

SOUTHWESTERN MONUMENTS

SPECIAL REPORT

NO 13

THE EXCAVATION OF ROOM 7

WUPATKI



BY

ERICK K. REED

&

JW BREWER JR

DEPARTMENT OF THE INTERIOR

NATIONAL PARK

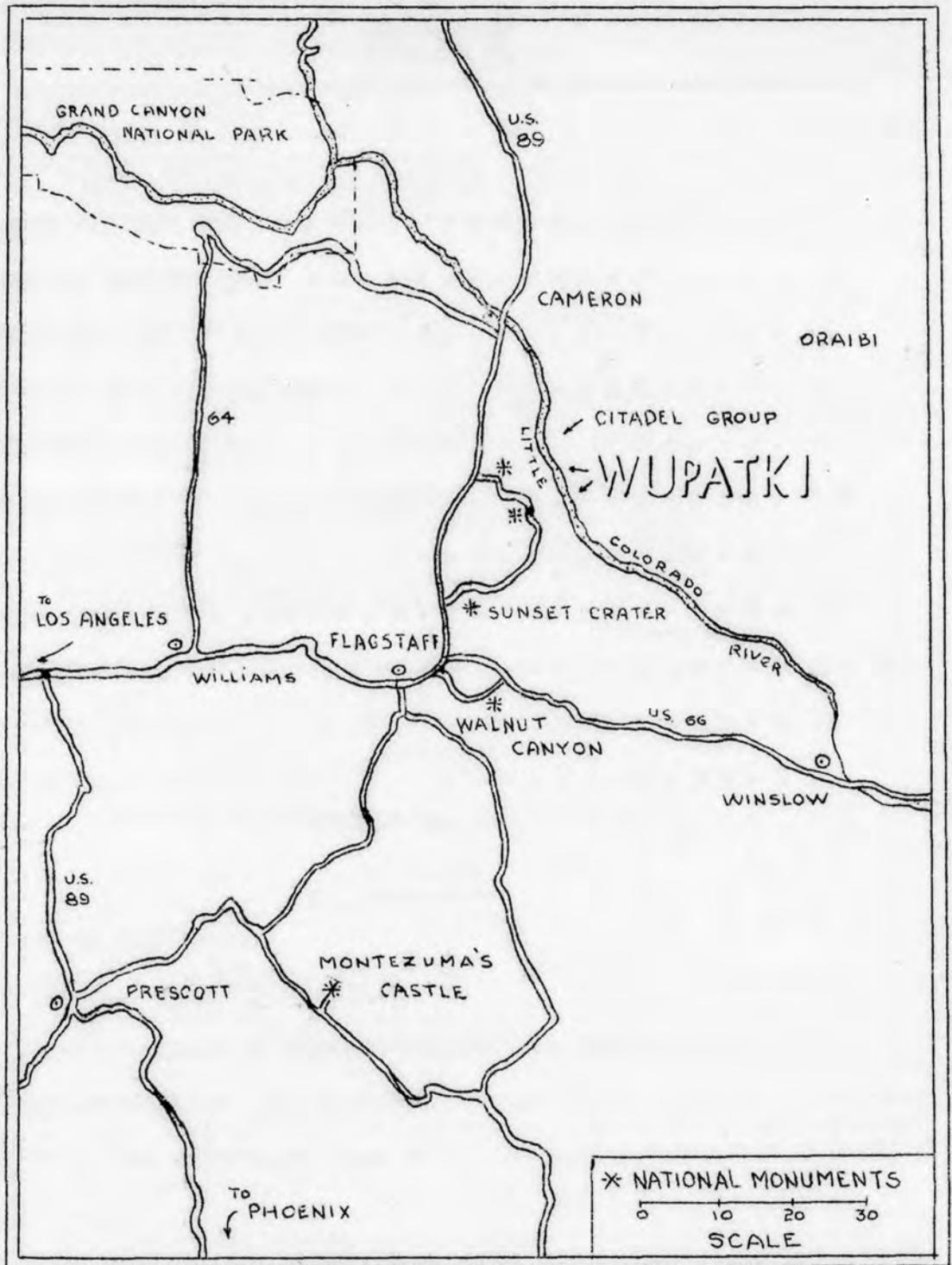
SERVICE

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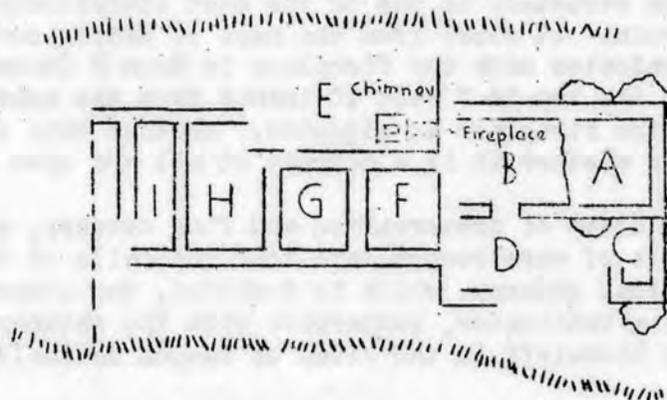


VICINITY MAP .

WUPATKI NATIONAL MONUMENT LIES 38 MILES NORTH-EAST OF FLAGSTAFF, ARIZONA.

WUPATKI THE EXCAVATION OF ROOM 7

By James W. Brewer, Jr., and Erik K. Reed



Fewkes' Figure 8

REVIEW OF PREVIOUS WORK IN ROOM 7 AT

WUPATKI NATIONAL MONUMENT

Assembled by J. W. Brewer, Jr.

J. W. Fewkes (22nd Annual Report, Bureau of American Ethnology)

Notes of the Summer of 1896

Room E (Room 7*) has two stories, and the floor beams and rafters are still in place but buried under debris. A high wall extends from the eastern wall of Room E, crossing a depression in the cliff which is bridged by logs serving as a foundation. - - - - -

The rooms of the second section (North Unit) (Fig. 8), several of which are well preserved, are lower than those of the first section, (South Unit) and the detritus has covered the base so completely that the mesa is inconspicuous. - - - - -

Room A (Room 1) is nearly square and is built on two rectangular rocks, the top of which forms the floor. One of the rocks forms a side of the lower story of the adjoining Room B (Room 4), which is in the best

* Present designation.

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

condition of any in this section. The walls of this room are well preserved and it was occupied as a habitation by a herder a few winters ago.* There is a lateral doorway through the wall on one side (east), and in one corner (southwest) is a fireplace communicating with a chimney, which will be later described. - - - - -

A chimney like structure is one of the most conspicuous objects in this part of the ruin. It rises from the mass of debris covering Room E (Room 7) and communicates with the fireplace in Room B (Room 4), but a vertical line from its top is 7 feet 10 inches from the nearest wall of the room in which the fireplace is situated. Whether this chimney is aboriginal or not, or whether it is a chimney at all are open questions.

Excepting its state of preservation and fine masonry, no evidence was found that it is of more recent date than the walls of the rooms. If it is an aboriginal chimney, which is doubtful, the structure is unique. It may be a ventilator, comparable with the chimney like structures described by Mindeleff in the kivas of Canyon de Chelly.

* During later excavation of Room 4, in 1933, a San Francisco newspaper with the date of 1889 was found on the floor.

A. Tenbroeck Williamson (Report of CWA Excavation in 1933-34)

(True Copy)

Room 7

A.T.W.---693

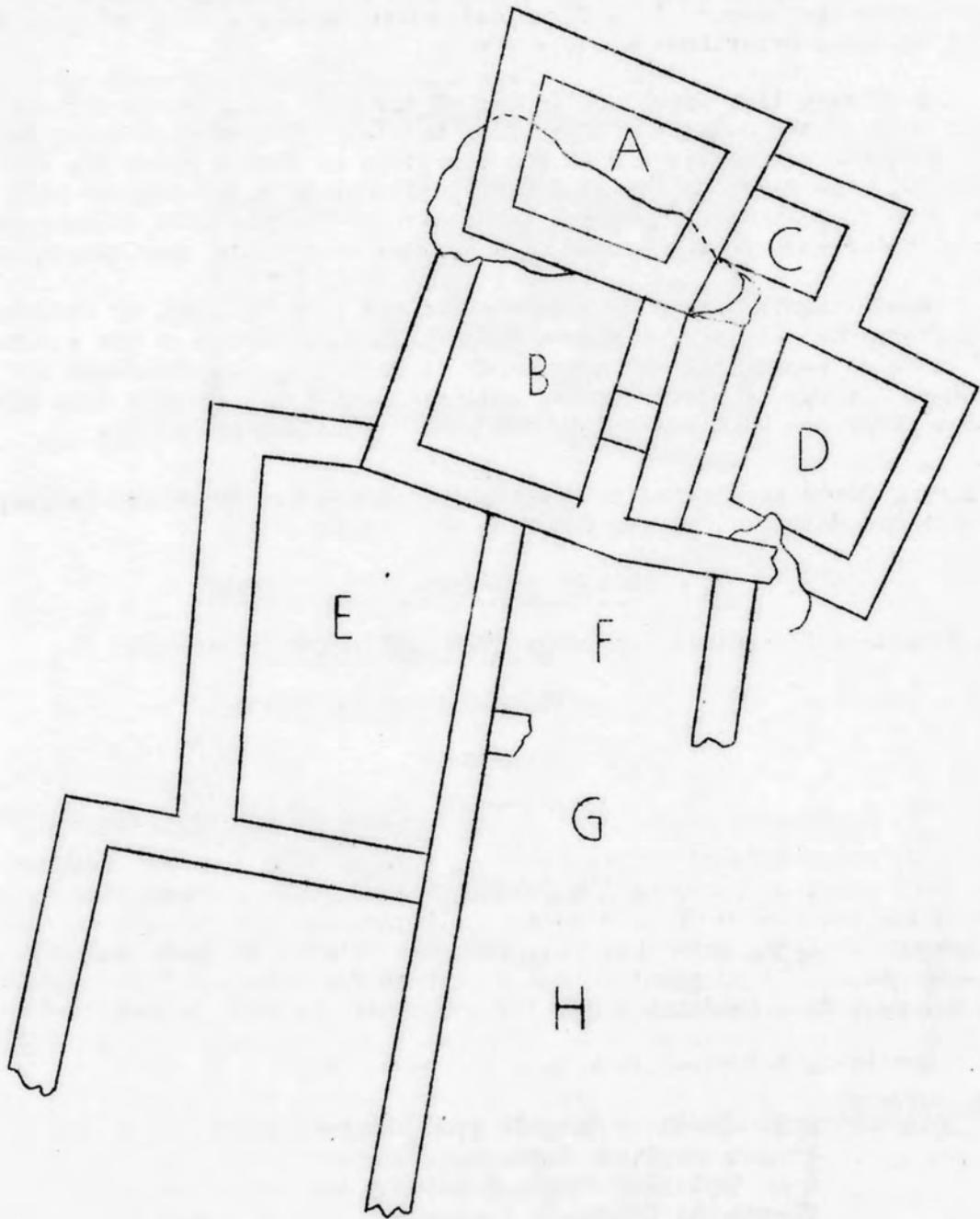
The upper fill of fallen wall was removed from Room 7. Because the allotted quota of laborers was not maintained, it was impossible to complete the excavation of this room. Of importance was the proof, since there was no tying into the wall, that the chimney in this room was not aboriginal. This is counter to a belief of Dr. Fewkes. Three beam holes in the east wall indicate a E-W direction for the roof beams.

Artifacts recovered from Room 7:

Ladle handle - Baby-in cradle-type
Fragment cotton cloth (2)
Bone implement fragment (3)
Glycymeris fragment, incised.

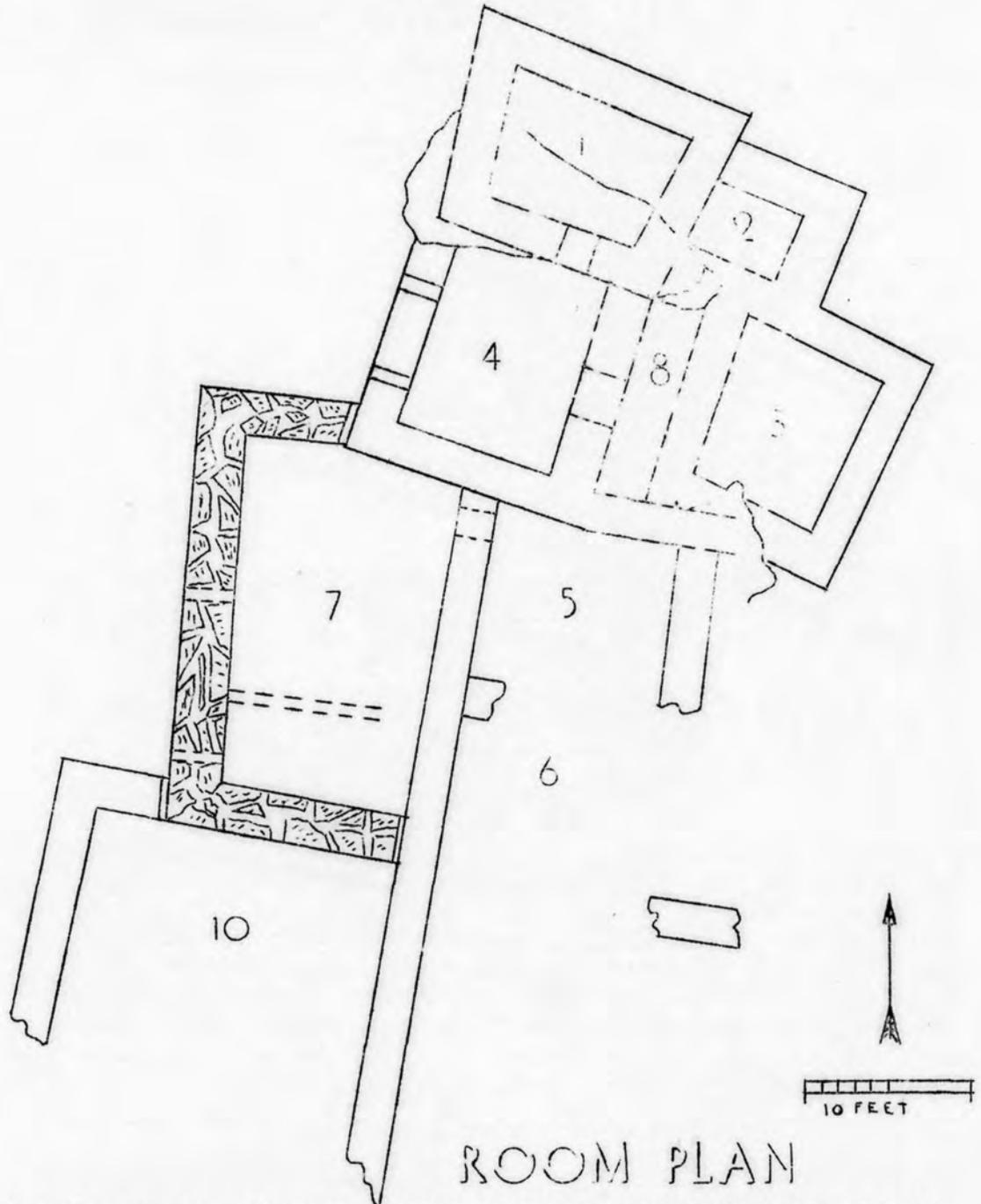
Photographs in association with Room 7:

405.87
405.111



ROOM DESIGNATION AFTER FEWKES

THE NORTH UNIT WUPATKI



ROOM PLAN
(AFTER PLAN OF MUSEUM OF NORTHERN ARIZONA)

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

Reprinted from Southwestern Monuments Monthly Report for March, 1936, page 162, by J. W. Brewer, Jr.,

430 Archeology, History

From partially excavated Room 7. A larger than average, much broken pot washed out. I collected the pieces and put them together on a slack Sunday afternoon. The olla is of coarse paste, rough smudged exterior; interesting is a row of 3/4 inch coiled rosettes just below the neck.

EXCAVATION 1936

BY E.K. REED

Assistant Archeologist
Region III
National Park Service

1. Introduction:

The main ruin at Wupatki National Monument is a large masonry pueblo on a spur of rock below the edge of Woodhouse Mesa overlooking the valley of the Little Colorado. The major portion of the site was excavated and restored by a CWA project, directed by the Museum of Northern Arizona; it is planned to leave part of the rest unexcavated indefinitely. For some time, however, Room 7, from which some of the upper fill had been removed by the CWA, on the side of the lower (northern) portion of Wupatki, had been washing out badly and it was feared that sherds of restorable vessels were being lost.

Accordingly the Regional Assistant Archaeologist spent the period of October 13 to November 3, 1936, at Wupatki National Monument excavating Room 7. Ordinarily eighteen man-days would not be required for the excavation of a room 20' x 12' with average depth of fill about 2 1/2', but, mainly because of the abundance of sherds, all of which I want to recover with as little breakage as possible, the work was done very slowly and painstakingly. Five burials were encountered; fifty-nine listed specimens and a number of uncatalogued ones were found; a number of interesting architectural details were worked out and studied. These are discussed in detail below.

Reluctantly, I left the job unfinished, because of the pressure of other matters, when it became evident -- upon entering the trash pit at the south end of the room -- that considerably more time would be required. On the one hand, I left the room in passable condition, the trash pit cleared and levelled to a slightly deeper level than that of the floor,

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

so that washing out will do little damage; on the other hand, custodian James W. Brewer, Jr., is sure he can find time to finish up the job (there is no doubt at all of his ability to do the work properly - he was field supervisor in general charge of the CWA work here and is a Research Associate of the Museum of Northern Arizona). Incidentally, I wish to express here my appreciation of Mr. Brewer's help throughout my work.

The artifacts and burials found in Room 7 were given serial numbers following the system of the Museum of Northern Arizona and continuing their Wupatki catalog. The majority of the cultural material recovered will be turned over to the said Museum for safe-keeping and for study (the specimens recovered by the CWA here are also in the custody of the Museum). These, and the CWA collections, will be returned to Wupatki for exhibit whenever a museum is arranged there. Dr. Colton and Mr. Hargrave of the Museum are publishing a general study on the Pueblo III period shortly, and plan to publish on Wupatki - primarily the CWA excavations - eventually; they have always cooperated with the Park Service to the fullest extent, and everything found at Wupatki should be placed at their disposal.

Burials 38 and 42 were not preservable at all; burial 41 is not yet excavated; burials 39 and 40 were cleared and left in place, and it is my opinion that they should be shellacked and the pits covered with some sort of lid and left permanently undisturbed as insitu exhibits. I am content to leave the disposal of burial 41, and any further burials found by him, up to Mr. Brewer.

Insitu exhibition of burials (of other phenomena, for that matter) in Room 7 is particularly to the point if Room 7 is utilized for a museum room as has been suggested. I heartily support this idea; the room can be made into a very suitable small museum, with no vast expense. If this is done, I suggest that a large skylight, or pair of skylights, be incorporated in the roof, rather than making unsuitably large window in the west wall; that the entrance be placed at the northeast corner of the room (i.e., using the present (original door)); that the outward-leaning section of the north wall be left sprung and simply finished up - there is no likelihood of its collapsing; that on the other hand the wall in the northeast corner be restored (to use the old door as the entrance); that the floor be of 'dobe plaster as it is now and has always been.

2. Method of Excavation:

Room 7 was filled to an average depth of about two and a half feet above the floor (some of the fill had previously been removed by CWA crew directed by Ten Broeck Williamson) with sand and adobe, largely fallen roof and wall material, containing lenses, layers, and pockets of ash and charcoal, and containing a great quantity of sherds. Due to the amount of sherds and the possibility of restorable vessels, practically all the fill was first trowelled down; and then shovelled out, being thrown across

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

the trail on the west side of the ruin to fill in depressions there.

The excavation was conducted systematically, by dividing the fill into horizontal and vertical sections of varying size. The fill sloped sharply from north to south, so the uppermost layer was taken at first arbitrarily to the lowest point on the then surface; later it appeared that this was nearly down to the uneven level of the fallen ceiling, so this latter was taken as the division point between layers 1 (upper fill, above the fallen roof) and 2 (fill between the fallen roof and the floor). Layer 3 is subfloor trash. The horizontal divisions within each layer were arbitrary and of varying size according to conditions and convenience; they are designated by alphabetical letters. They do not necessarily correspond from layer to layer. Thus, block 1 A is the fill above the fallen ceiling in the entire south half of the room (this block was extended so much because of its extreme shallowness); block 2 A is only four feet square in the southwest corner (between the ceiling and the floor); block 3 A is the entire trash pit in the south end of the room, since this area constitutes a unit as against the presumably much earlier subfloor trash. (It is also possible that the trash pit is really subfloor trash, the floor having for some reason disintegrated over the south end of the room. Light will be thrown on this by Mr. Hargrave's study, by comparison of artifacts from 3 A and 3 B (subfloor trash)). Material from sections 1M and 1E belong actually with layer 2, since these blocks were almost entirely behind (under, in effect) the upturned northeast corner of the fallen ceiling. The small section of wall north of the door in the east wall fell before the roof did, obviously, and a certain amount of soil washed and/or blew in among these rocks, also before the fall of the ceiling; any cultural material therein belongs temporarily, though not literally spatially, between the ceiling and the floor.

Layer 1 was removed down to the fallen ceiling (most of blocks 1E and 1M being left untouched accordingly), and the latter was cleared off and photographed; then layer 2 was removed and the floor cleared. The small pits in the floor were investigated and infant burials found in most of them. One burial, No. 41, over which the floor had been replaced, was not worked on, and excavation of the trash pit was carried down only to floor level. These two things are being worked on by Custodian Brewer, who informs me that he has already found a very fine burial in the trash-pit (area 3 A).

3. Architectural Features:

The floor of Room 7 is of adobe plaster, in good condition; it has been replastered once. The replastering is one inch thick; there is no refuse fill between the floors, so no break in occupation is indicated.

The walls are of small slabs of Moencopi limestone and evidently were plastered completely with adobe during occupation. Some of this wall plaster is preserved quite well in the northeast corner of the room

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

(protected by the fallen rock and consequent early accumulations of soil).

The ceiling evidently fell in all at once, atop the rock-fall in the northeast corner and atop about 9' (in the north end) to 3" (in the south end) of mostly windblown (?) refuse fill. Impressions of rafters (running north-south, poles about 3" in diameter), in some cases still containing decayed fragments of the poles themselves, and of small sticks, brush, and grass (mainly running east-west approximately), with remnants of the grass itself, were clearly observable in the north end upper side of the ceiling. In other words, what is referred to herein as the ceiling is only a part of it - the underneath, or inside, plaster. (A major portion, accordingly, of the fill above the ceiling, layer 1, is the adobe and earth which were piled on top of the timber and brush that constituted the basis of the roof. As a matter of fact, the two metates which we found, and perhaps some of the pottery - restorable plainware jars especially in -- layer 1 were probably on the roof when (and before) it collapsed). The three transverse (east-west) rafters, did not appear in the fallen ceiling itself; but three beam holes in the east wall attest their former presence. The center one of these, in the middle of the wall, is now 1'6" by 2'3" and presumably the central rafter was a log about 15" to 18" in diameter. This would have been the primary support of the roof. The other two beam-holes are spaced about halfway from the central one to the north and south walls and contained rafters not over 10" in diameter. The three-inch north-south poles were laid across these three main supports which were firmly held in the walls and brush, grass, adobe and earth, piled successively atop them.

These three-beam-holes extend down to one and the same course of masonry, so that these are the original lower limits, at 6'6" to 6'10" above floor level. The present upper borders of the rafter holes are 7'10" to 8'1" above the floor, which is about a foot above what appears to have been the top of the door in this wall. There can be no question but that the fallen ceiling which we have been discussing is the one which was supported by these three beams, as on the one hand there is no trace of any fallen ceiling between it and the floor and on the other hand there are no rafter holes whatever between these three and the floor. Accordingly, then, the ceiling was approximately 8' above the floor; forming a room unusually large vertically as well as horizontally.

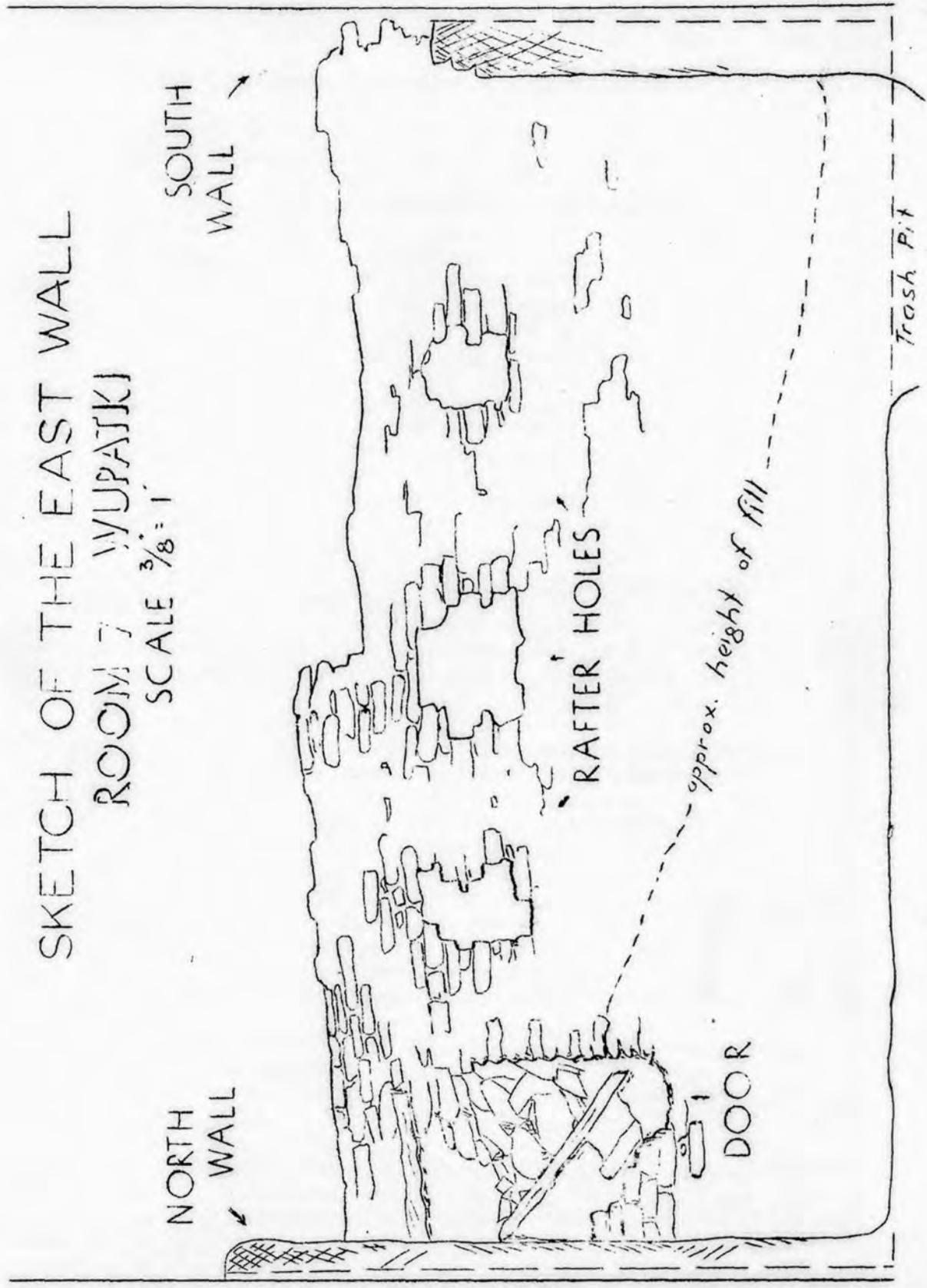
There is no indication and no likelihood of any door except the one in the north end of the east wall, which is mostly gone, rising at present only about 30" above floor level. There is nothing suggesting any opening in what is left.

The door in the north end of the east wall extended vertically from 4' above the floor to 7' above the floor. Presumably a short ladder was set against its sill. This peculiarity of one small door so far above the floor, may have been for defensive reasons; more probably it is simply because the floor level in the adjoining room (unexcavated) into which it

SKETCH OF THE EAST WALL

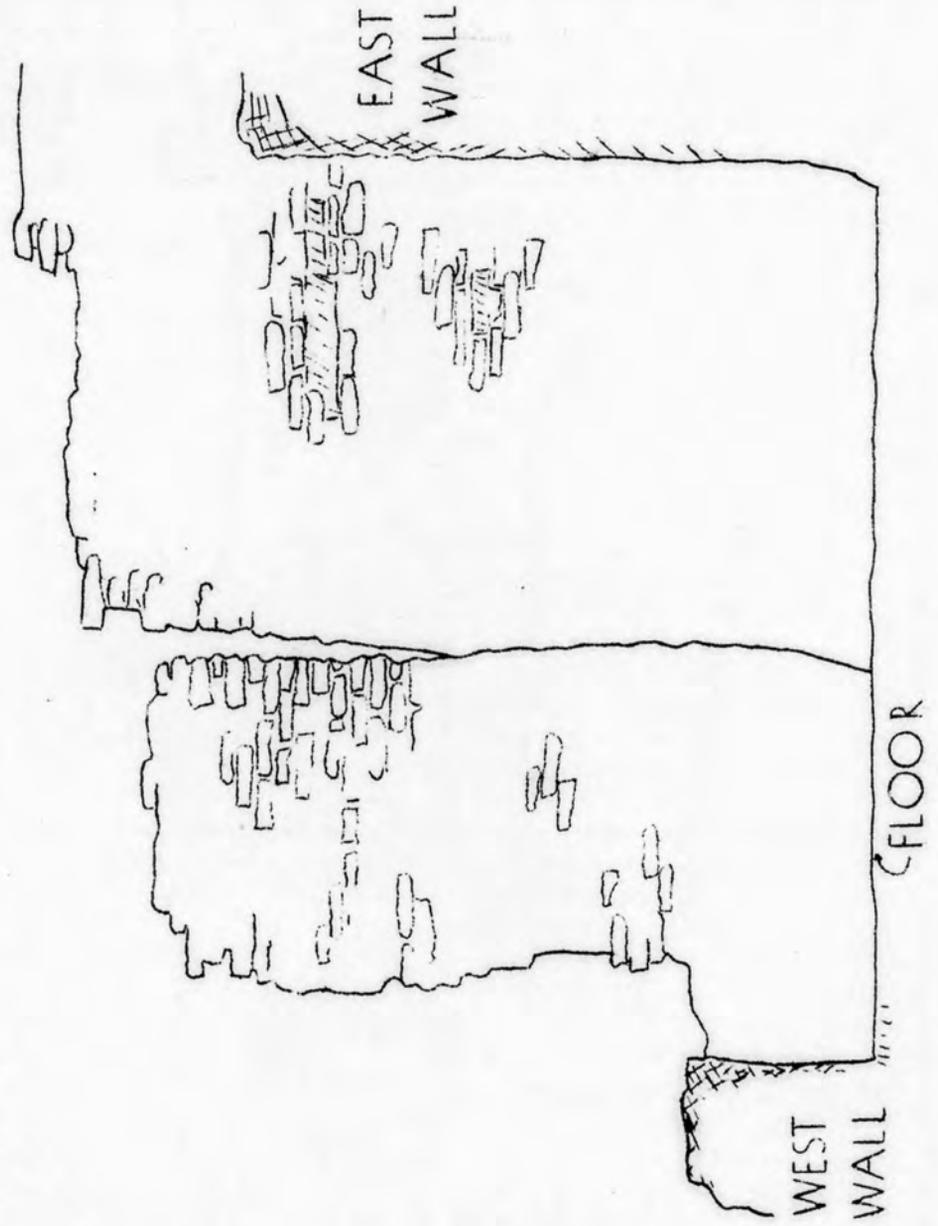
ROOM 7 WUPATKI

SCALE $\frac{3}{8}'' = 1'$



SKETCH OF THE NORTH WALL
ROOM 7 WUPATKI

SCALE $\frac{3}{8}$ "-1'



EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

opens is presumably higher--not necessarily a full four feet higher--than that of Room 7. The door is about 20" wide, set out about 18" from the corner. (Those measurements are given as approximate because the section of wall between the door and the north wall, and the east part of the wall above the door, have collapsed.) The fallen lintel is still in the doorway, extending diagonally across it (and across where the fallen section of wall stood); above it are displaced stones it previously supported.

A ventilator extends through the west wall close to its south end just below floor level. A similar ventilator, filled in with building stones, occurs in the west wall near its center just at (that is, extending up from) floor level. It is quite possible that this ventilator was used at first, was blocked when the replastering took place. Why, I have no idea.

Several pits in the floor appeared when it was cleared off. The most striking of these was the large trash pit across the south end of the room, constituting 3 A. This is being worked out by Mr. Brewer. The others turned out to be burials (discussed below) or simply disintegrated places in the floor. A weak part of the floor just north of the center of the room contained a pocket of ash; this resembled a burnt post more than a firepit. I found neither definite postholes nor a definite firepit. These, at least the firepit, may perhaps be found by Mr. Brewer. It is to be expected that further pits will appear in the lower floor level when the replastering is removed. Very possibly weak places in the upper floor are due to such pits. A clay-lined pit in the northwest corner of the room, 1'2" in diameter and 4" deep, contained a shattered polychrome bowl.

Late chronological position of Room 7 is amply evidenced by the curving-out of the base of those of its walls which are parts also of other rooms; clearly the east and south walls and part of the north wall were built as exterior walls, and Room 7 added later by extending the north wall and constructing a west wall. This is particularly definite and clear in the north wall, where the added section was not tied in with the already existing part and has leaned out away from it.

4. Burials:

Five inhumations were encountered; two of these were completely removed; two cleared but left in place; one has not yet been worked on. They were assigned numbers beginning with 38, in continuation of the Museum of Northern Arizona series of Wupatki burials. All four of the excavated burials were children; two flexed, one extended, one extended and twisted or semiflexed. All four were in pits cut through the floor beside one or another wall, and the floor was not replaced over them. Possibly these four children died at the time of, or shortly after, the abandonment of the room. The unexcavated burial is evidently in another pit under the floor; but the floor was replaced over it. (Perhaps only the upper floor or replastering). Two burials were not accompanied by grave-goods; two had as offerings two small pottery vessels each, a jar and a bowl in each

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

case. In one of these a twilled yucca mat was spread under the pots and above the skeleton. The other was covered with thin slabs of stone.

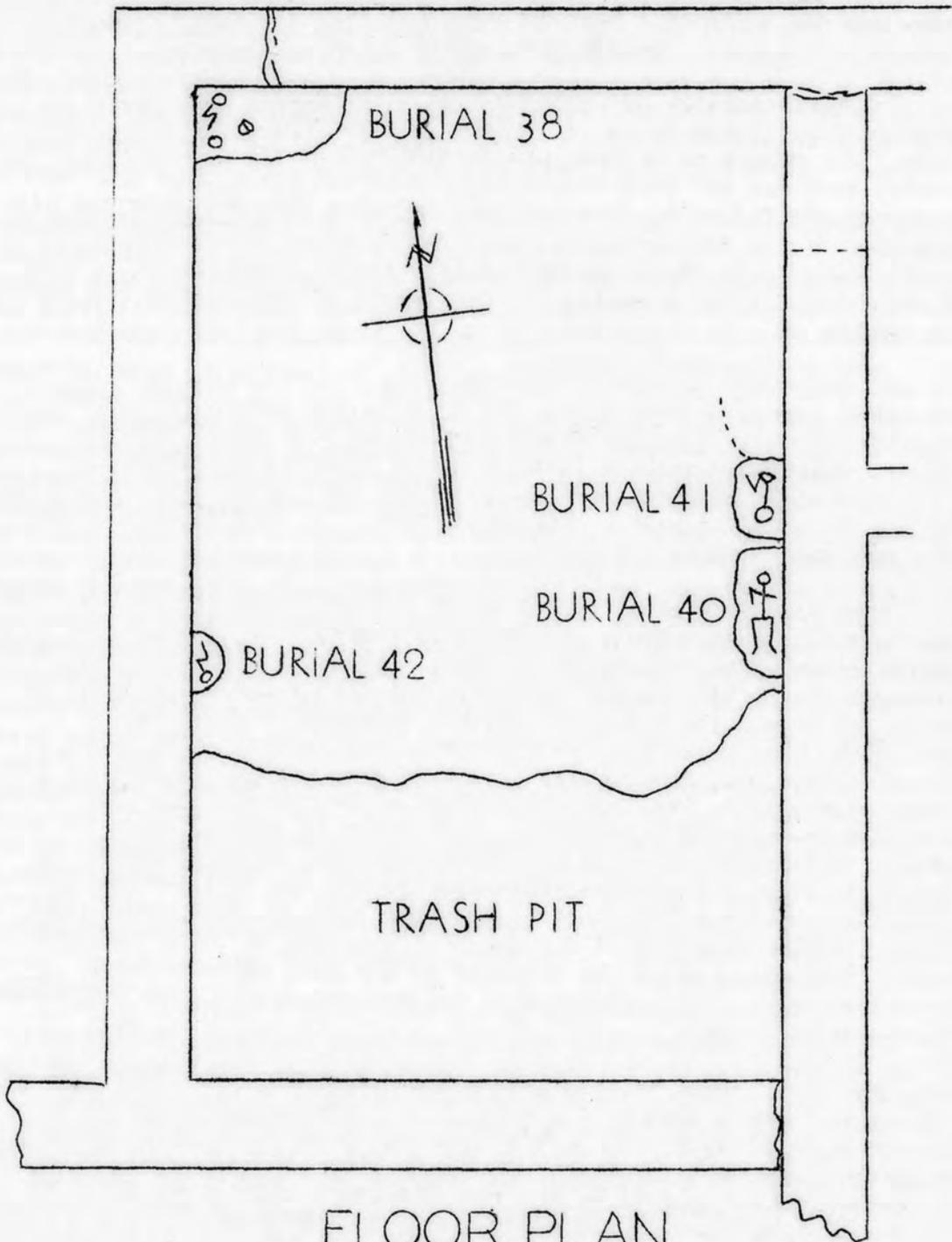
Thirteen complete or restorable pottery vessels are listed in the catalog; in addition there are, probably restorable, several polychrome bowls and a number of redware and plainware jars which were not catalogued because they had not been completely sorted out and worked on. In addition there are the following minor ceramic objects: clay figurine leg with a cleven-hoof; two ladle-handles, two pottery disks (spindle-whorls--flat sherds worked down to an approximately circular shape and to a diameter of about an inch and a half), one perforated black-on-white, one unpierced corrugated.

Of the thirteen pottery vessels, only two are jars; both of these are small (one, black-on-white, $4\frac{1}{2}$ " by $4\frac{1}{2}$ ", the other, corrugated, $4\frac{1}{2}$ " in diameter and 3" high) and both were found with child burials. The black-on-white jar could well be termed a pitcher; narrow orifice (to-wit, $2\frac{1}{2}$ "), and a single large vertical handle. The other, is a small flat indented corrugated vessel without handles. The uncatalogued redware jars are large ollas.

Five black-on-white bowls and six redware bowls are listed. One of the former is particularly interesting, a variation that neither I, nor any archaeologist I've talked with since finding it, had previously observed or heard of: After the bowl was dry, but before firing, a layer of coils was added around the exterior, and not indented or thumb-marked ("corrugated"). One of the black-on-white specimens was originally a large bowl; part of the rim broke off, presumably, and the vessel was ground down to form an almost flat place. Another black/white plate, incomplete, was found--this one deliberately and originally a flat plate (a typical shape in the Pueblo area). This object is also of interest in that it is decorated on both sides; ordinary Flagstaff-type designs on the top of interior, hatched bands on the bottom or exterior. Another black/white bowl is slightly unusual in its sparsity of design---a succession of long, narrow horizontal triangles around the interior of the rim; nothing more. The fifth is surprisingly, quite average---a typical and fairly good large Kayenta black-on-white bowl.

All the redware vessels have black interiors, varyingly well polished. The three large (about 9" diameter) bowls are smudged also on the outside. One small ($2\frac{7}{8}$ " diameter) redware bowl was with one burial, another slightly larger with another. The latter has an interesting detail---it is crimped at two points on the rim, forming a corner or, so to speak, a spout. Finally, one is not only a small black-interior redware bowl with thumbnail marks on the exterior suggesting the Plains, it is an effigy type of Hohokam, or Mexican, affinity carried on the back of a quadruped.

The polychrome bowls are of at least two, perhaps three, varieties, all on an orange base. One vessel has a black/orange interior and a



FLOOR PLAN
ROOM 7 WUPATKI.

SCALE 2 FEET

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

white/orange interior; the others are various developments of red/orange with, or without, white or black added and with horizontal stripes around the orange exterior an inch or so below the rim.

Among the sherds (all of which are being kept) the following wares are represented in addition: gray plainware, black-on-red, Rio de Flag brown, Elden corrugated.

6. Objects of Stone:

a. Four metates of the shallow trough type (the trough open at one end only). A large number of manos were also found, most of them of the ordinary type (flattish, one side showing use), but several were of the late Hopi type, bevelled so to speak, two smooth faces adjacent.

b. Two small sub-hemispherical lava mortars, one so tiny it must have been a toy, and part of an oblong shallow mortar 4" across the short side and $1\frac{1}{2}$ " high, the larger (diameter 3") hemispherical one near the surface of the fill, the other two mortars close to the floor.

c. Only two arrowpoints, a typical concave base and side notch chalcedony point and a small broken obsidian one.

d. Several small rounded-cylindrical pebbles (rather, worked-down fragments) of vesicular basalt, averaging about $2\frac{1}{2}$ " long. Many of these have been found at Wupatki before, their function or purpose is unknown. They are most nearly comparable to "net sinkers".

e. Two "hoe blades", thin flat limestone slabs.

f. A very thin perforated dice of hard stone similar to the pottery "spindle-whorl" discs.

g. A small ($7/8$ " high) keg-shaped diorite (?) object with a deep transverse groove in one side.

h. A perforated pendant 1" long of red igneous stone.

i. Also a number of hammerstones, cores, flakes and spalls.

7. Objects of Shell:

Several small articles or worked-down marine shell were recovered--olivella or oliva beads and glycymeris bracelets, "tinklers" of (apparently) small conchs.

8. Objects of Bone:

In addition to unworked faunal remains (including birds, small

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

mammals, deer), ten artifacts of bone were found. Five were typical bone awls of mammal bones (mostly deer metatarsals), three were small needles, of rodent or bird bones, one of which is eyed, one is a "bodkin" ---a large needle with a slightly hooked end; one a variety of awl with a deep groove from front to back across the proximal epiphysic.

9. Objects of Perishable Material:

Squash seeds and small corn-cobs constituted the only remnants found of vegetal foods. A number of fragments of wood, and wood charcoal, of varying size were recovered; those which were in fairly good condition were saved in the hope that they might prove of use in dendrochronological determinations. Unfortunately only a few look like pine (the only wood utilizable in tree-ring dating).

Remnants of textiles of various types in varying condition were recovered. An almost complete cast (both upper and lower impressions) of a coiled basket about 10" in diameter, with only the merest traces of the basket itself, was just above the fallen ceiling. A roughly twilled yucca sandal, two smaller fragments of sandals, an irregular fragment of tightly woven thin cloth, and one end of a sandal-pad or belt woven of coarse cotton (?) yarn, with two longitudinal dark stripes, were recovered from the trash pit. Also, small fragments of well-knit textile, perhaps of cotton, were found with burial 39, curved pieces suggesting leggings or armlets. A mat accompanied burial 38; or narrow-leaf yucca leaves twilled one over-two under. A few other much smaller fragments of yucca matting were encountered.

No wooden artifacts were found; one cane cigaret was turned up in the trash pit.

CATALOG OF SPECIMENS

- NA 406 R 7 A-8 Vesicular basalt mortar 3" in diameter in SE corner of 1E at depth from surface 4".
- 9 Shell tinkler from 1 B
 - 10 Redware ladle handle from 1b
 - 11 White chalcedony (?) projectile point $1\frac{1}{4}$ " long with concave base and pair of small side notches from depth about 2-" from surface in 1 a
 - 12 Bone awl from 1 a, of deer (?) ulna
 - 13 Bone awl from 1 a, Epiphysic gone (not worked off)
 - 14 Bone awl from 1 a, perfect, of deer (?) metatarsal
 - 15 Piece of glycymeris shell bracelet from 1 b
 - 16 Bezel of shell bracelet, from 1 a
 - 17 Leg (cloven foot) of pottery figurine, 1 a
 - 18 Incomplete shell bracelet 1 d
 - 19 Vesicular-lava cylindrical pebble 1 d
 - 20 Broken small bone awl, 1 h

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

- NA 406 R7 A-21 Pendant of red igneous stone, large longitudinal perforation, one side flat, rest of circumference bulging 1" long, from SW corner of l c, dept from surface 1'8"
- 22 Piece of shell bracelet from l j.
 - 23 Shell tinkler, 1 a
 - 24 Stone hoe blade, 1 a
 - 25 Stone hoe blade, 1 a
 - 26 Blackware bowl 3 $\frac{1}{2}$ " in diameter, exterior thumbnail-marked, supported on quadrupedal effigy of which head and tail gone. Much of rim gone in SE corner of l h at depth 1'8".
 - 27 Black/white bowl bottom worked down to a plate, complete. Diameter 6 $\frac{1}{2}$ ". In layers (2 and (3 in l g
 - 28 b/w bowl 6" in diameter with layer of coils added around exterior after bowl dried but before firing. In NW $\frac{1}{4}$ of l d at depth 18" and in l g (2 and (3, almost complete.
 - 29 Black- (fairly well polished)- interior redware bowl 9 $\frac{1}{2}$ " in diameter, about one-third missing, in SW $\frac{1}{4}$ of l h at depth 1'6".
 - 30 b/w bowl--about half present, in two large sherds; small design, repeated around rim only. In SE corner of l d at depth 8" and in NW $\frac{1}{4}$ of l d at depth 15" from surface (actual diff. in depth circa 10").
 - 31 Large b/w bowl, fairly well made, mesquite bar type of design not especially wall drawn; about a third present (in l b at depth 12" to 18")
 - 32 Fragments of inner and outer impressions of a basket cast (in l a at 10'9" due North (magnetic N)) from SE corner of room 10" in diameter; ordinary coiled with 4 $\frac{1}{2}$ coils to the inch, 16 stitches to the coil, foundation unascertainable, hemispherical.
 - 33 Large flat-bottomed black (not especially polished) interior bowl (in center of l h at depth from surface ca. 2'--about same absolute level as A26 and A20) over half present.
 - 34 Large blackware bowl of A29 and A33; in poor condition; over half present. (at depth 10" in lj).
- * A ladle handle (b/w) in l g or h sherds
- ** Two or three vesicular-lava cylindrical pebbles in l a sherds.

- NA 405 R7 B-1 Half of perforated pottery, b/w, disc-2d
- 2 Unperforated pottery, corrugated, disc--2d
 - 3 Half of perforated thin stone disc--2m
 - 4 Bone awl; perfect; epiphysis worked off--2d
 - 5 Vesicular lava cylindrical pebble (within 3" of floor in 2m)

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

- NA 405 R7 E-6 Tine (diameter 1", height $\frac{1}{2}$ ") sub-hemispherical diorite (?) mortar (just above floor at conj. of 2a, b, c, f).
- 7 Broken shell tinkler-- 2m
 - 8 Olivella bead from S end of 2j, depth CA 4" above floor.
 - 9 Fragment ca 3" by 2" of tightly woven cloth-- 3a
 - 10 Piece of shell tinkler (within 5" of floor in 2j)
 - 11 Obsidian arrowpoint; base broken off (3" above floor in NE corner 2f)
 - 12 Part (probably about half) of a subrectangular flat low-walled vesicular basalt "mortar"; 4" across short side; $1\frac{1}{2}$ " high (in N end of 2j, about 5" above the floor)
 - 13 Vesicular lava cylindrical pebble-- 2f
 - 14 Vesicular lava cylindrical pebble-- 2f
 - 15 Piece of shell (not glycymeris, larger) bracelet 3a.
 - 16 Stone keg-shaped object $7/8$ " high; deep transverse groove in one side-- 3a
 - 17 Bone tool with deep notch in proximal end-- 3a
 - 18 Cane cigaret-- 3a
 - 19 Bone needle--3a--epiphysis worked off; perfect
 - 20 Bone needle--3a--epiphysis left on; perfect
 - 21 Bone needle--3a--eyed; end broken off at eye
 - 22 Bone bodkin (hooked end)--3a
 - 23 b/w (of Dogeszhi) plate; about $6\frac{1}{2}$ " in diameter and about $11\frac{1}{2}$ " high; about 1/3 percent; decorated on both sides-- two hatched bands on exterior; solid motifs and thick lines around interior with Maltese cross in middle (6" above floor in 2m)
 - 24 Sandal of twilled yucca-- 3a
 - 25 Sandal fragment-- 3a
 - 26 Sandal fragment-- 3a
 - 27 Woven sandal pad or belt end of very coarse thread (cotton?); two longitudinal dark stripes; 3" wide 3a
- NA 405 R7 B38-
- 1 b/w pitcher; one large flat vertical handle; diameter $4\frac{1}{2}$ "; height $4\frac{1}{2}$ "; diameter of mouth including rim $2\frac{1}{2}$ "
 - 2 Small redware bowl, polished black interior, $2-7/8$ " diameter including rim; height $1-3/4$ "
- B40-1 Tiny shell bead (a ground down olivella) in fill of pit above skeleton
- 2 Corrugated small handle--less jar; $4\frac{1}{2}$ " in diameter; 3" high; diameter of mouth $3-1/8$ "
 - 3 Redware (polished black interior) bowl; 5" in diameter; $2-3/8$ " high; with two crimps in edge forming a spout.

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

Polychrome bowls not catalogued; uncertain as to how many are restorable.

A number of evidently restorable plainware jars among the sherds. Manos, metates, hammerstones, flint chips, and cores not catalogued.

Four metates: the thickest, from surface above le, two metates in le, 3" apart, one face up at depth 15", one face down at depth 20"; at 16" from SE corner of room and 15'2" from SW corner a metate in IM at depth ca 4' from surface, on 1 $\frac{1}{2}$ ' above floor, just to west of stack of fallen rock; thinnest and least used one, no definite trough.

Condensed Burial Notes

Burial 38: A very small baby, flexed on left side, head to north-northeast in large grave (floor not replaced) in the northwest corner of the room. The skeleton itself closely tucked up in the corner in a pocket of cinders. A yucca mat spread flat across the grave, corner turned up against west wall extending above floor level. A black-on-white pitcher and a very small redware bowl set on the mat.

Burial 39: Child about four years old, flexed on left side, head to south, in pit 1'3 $\frac{1}{2}$ " in diameter, at the east wall 8' from north end, floor not replaced. Uppermost point of skull (right parietal) only $\frac{1}{2}$ " below level of floor. No offerings--traces of a closely woven textile. Note peculiarity; skull and rib cage empty, but not collapsed.

Burial 40: Small baby, extended with head to north, in pit 2'4" by 1'1" along east wall just south (4 $\frac{1}{2}$ " from) #39, floor not replaced. Face up. Arms semiflexed--right pulled back and up, left pulled under torso, skull about 9" below floor level. A redware bowl and a small corrugated jar on the floor of the pit, the bowl near the left foot and the jar near the right knee. A small shell bead in the fill. Covered with four thin slabs of stone set on ledge in grave at about 4" below floor. Left insitu.

Burial 41: Unexcavated. Just north of 39 against the east wall--skull of 41 one and one-half inches from right insehium of 39.

Burial 42: Tiny baby in circular pit, less well-defined and shallower than foregoing, 8" in diameter against west wall 12' south of north end. Head of cast, foot to northwest, no offerings. In poor condition, removed.

*

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

The following is a laboratory report by Mr. Volney H. Jones:

NPS/NA 405 R7 B.9

A fragment of a textile of plain plaiting (under-one, over-one) weave. It is rather closely woven with about 14 threads per centimeter in one direction and about 8 threads per centimeter in the other. The threads are single strand and spun in a counter-clockwise direction.

A larger two-strand cord is worked into one edge of the textile. The manner in which it is engaged does not conform to the usual pattern of edge binding. It appears to be a repair rather than part of the original weaving.

Bits of material from threads of each direction and from the heavier cord on the edge were examined and were found to be of undyed cotton, Gossypium sp. The species is likely Gossypium hopi.

NPS/NA 405 R7 B.27

A fragment of a textile of twilled weave. The borders and a center portion are undyed. Two broad stripes are dyed brown.

The fragment is 7.8 cm. in the shortest dimension and about 18 cm. at the longest point in the other--but is incomplete. The material is cotton and the individual threads are single strand, twisted counter-clockwise.

The weave is basically a twilled weave with the unit over-two, under-two. The pattern is a diagonal one, and by varying the grouping of the warp elements passed over and under, the diagonals zig-zag back and forth across the fabric. This is further complicated by breaks in the pattern caused by what appears to be imperfections in the weave.

FURTHER EXCAVATION

BY J.W. BREWER, JR

When Mr. Erik Reed was detailed to Chaco Canyon National Monument, the excavation of Room 7 at Wupatki was continued from November 5 by the writer.

At this time the fourteen feet and seven inches north of an irregular E-W partition had been cleared to the 'A' floor level. This was the last occupied first story floor level in this room.

In the west wall there is a ventilator 1' 3" from the south wall (inside). Since the top of this vent is located 11" below the A floor level, its use could be determined only through further excavation of the trash pile south of the partition.

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

Excavation of the Trash Pit

The south five feet of this room appears to be a trash dump separated from the north part of the room by a wall of vertical and horizontal sandstone slabs; this wall, partly destroyed, once extended downward to a depth of 2' 3", from the level of floor A to undisturbed shale. (The sandstone shelf noted in the north end of the room (Reed) does not continue south of the partition.)

Removing the trash in arbitrary six-inch layers, a small cyst (12" N-S by 13" E-W by 15" deep) was found 24" from the south wall (inside). The east wall of Room 7 is the east side of the cyst. The upper fill in the cyst was similar to that found throughout the pit (ash, bones, sherds, sticks, and stones). At a depth of ten inches and against the north side the edge of a coiled basket, or tray, was found (Catalog No. 405.R7D.1). The bottom one inch of the cyst was entirely covered with partly burned clumps of grass.

Against the north side (outside) of the cyst is a vertical stone slab that forms the south side of Burial 43.

In the trash pit a small block of hardened level occurs at a depth of one foot, seven inches in the SE corner. At the same level another block of hard packed clay appears against the partition of the EW center. Angling toward the ventilator from this block are three vertical and then two horizontal sandstone slabs. On top of the hardened level and flush on the first vertical slab, rests a nearly horizontal stone that suggests the remains of a covered channel ventilator. (Sub-floor channel ventilators have been noted in Rooms 46 (Hargrave) and 43 (Van Valkenburgh)).

I believe that after the room was abandoned the south end was used as a trash dump, and that stones once used in the wall (partition) and in the vent channel (?) were later used to construct the cyst and Burial 43.

Artifacts found in the trash pit are as follows:

- 405 R7D.2 Cane tube
- .3 Cane tube
- .4 Fire drill
- .5 Fire hearth

Burial 41

The excavation of Burial 39 revealed a skull bone on the north side of the cyst 10" below floor level B.

This was thought to be a north-south burial until a test hole 6" to the north of Burial 39 and through three floor levels produced no supporting evidence.

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

Working this test hole to the south at a depth of 10" no bones were encountered, until the edge of Burial 39 was reached, revealing that the evidence upon which Burial 41 had been based was only a fragment of skull (a complete parietal bone).

Suspecting more of this burial might be found at a greater depth, Burial 39 was removed. One inch below the bottom of this cyst another parietal (right) bone was found and, with the removal of that inch of fill the parietal bone was seen to be resting on a frontal and upper jaw bone. On the same level and against the wall the occipital bone was found. All of the skull bones mentioned above apparently belonged to one individual.

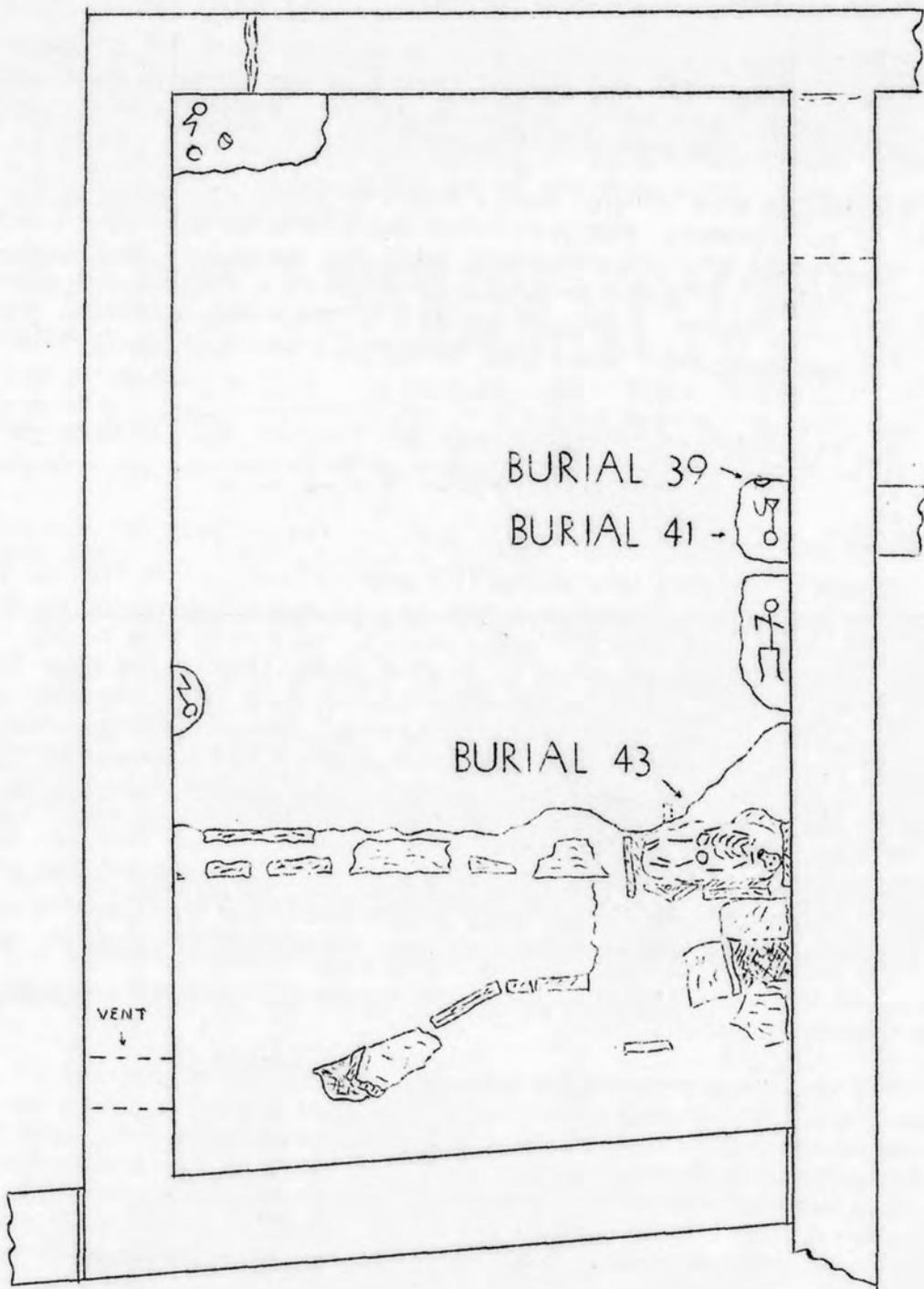
No other bones or offerings were recovered in this burial, which appears to have been the re-burial of a youth's skull.

Burial 43

Burial 43 is that of a seven (?) year old child. It lies at right angles to the east wall and parallels the disrupted partition on the south (fourteen feet from the north wall). The north side of the burial is the space formerly occupied by the E-W partition; at the east (head) end a vertical slab leans on the east wall of Room 7; at the west (foot) end and south side are also vertically placed slabs. Eight inches from the west end a three-inch pine beam once spanned the burial, supported by one of the vertical slabs on the south and inserted into a hole hollowed on the north side. The purpose of this beam was to support a stone lid or cover for the burial; this stone cover was found over the west end of the burial, still resting on the beam except on the north end where the beam was rotted and fallen. (Catalog No. of beam: F.405 R7.5).

The bottom of the cyst is one foot, nine inches below the B floor level; the cyst is one foot, three and one-half inches wide and two feet, nine inches long.

The child was wrapped (or dressed) in a cotton fabric and placed on a mat, which in turn had been placed on a thin layer of cinder in the bottom of the cyst. The arms and legs were extended and the head tipped slightly forward, because of the inadequate size of the cyst. The child was then covered with a mat upon which burial offerings were placed as follows: A pair of nested bowls--a black on white jar (Cat. No. 405 B43.3) inside a corrugated redware bowl (Cat. No. 405 B43.2)--placed three inches to the right of the neck. A single black on white jar (Cat. No. 405 B43.1) placed slightly above and to the right of the hips on a coiled basket or plaque (preserved only directly under the jar). Above the right knee a Flagstaff Red bowl (Cat. No. 405 B43.5) was nested into a black and white bowl (Cat. No. 405 B43.4). Between the knees a small black on white cup (Cat. No. 405 B43.6) was nested into a slightly larger black on white cup (Cat. No. 405 B43.7). A glycymeris shell bracelet (Cat. No. 405 B43.9)



BURIAL 39

BURIAL 41

BURIAL 43

VENT

ROOM 7 WUPATKI

1' 2"
SCALE

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

was intact around the left humerus. Scattered (possibly by rodents) throughout the cyst were 86 small bivalve shells and 48 olivella shells (Cat. No. 405 B43.8). They were most numerous about the neck and eight of the olivellas were lying together under the skull, longitudinally parallel with the perforated end toward the head of the burial. About the right wrist were found seven olivella shells ground off on both ends, probably a bracelet (Cat. No. 405 B43.10). (Beam F.405 R7.5 complacent, McGregor)

CATALOGUE

Burial 43

NPS

- NA405 B43.1 B/W jar with vertical handle Diam. 4" Ht. 3"
- .2 Undescribed corrugated bowl with white exterior decoration
Diam. $6\frac{1}{2}$ " Ht. 3"
- .3 B/W jar with vertical handle Diam. 4- $\frac{3}{4}$ " Ht. $4\frac{1}{2}$ "
- .4 B/W bowl with horizontal handle Diam. 7- $\frac{5}{8}$ " Ht. 4"
- .5 Flagstaff Red bowl Diam. $4\frac{1}{2}$ " Ht. 3"
- .6 B/W cup with horizontal handle Diam. 3- $\frac{5}{8}$ " Ht. 2"
- .7 B/W cup with vertical handle Diam. 4- $\frac{3}{8}$ " Ht. $2\frac{1}{2}$ "
(unfinished cross hatchure on exterior)
- .8 Shell necklace (Glycymeris and olivella bacteria)
- .9 Glycymeris bracelet (?)
- .10 Bead bracelet (olivella)

NPS Beam specimen (complacent; McGregor)
F405 R7.5

Disposition of Backdirt

The back dirt from Room 7 was used to fill a depression in the trail along the outside of the west wall of Room 18 and the south half of Room 7, and a hole left by CWA five feet west of Room 7. To get a trail across this hole, a "dry masonry" wall had been constructed $4\frac{1}{2}$ feet west of the west wall of Room 7. This wall has also been covered with back dirt.

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

A trench in Room 18 was also filled to help eliminate a pocket that compelled surface water to seep into the room. This is another unexcavated, unrestored room that probably contains as much valuable information and as many artifacts as Room 7.

Recommendations

In view of the several unexcavated floor levels known to exist in Room 7 and the occurrence of burials in that room below floor level, further investigation of the lower floors might be advisable.

I recommend the reconstruction of Room 7 and the replacing, under glass, of all the burials with their artifacts.

The door into Room 5 should be sealed and a new one built into the west wall as it is restored. The north, south, and east walls are now standing at sufficient height to support a roof.

In addition to the burials this room is large enough to accommodate at least four museum cases and several wall charts, etc.

In reconstruction of the roof two 3' square skylites should be provided toward the eastern half of the roof. This would permit light for display of B 43. Two windows in the west wall would also help lighten the room.

A thorough study should be made of the pottery.

Technical identifications of artifacts recovered.

Shell material was identified by Mr. George Willett of the Museum of Los Angeles as follows:

NPS/NA405 R7.23 - *Conus comptus* gld. (?)
NPS/NA405 R7.15 - ? ?
NPS/NA405 B43.8 - *Olivella* Bacteria (Little Olive)
NPS/NA405 B43.9 - *Glycymeris*
Miscellaneous (1.) - *Cardium elatum* (Giant Cockle)

"The material probably comes from the Gulf of California."
(Comstock)

The laboratory report of Dr. Volney H. Jones of the University of Michigan follows:

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

Report No. 90

Date of receipt of material November 23, 1936.

Received from National Park Service, Wupatki Nat'l Monument
per J. W. Brewer

Collected by Brewer?

Where collected Wupatki Monument, Arizona

Name of site Wupatki

Other circumstances From Room No. 7, Wupatki.
Tree-ring date 1168 A.D.

Description

Original No.

Laboratory No. 1273. A fragment of loosely woven textile with about 8 threads to the centimeter in each direction. The threads running in one direction are of somewhat larger diameter than those in the other direction. As there is nowhere a selvage edge it is impossible to determine which is warp and which is waft. The weave is a simple over-one, under-one or plain weave. It is probably, but not necessarily loom woven.

The material is cotton, very likely Hopi cotton (*Gossypium hopi*) as this species seems to have been the only one grown in the region in prehistoric times. There is no evidence that the textile had been dyed.

Lab. Report No. 1274

Four fragments of shells which seem to be of gourds (*lagenaria vulgaris*). It is difficult to distinguish the gourds, squashes, and pumpkins by shells alone as the stems and seeds are the criteria by which they are usually determined. However, the stem scar on one of the fragments leaves little doubt as to the identity in this case.

Gourds were commonly used in the Southwest, and elsewhere as well, in the manufacture of rattles, containers, dippers, etc. The Hopi at present have four different shapes of gourds, each separately named and grown for a special purpose.

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

Lab. Report No. 1275. A corn cob about 7.5 cm. in length and 2 cm. in diameter. It formerly had eight rows of kernels, and shows the elliptical cross-section characteristic of Southwestern corn. This cob is somewhat smaller than that of the corn commonly grown today in the Southwest but is not otherwise unusual in any way. It appears to have been of flour type.

It is interesting to note that the kernels were removed in the green, or roasting-ear state, as evidenced by the bases of the kernels still adhering to the cob. It had probably been steamed or roasted before eating, but does not show any effects of scorching in the process.

Lab. Report No. 1276. An ear-stalk of corn of average size and appearance. It is not possible to distinguish the type of corn from which it came.

Lab. Report No. 1277. One half of shell of a walnut, 18 mm. in diameter, none of the kernel now present.

Walnuts grow in the canyons of southern New Mexico and southern and central Arizona. These were formerly considered to be all of one species, Juglans rupestris, but have since divided. The westernmost which has a larger nut and differs in other respects is now considered as a separate variety (Juglans rupestris var. major) by some authors and as a separate species (Juglans major) by others. Juglans rupestris extends only into the southeastern corner of New Mexico, while Juglans major occurs across southern New Mexico and Arizona extending in central Arizona almost as far north as Flagstaff. Wupatki appears to be somewhat north of its range but it is not impossible that it occurs in sheltered canyons nearby.

The diameter of the nut of Juglans rupestris is given as 15-20 mm. and that of Juglans major as 20-35 mm. but there is some overlapping. Since the present specimen is 18 mm. in diameter it more nearly resembles Juglans rupestris in size, but if it is of this species it has been carried considerably out of its range. We are more inclined to believe that it is a small specimen of Juglans major from nearby.

These western walnuts which are so small as to offer only a negligible source of food were, however, some-

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

times eaten by Indians. They were also carried considerably out of their range for use as ornaments. They have been found at both Aztec and Pueblo Bonito with holes drilled in them for suspension and one from Bonito was decorated with turquoise inlay. There is no indication that the present specimen had been brought to Wupatki for any purpose other than as food or as a curiosity.

Lab. Report No. 1278. Four tubular reed pipes and one segment of reed of much smaller diameter. These may be described as follows:

- a. One pipe 4 cm. in length and 1.5 cm. in diameter. The internode has been punctured. No material remains in the pipe but there is evidence of burning.
- b. One pipe 5 cm. in length and 1.6 cm. in diameter. The internode has been punctured and there is evidence of burning. There is no material in the pipe.
- c. One pipe 3.5 cm. in length and 1.2 cm. in diameter. The internode has been punctured and there is evidence of burning. Some partly burned material remains in the pipe.
- d. One pipe, now broken, but formerly about 4.5 cm. in length and 1.4 cm. in diameter. The internode had been punctured and there is evidence of burning. Some partly burned material came from the pipe.
- e. A segment of reed 6.5 cm. in length and .8 cm. in diameter. Appearing to have not been fashioned as a pipe but possibly waste material from pipe manufacture.

These pipes are of the type commonly called "ceremonial cigarettes" in the Southwest. Such pipes seem to have been used both in ceremonial smoking and as offerings. The present lot are of the customary material, Reed Grass (Phragmites communis) and in general are similar to others which we have seen in being composed a node and parts of two adjacent internodes.

These differ in several respects from reed pipes from the Gila region examined by us and by Mr. Charlie

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

Steen. (See: Steen, Charlie R., Ceremonial Cigarettes, Southwestern Monuments, Monthly Report, Oct. 1935, Supplement pp. 287-292). Only about one-third of those from the Gila region had the node punctured while it is punctured in all of the present specimens. All of the present specimens show signs of burning while few of those from the Gila had been burned. None of the present specimens have any wrapping or ornamentation while this was common among those from the Gila.

The material in the pipes from the Gila region examined by us was crushed tobacco leaves held in place by a plug of thin folded inner bark of creosote bush. The material found in two of the present specimens is definitely not of the same material and arrangement. The material is of small half cylinders of bark as taken from some stem or root, apparently from some woody plant. It bears no resemblance to either tobacco or creosote bush. The material seems uniform and there was no plug to hold it. We have so far been unable to identify this bark.

The pipes from the Gila region seem in most cases to have been for offerings rather than for smoking, but these from Wupatki apparently were designed and used for smoking. Fewkes has reported having observed the ceremonial smoking of reed pipes by the Hopi.

Lab. Report No. 1279. A cocoon of some insect of the order Lepidoptera, probably that of a butterfly. Identified by Professor F. M. Gaige, Curator of Insect Division, Museum of Zoology, University of Michigan Museums.

Lab. Report No. 1280. Badly disintegrated strips and wads of strips of leaves of *Yucca*, apparently of *Yucca baccata*. Some of the strips are twisted and knotted seeming to have been used as thongs.

Lab. Report No. 1281. A pod of the plant commonly called Devil's Horns or Unicorn Plant, *Martynia* sp.

A number of species of this genus occur in the Lower Sonoran zone of southern Arizona and southward. Only a single species occurs in the Upper Sonoran zone in the vicinity of Wupatki, this is *Martynia louisiana*. The specimen is doubtless of this species.

Among the Apache, Papago, and Yaqui the seeds of these

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

plants are eaten. Fiber from the pods enters into the ornamentation of the baskets of the Papago and Pima. The purpose of the present specimen evidently was not for food as the seeds are still present. Also there is no evidence that the fiber was removed for basketry and indeed there is no record of *Martynia* fiber having been used thus except in the Gila region. Hough has reported the ceremonial use of *Martynia louisiana* in the soyaluna paho of the Hopi. Possibly some such use may account for the presence of the specimen at Wupatki.

This is the first archaeological specimen of *Martynia* which has come to our attention.

Lab. Report No. 1282. Two beans and several fragments of bean pods. In size, shape and other characteristics these strongly suggest Lima beans (*Phaseolus lunatus*) and we have no doubt that they are of this species.

Lima beans are of Central or South American origin and have been found in archaeological sites in Peru. They have been collected from various tribes of North American Indians and their aboriginal cultivation in North America apparently has never been questioned. However, much to our surprise a hasty examination of our files and of archaeological literature reveals no previous archaeological Lima beans in North America. If a more careful survey fails to show any such evidence these specimens will assume great significance and importance. Kidney beans (*Phaseolus vulgaris*) are quite common in archaeological sites in the Southwest and other parts of North America.

Lab. Report No. 1283. Portion of stem, two seeds, and several fragments of shells of pumpkin. The stem and seeds are of *Cucurbita moschata* and the shells appear to be of the same species but exhibit no definite diagnostic characters. *Cucurbita moschata* is common in archaeological sites in the Southwest. A variety of Striped Cushaw pumpkin of this species was widely cultivated throughout the Southwest and has persisted to the present.

Lab. Report No. 1284 Tube and trap-door of the nest of a trap-door spider. Identified by Professor F. M. Gaige, Curator of the Insect Division, Museum of Zoology, University of Michigan Museums.

Lab. Report No. 1285. Basal portion of a yucca leaf, seeming to be of the

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

narrow leaved yucca, yucca glauca. No suggestion as to its purpose is offered.

Lab. Report No. 1286. A disintegrated and broken cotton boll. This checks well in size and other characteristics with bolls of Hopi cotton, Gosypium hopi in our collections and doubtless is of this species which seems to have been the only species grown in the Southwest in aboriginal times.

Conclusion

The writer agrees with Mr. Reed that Room 7 was apparently abandoned in the latter days of the prehistoric occupation of Wupatki.

The south wall of Room 4 is abutted by the west wall of contiguous Room 5 and 6 at an almost right angle (see Room Plan). Taking advantage of this much construction, the builders of Room 7 made an extension of 6 feet, 4 inches to the already existing 6 feet, 2 inches of south wall of Room 4, thus forming the north wall of Room 7. The west walls of Rooms 5 and 6, of course, were the east wall of the newer Room 7. Constructing the south and west walls for Room 7 the northwest and southwest corners were tied, while the east end of the south wall abutts the west wall of Room 6 as the added portion of the north walls abutts Room 4. The presence of these two tied corners is unusual, "ties" are almost unknown in the earlier rooms of the Pueblo.

The only door in evidence in Room 7 is in the east wall, 4 feet, 3 inches above the floor level! I believe this unnatural height of the door entered on the second floor level of Room 5 (unexcavated). The chinking with small stones, to bring the sides up evenly, indicates the restoring of a wall through which an opening for the door had been made. A beam specimen taken from the fill in this door (possibly a fallen lintel) dates 1168 (McGregor), with the outside ring present.

Some of the pottery types found in the fill of room 7 are of the latest types found at Wupatki (Hargrave). Of the decorated wares, polychrome sherds are as much in evidence as black-on-whites.

Sherds from a "Little Colorado" type vessel appearing to have a small glazed panel were forwarded to Mr. F. G. Hawley of the Inspiration Copper Company, who tells us the following: "By dissolving off a considerable amount of the paint in a mixture of nitric and hydrofluoric acid and concentrating this in a platinum dish I was able to get very good tests for both copper and lead by the electrolytic method. Apparently more copper than lead but very distinct tests for both."

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.):

Of special interest are the four infant and two youth burials in this room.

In some localities it was the custom to bury infants inside of pueblo rooms, while the adults were buried outside. Haury shows us that at Canyon Creek Ruin (Medallion Paper #14, 1934):

"Forty burials were found during the excavations. Infants, and in rare cases adults, were buried below the floors of rooms. Adults and youth were placed on two artificially constructed terraces on the talus slope below the west end of the house."

Such a practice is not indicated at Wupatki. Of the 26 human burials excavated at Wupatki (not including Room 7) 18 were inside burials. Of these 18, ten were adult. On the other hand, of the eight outside burials three were children. This indicates that Wupatkians did not observe the custom of the Canyon Creekers, or of the modern Hopis.

The answer to why so many children, and no adults, were buried here in Room 7 seems to be only that so many children died.

Bearing in mind that all four of these infant burial pits were definitely cut through the last occupied first story floor level in Room 7, and assuming this indicates a high rate of infant mortality, let's turn to Dr. H. S. Colton's excellent paper "The Rise and Fall of the Prehistoric Population of Northern Arizona." (Science, October 16, 1936)

"Haury has shown us that droughts were sometimes so bad that there were considerable migrations of peoples, and there is no doubt that persons in early days were subject to deficiency diseases. Droughts no doubt lead to starvation, disease, migration and to wars, but droughts were probably on the long run not much worse in the years after 1100 than in the eight hundred years that preceded. The tree ring specialist can see no real difference in rainfall. As you will see later, the big decline in population began long before the 23-year drought, the great drought that ended in 1300, which certainly was a major catastrophe in pueblo history. -----

"Lack of vitamins would hardly be a serious factor in causing deficiency diseases. But there is a neglected factor leading to a population decrease which seems very much stronger than any of these. This factor might be summed up in the words 'bad sanitation'. ----

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

"After 1100 the people changed their habits and constructed masonry structures with flat roofs in which several families dwelt in closely contiguous rooms. It marked a change from rural conditions to urban--a change from a family or a small group of families living in detached one-roomed houses placed near their farm plot, to a condition of many families living in multi-storied apartment houses and walking some distance to reach their fields. I want to stress the fact that the change occurred in northern Arizona about 1100 A.D. The statement may not apply to the area east of the Chinle Valley and certainly does not apply at all to New Mexico or Colorado.-----

"The pueblo family lives in crowded quarters. Families live close together, and the excreta are deposited in the narrow plazas, streets, middens, and passages near the houses. Were it not for the arid climate, conditions would be impossible. -----

"The infant mortality of the Hopi children under two years of age after the summer rainy season is very great. ----- In 1934 nearly all the children under two years of age died of infantile dysentery at Shungopavi and also at First Mesa. -----

"Our studies show us that the population of northern Arizona increased seven fold between 600 A.D. and 1100 A.D. This was possible by the introduction of agriculture, together with the custom of families living in isolated houses.

"During the next eight hundred years, when urban communities such as Wupatki grew up, the population decreased. This decrease was equal to the previous gain. We do not have to postulate nomads, we do not have to postulate drought. The mere fact that people lived in crowded tenements under bad sanitary conditions, and so could not raise their children is a sufficient explanation to account for a loss of population." (The underscoring of "could not raise their children" is mine.)

On the evidence presented in Room 7 Wupatkians "could not raise their children" at that time.

Assuming Room 7 was constructed about 1108, used as a living room abandoned and used for a burial ground, the evidence found in this room might contribute to the answer to "Why was Wupatki abandoned?"

The latest tree-ring date yet obtained at Wupatki is 1205 A. D.

EXCAVATION OF ROOM 7 AT WUPATKI (CONT.)

(National Geographic Society, Pueblo Bonito Series #V, Dr. A. E. Douglass, 1935) indicating that toward the latter years of Wupatki occupation a high rate of infant mortality may have led the inhabitants to abandon the Pueblo.

Cottonwood charcoal found on the floor and in the trash pit greatly predominates pine.

Possibly this fact supports Dr. Douglass' theory of receding pine forest on Woodhouse Mesa one half mile south of the Pueblo.
