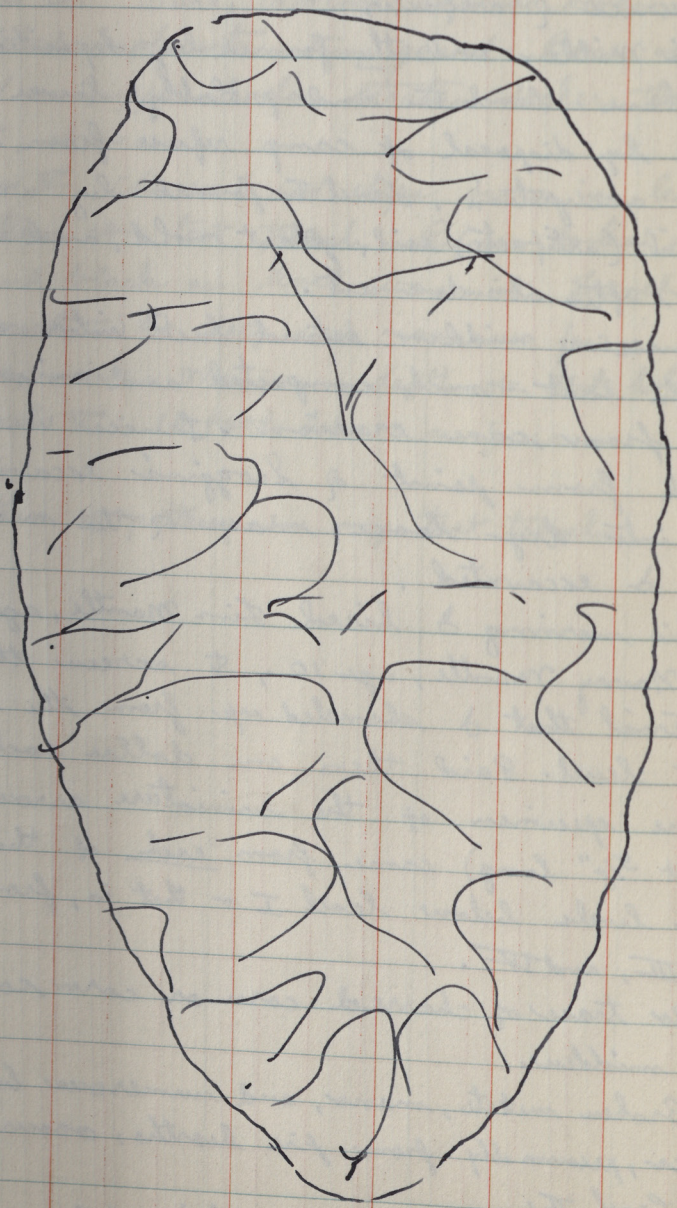
No trace of charred corn or corn cobs in midden.

Broken metate, mano, and numerous heat rocks, presumably from fire hearths, occur in Level II.

Backfilled trench after taking photographs in rain.

October 11, 1947
Mantle's Ranch

Mantle Collection
Typical Specimens

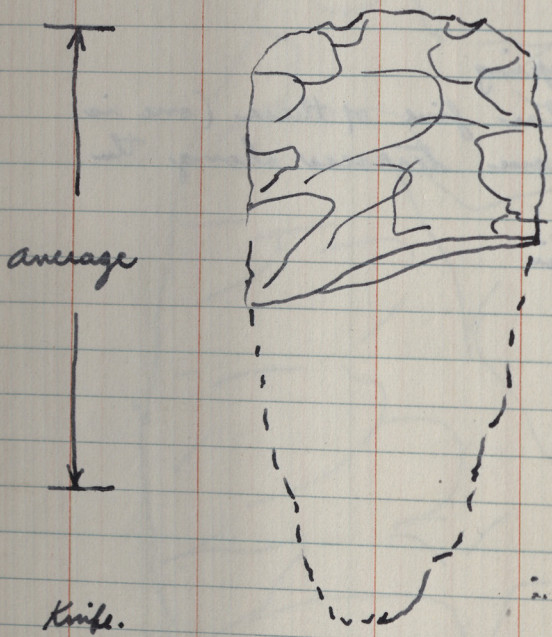


Blade
Natural Size
White Quartzite
Percussion Chipping
Mrs. Mantle has five of these (one is sugar quartz) from terraces along the river.
Thin in section

October 11, 1947
Mantle's Ranch

Mantle Collection

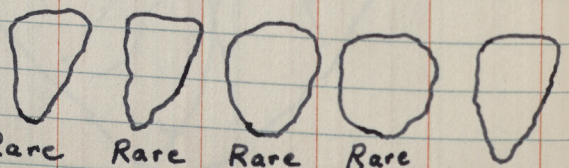
Typical Specimens



Natural size
Slightly larger than average for the type.

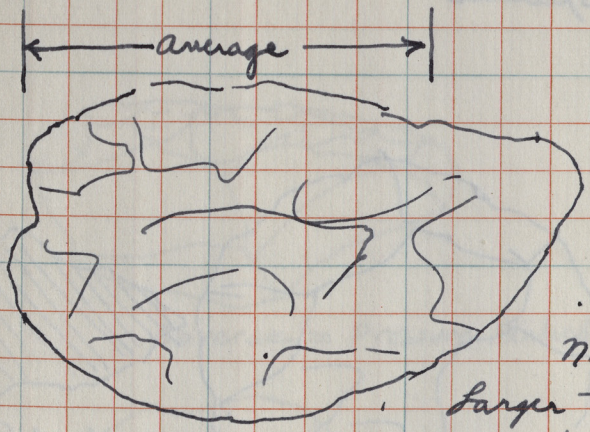
Knife.
Common in Yampa Canyon
Frequent breakage suggests use as knife in wood handle.
Usually broken
Pressure flaked
Thin in section

Range of forms:



Oct. 11, 1947
Mantle Ranch

Mantle Collection
Typical specimens



Natural Size
Larger than average for the type.

Asymetrical Blade
Rarely broken
Common in Yampa Canyon
Pressure flaked.
Thin in section

October 11, 1947
Manlites Ranch.

Mantle Collection
Typical Specimens

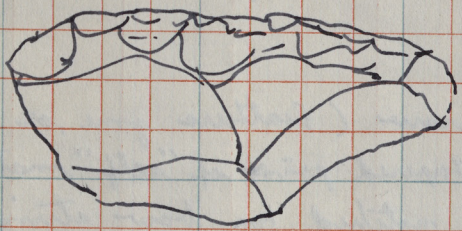


Natural Size
Slightly smaller than average for type

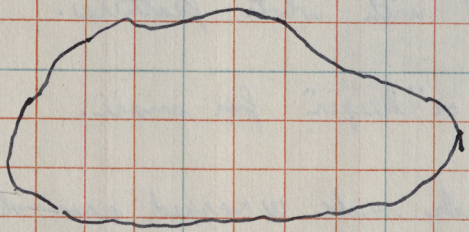
Chopper.
Percussion flaked.
Thick in section
Rarely broken
Common in Yampa Canyon

Oct. 11, 1947
Mantlis Ranch

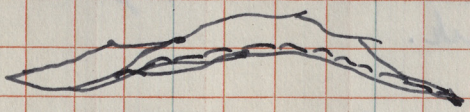
Mantlis Collection
Typical Specimens



Obverse = Pressure Flaked on edge



Reverse = Natural percussion flake



Section = Concavo-convex.

Scraper made from curved percussion flakes by pressure flaking of edge. Probably re-sharpened frequently.

Oct. 11, 1947
Mantle Ranch

Mantle Collection

Item: Knot made of twigs. See Scoggin material.

Item: Wood arrow (feathers gone, or never used?). Tapered point of "self" material. Nock is notched for bow string. Thorne museum has bundle of these feathered with white feathers.

Item: "Trigger" or "keeper" for snare.

Item: Cedar-bark mat. Wrapped around bundle of feathers. Mat held by twined cord and twined fibers of cedar bark.

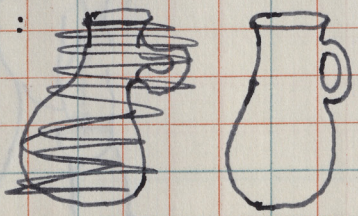
Item: Cedar-bark bag. Held by coarse lengths of twined cedar bark.

Item: Jule-reed mat. Held by twined cordage at 2" intervals. See Durango material.

Item: Mountain sheep-horn wrench.

Item: Cane arrow shaft. Fragment. Rawhide tie for feathers. Not notched for bow string.

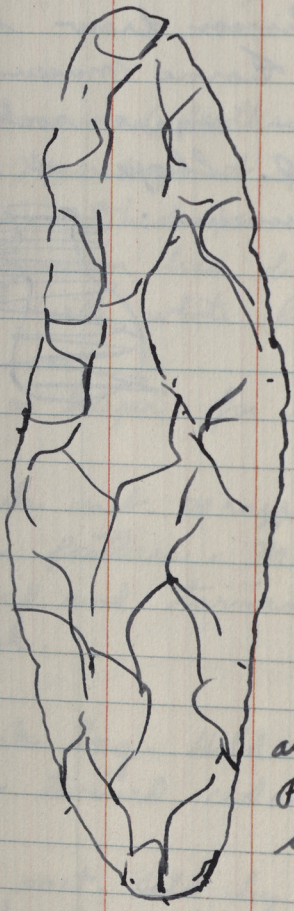
Item: Pottery apparently not coiled. Check this with Miss Shepard. One sherd has scar for ~~leg~~ handle. Mantle's sherds from vicinity of Johnson draw seems to be same as in Thorne museum. Tall rough pitcher - coarse rock temper - fire blackened. Shape of specimen in Thorne Museum:



Oct. 11, 1947
mantle Ranch

mantle Collection

Typical Specimens

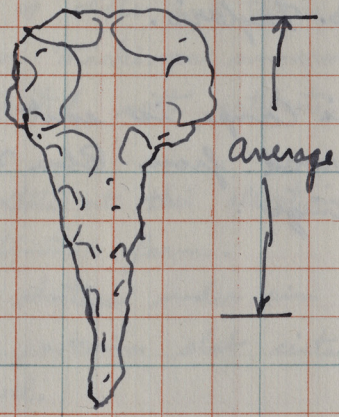


Natural Size
average for type.

Rarely broken, although fragile. Possibly never had utilitarian function.

Knife
Common in Yampa Canyon
Long, thin in section.
Widest at midpoint, tapers to point at both ends.
Pressure flaked.

Mantle Collection
Typical Specimens



Drill.
Usually broken
Pressure flaked.
Common in Yanpa Canyon.

Haslem's Camp. West end of Blue mountain.
Has buffalo skull – possibly b. Taylori.

Thorne museum has huge buffalo skull.
Possibly b. Taylori.

Note: Haslem's Camp is east of Jct. 2 miles on road from Blue Mountain to Elk Springs.

Sunday Oct. 12, 1947
Mantle Ranch

Journal

Trip in Jeep to ridge between Johnson canyon on north and Bull Canyon on south. Benches 500 feet above river strewn with flint chips and artifacts. growth is pinyon-juniper on ridges between gullys at top of cliffs and talus slopes overlooking canyon below. Wickiups numerous, and probably associated with artifacts and midden material.

Observed metate at this elevation. arrowpoints are of no distinctive form.

Caves and shelters under rim rock, high above canyon floor, contain slab cists like those at river level.

Wickiups built of pinyon and juniper poles. Some of these still stand against living trees and could not be more than 200 years old at the earliest.

Mrs. Mantle and the boys showed me all the sites between Castle Park and Hardings Hole.

Oct. 13, 1947
Mantle Rancho

Journal

Worked in Mantles Cave until 2:30 P.M. This afternoon began the first heavy rain. Have had light rain every afternoon since Oct. 9 but this is the first sign of autumn storm.

Found proof of lower occupation in Mantles Cave - presumably Basket Maker. Lies below rock fall. Obtained three sections of charcoal from lower level.

This level of occupation contains charcoal and ashes to depth of six inches, with burned and broken animal bones throughout.

Masonry cists, as well as a few slab cists, occur on top of rock fall, so the prior age of the lower level of debris cannot be questioned.

Mantle Ranch

Summary on Archaeology of Yampa Canyon

Tree-ring dates indicate agricultural occupation contemporaneous with San Juan B M II.

Hells Midden, containing artifacts same as in Mantle's Cave, indicates long, intensive occupation of canyon. (Middens in association with caves occur elsewhere in the canyon.)

Deep charcoal stratum underlying rockfall in east end of cave proves occupation long prior to Pueblo occupation on top of rock fall.

Wickiups associated with areas of flint working belong to a later people. These occur on high benches 400 to 600 feet above the river. (The middens occur on terraces on the canyon floor.)

The cave culture of the Yampa occurs widely over Northwestern Colorado and Northeastern Utah. The association of painted pottery is lacking in Yampa canyon (# is for south only in Utah.)

Petroglyphs, wood artifacts, atlatl weights, basketry, etc. correspond closely to classic B M II, except for absence of twined work. Twining occurs only in matting and cedar bark bags. This complex (compare Du Pont Cave and Durango), I consider to be B M 1½. Check Nusbaum for twined sandals and bags from Cave du Pont.

(over)

Summary (continued)

Northern Periphery as classificatory term must be restricted to Pueblo. The B M trait is more than transitory, and is "pure"; without noticeable ~~trace~~ indication of decadent traits, laggard survival, or aberrant features that might be expected in a peripheral culture.

The conception of a pure B M occupation is in accord with the old notion of a wide spread substratum of Basket Maker I (hypothetical.)

Presence of pre-agricultural horizon is possible, but further excavation is needed to prove its existence.

Plants and animals in Castle Park

Juniper
Pinyon
Red Cedar
Cottonwood
Sage
Rabbit brush
Birch
Service Berry
Choke cherry
Box elder
Buffalo berry
Elderberry
Blue Currant
Red Willow
Squaw brush
Yucca
Cactus
Brigham tea
Slippery elm? (shrub: wild hollyhock)
Primrose
Sand lily
Sage lily
Indian paint brush
Pentstemmon
Wild honeysuckle
Mountain mahogany
Russian thistle (recent)

grosbeak
~~thrup grass~~
Cheat grass (recent)
~~Tumble weed~~
Goldenrod
Sunflowers (recent?)
Clover (recent)
Johnson grass (recent)
Rushes (tule?)
Cedar waxwing
Deer
Porcupine
Lynx
Bobcat
Ring-tail cat
Swift fox
Badger
Beaver
Mink (recent)
Muskrat (recent)
Coyote
Mountain Lion
Cottontail
Jack rabbit (rare)
Sage hen (rare)
grouse (rare)
geese
Heron

Chickadee
Swallows
Sapsuckers
Chipmunk
Rattlesnake (rare)
Bull snake
Water snakes
Lizards
Camp robber
Robin
Bluebird
Magpie
Buzzard
Blue jay

Oct. 16, 1947

Scoggin's Reconnaissance Report.

"Report of Reconnaissance in Dinosaur National Monument": season 1941. Charles Scoggin.

Slab sites in the open at Site B 14 and at Charley Mantle summer camp on Blue Mountain along Turner Creek.

Site L 29: Moss Cave. Harding Hole. Contains wickiup poles.

Scoggin Sites not in Aniocam Nat. Mon.

Brownie Park. Site "A" is located on the upper road to the Sodore country from greystone (by way of the big bend in Vermillion Creek) approximately in the N. W. Cor. of sec. 17, T. 9 N., R 101 W.

Big Bend (of Vermillion Creek) Brownie Park is located in sec. 31, T. 9 N. R 101 W. on the east side of the creek.

Petersen Spring site and Petersen Spring cave are located in sec. 5, T 7 N. R 101 W. (sometimes called Vaughn spring).

Walker Spring site is located in section 1, T. 7 N 101 W at the former Bonner Place.

Red Rock sites are located in sec. 15 T. 6 N. R 103 W.

Tisdell site is located in sec. 6 T. 7 N. R 101 W. (sometimes called Jumbo spring).

October 16, 1947.
Vernal, Utah.

Journal:

Spent afternoon with Custodian Jesse Lombard at HQ Dinosaur Nat. Mon.

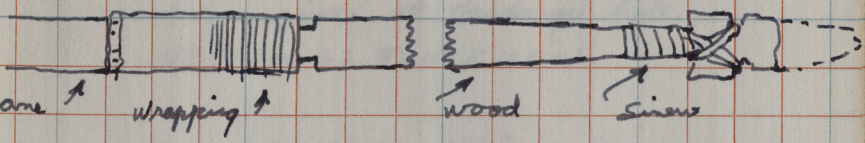
Obtained wood specimens from Stirlands Site 5 (1947 Reconnaissance) at Jones Hole.

Pottery more common west of Green River than in Yampa canyon. Corrugated ware as well as grey ware.

One specimen of scapula, roughly broken, may be similar to implements from Smango rock shelter.

State Historical Society - Denver Museum.

Item Arrow foreshaft with stone point attached, on cane shaft. Foreshaft about 10 inches long.



Item Bundle of tapered arrows. Possibly 200 in this group. Coarse fiber. From Mellinger collection.

October 29, 1947

Wood Specimens sent to Gila Pueblo 10-29-47

Field No.	Provenience
47D1	Fallen pine from bench 400 ft. above river at Harding's hole. NE¼ Sec. 22 T6N. R 10 2 W.
47D2	Pine section of wickiup pole. From same as 47D1
47D3	Cedar section of wickiup pole. From same as 47D1.
47D4	Charred wood from Site 5, Jones Hole, Dinosaur Nat. Mon. To be returned to Custodian.
47D5	Charred wood. From same as 47D4
47D6	Charcoal from Mantle's Cave below rockfall in deep section dug by Scoggin. Section E-1 on Scoggin's Map.
47D7	Stick from surface. Mantle's Cave.
47D8	Stick from surface. Mantle's Cave.

Edgar C. McMechen. "The Hermit of Poté Hole.
The Colorado Magazine. Vol. 19. No. 1 Jan. 1942 p. 91

Auerbach, H.S. 1943 Father Escalante's Journal, 1776-1777. Newly translated with Related Documents and Original Maps. Utah Historical Quarterly. Vol 2. Nos 1 to 4.

Ferris, Warren A. Life in the Rocky Mountains.

Nov. 3, 1947

Conclusions

Upper level of Kelli Haidem only shows evidence of agriculture? Might corn have been introduced to existing population?

Notes:

No. 3-ply cord can be detected by plant of twist, which is more nearly at right angles to axis: 3-ply = IIIII 4-ply = IIII

March 11, 1948

Petroglyphs in Brownie Park on Green River at upper end of Sodore Canyon.

Reported by C. F. Eiglehart,
1607 S. Delaware,
Tulsa, Oklahoma.

Horned figures and goats in Vermillion Canyon
On west face of south entrance of Vermillion canyon.
On road from Maybell to Sodore.
Known to ranchers in the region.

May 28, 1948

Reconnaissance Trip to Divisadero Nat. Mon.

R. H. Lister
R. F. Burgh

Data Required:

Reg Log to Mon. Hdg. and Castle Park.
6 copies of topog. map. 1945.
Condition of roads, bridges, for trucks and cars. Condition in wet and dry weather.
Mileages for supplies, mail, repairs, gasoline.
Purchase of gasoline at Mantle's Ranch.

Location of field camp.
Water
Fuel
Swimming
Work areas
Drainage for tents and vehicles
Latrine
Shade
Fire Hazard.

Lumber
Dynamite
Wheelbarrow

Can Lombard accompany Rodeck into Castle Park?

Date of arrival in June.

Truck time from Boulder & Blue Mt. turn-off.

Can Lombard take Rodeck in if road impassable for car?

Storage of camp outfit at Mantles ranch.

Purchase of eggs, meat, and vegetables from Mantles.

Poles for tents.

✓ Buy tire pump, tire tools, lug wrench, tire patch.

Crowbar for Park Service.

Fuel & water, refrigeration for Botanical Section.

Saddle and pack horses for Botanical Section.
Rates and availability.

Storage of herbarium equipment and specimens.

Tourist camps for June 16.

Jones = plane at Vernal. Horse trip up river.
Trail to Sodore.

May 28, 1948

Road Log.	Mileage	Time
Starting mileage - Boulder, Colo.	6329	1:30 PM
Craig	6565	10:15 PM
Running Time 7 hrs.		
Boulder to State Line	6657.7 6330.0 327.7	
State Line to Turn-off for Chew Ranch	5.0	
Turn-off to Jct. Utah 45 & US 40.	1.0	
Jct. to Jensen, Utah.	12.0	
Jensen to Mon. Hg.	7.0	
Jensen to Vernal.	12.0	
Turn-off	0	
Left Turn across deep arroyo	1.1	
Cattle guard	7.9	
Left Turn, Jct. Top of grade	12.5	

Vernal 6709 7 11 miles.
Jensen 67 21

Follow best road from Top of grade, to Fire Cache.

Three-way fork, turn right on right fork.	18.2
~~Reservoir~~ Cross wagon trail	18.9
~~Jct. with~~ Cross wagon trail from left. Keep straight ahead	20.0
Cross wagon trail	20.2
Reservoir	20.3
"Reverse" Jct from left. Keep straight ahead.	22.4
Jct. with road left. Keep straight ahead.	24.5
Wire gate & Jct. Keep right.	24.9
Jct. with Harpers Corner Road. Turn right down long steep grade Harpers Road impassible. Fire cache, fence posts, & boundary sign at Jct.	25.4
Jct. with Chew Road. Keep right.	35.9
Schoolhouse	39.8
~~Mantle~~ Ranch	~~39~~ 43.0

Jct. with Standing Rock Road 42.0 Keep to left.

may 29

get state clearance for mammal collection.

Thorne Collection, Vernal:
One pair and one extra yampa moccasins
One pair fremont moccasin

Discussion of Utah University.
Jennings going to Utah.
Bug-killed ginyan on Harding Hole road.
~~Ford~~ 1936 2-ton truck for camp is available, also Army Carry all.

Lombard away June 14 to June 19 at Estes Park.

Wolfe and Dever can have apartment until Lombardi returns.

Lombard can carry girls on field trips.

no mattresses available.

Kit of fire tools for 10 men, and back-pack. Lombard will deliver.

Contact state on trapping Charlie's beaver.
Rile Chew also has beaver.

Send Lombard picture of headdress.

Rita Chew has cane with basket in it.

Lombard has power plant available.

Check cliff house at Harper's Corner - across Green River below Echo Park.

Take extra gas for Oshkosh truck. Key in one preston tag.

Take fire cache and wheelbarrow in shed.
Take tent poles from overhead

Horse hire doubtful for girls - horses wild.
Park Service won't recommend local horses.

Take fire tools for ten.
Take one bench - cut in two.

For message to Lombard telephone Rocky mt. evening before for radio message.

Basin Flying Service, Vernal.
Cessna 2-place for $ 10 hr.

June 3, 1948

Mantle Ranch —

Camp in old orchard
Fresh beef and vegetables available.
Caution on fire arms.

Additional equipment:

2 25 gallon gasoline drums.

Eggs	1 doz.
Bread	2 loaves
Pepper	1 box
Chipped beef	1 #
Coffee	1 #
Sugar	1 #
Bacon	1 #
Wieners	1 #
Milk	3 cans
Hash	2 cans
Corn	2 cans
Preserves	1 can
Apricots	2 cans
Berries	2 cans
grapefruit slices	2 cans
Oranges	½ doz.
Potatoes	5 #
Onions	2 #
Salt	