

THE ARCHAEOLOGY OF THE HOPI BUTTES  
DISTRICT, ARIZONA

by

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## CHAPTER 2

### THE SOUTHWESTERN HOPI BUTTES SURVEY

The archaeological survey in the southwestern Hopi Buttes was a discrete part of the whole archaeological program. During the first weekends in which the site survey was undertaken no excavations were planned. The purpose of the survey was simply to assess the character of the prehistoric population in the area. It was only after the initial stages of the survey had been proved successful that an excavation program was proposed to the U.S. Geological Survey.

#### History

The first portion of the survey was done during four weekends in March and April 1966 when weather permitted. The second part of the survey was conducted while the excavation program was in progress. The later part of the survey program took place from 11 July to 12 August 1966. At most times the survey team consisted of two people. The survey was undertaken with a four-wheel drive vehicle and on foot where driving was impractical. A collection was made at all sites except at the seven sites where no pottery was found. Each site, when discovered, was accorded a temporary field number; then in the laboratory a permanent NA number was assigned in the Museum's survey system. A standard Museum of Northern Arizona survey card was filled out for each site and a sketch was drawn of the site plan and location. The site location was then plotted on the preliminary U.S. Geological Survey topographic map of the area then being compiled.

For purposes of the survey a site was considered a discrete collection of sherds, worked stone, or obvious architectural features. These elements were often found separately but were still considered a site. For example, several rectangular basalt structures were recorded as sites, although there was no other indication of human activity in the immediate vicinity. The areal extent of the survey and the sites recorded are shown in Figure 2-1. Six of the recorded sites are situated slightly off the map.

A total of 210 sites was recorded and given numbers NA9165 through NA9208, and NA9243 through NA9409. Several sites with obviously two components or distinct periods of occupation have been counted as two sites in the enumerations of sites with structures visible on the surface, in site temporal spans, and in other figures. Some of the deeply buried material that has been counted as a single site may actually be two or even more separate sites because it is sometimes impossible to tell where one site ends and another begins because of inadequate exposure. All of the prehistoric sites are assignable to the Anasazi culture and all appear to be habitation sites, except one site that may be a shrine and one that may be defensive. Navajo sites were found during the survey, but none were recorded; all were recent.

The site survey was extensive rather than intensive. The objective was to record all sites in the fifteen-minute Malpais Spring 2 Quadrangle, in which

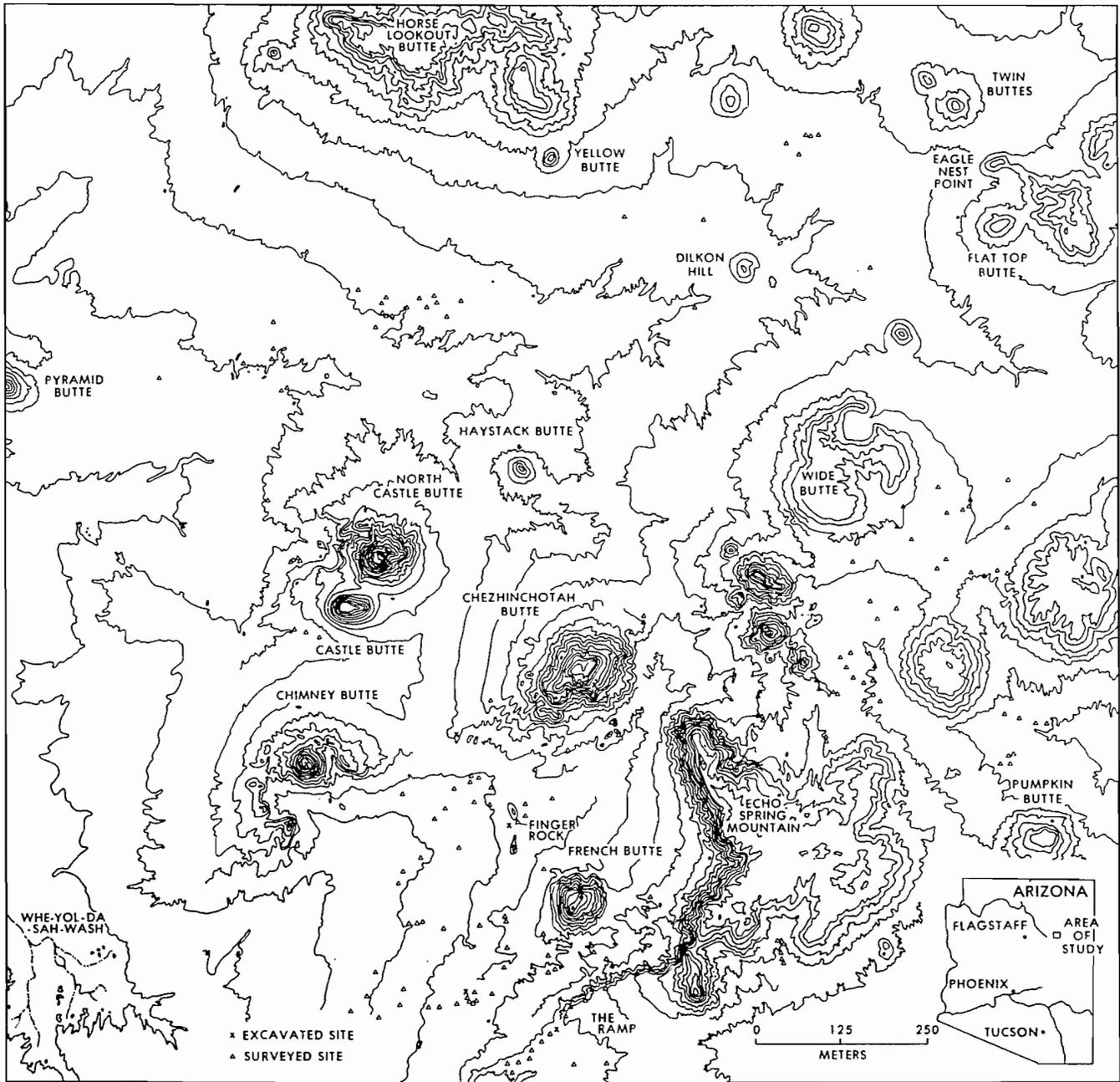


FIGURE 2-1. Southwest Hopi Buttes survey location of surveyed sites.

the U.S. Geological Survey was mapping; nevertheless, only about one-third of the quadrangle was surveyed, and not all areas within the boundary were intensively inspected. Low areas were given a cursory examination, and ridges, slight elevations, and areas along drainages were searched more thoroughly.

An analysis made of the Hopi Buttes survey as a test of methodology indicated that the relatively low number of sites recorded was largely the result of the low number of work days spent in field examination (Plog et al. 1978). There is no question that an increase in the intensity of the survey would have resulted in a larger number of sites recorded. However, it is unreasonable to assume that all regions, no matter how inhospitable, supported large populations and that more intensive survey would automatically indicate that. No pretense is made that all the sites within the survey region were discovered. Inspection of the completed El Paso pipeline shows several sites in heavily duned areas that were not visible on the surface until the trenching machines revealed potsherd concentrations. Undoubtedly, many small sites are being alternately buried and uncovered by shifting sand dunes.

The decision was made to opt for broad areal coverage rather than concentration on a much narrower segment of the study area, because it was felt that an assessment of the relative density of sites and their patterning over the landscape was necessary to answer the research questions posed, given the financial and personnel resources available. It is doubtful whether an increased number of recorded sites in the study area would change the interpretations of this monograph. However, the boundaries of the study area may have obscured patterns, and since the southern area was added to the area under investigation as a late decision, the Plaza site would not have been found. As will be discussed, the Plaza site is vital for understanding the nature of the prehistoric occupation. It would have been useful to expand the area of survey to the north in an attempt to delineate the northern boundary of the Little Colorado White Wares, but time did not permit.

Because of the pipeline surveys that traversed the Hopi Buttes district north of Dilkon, several sites were encountered in the study area. No attempt was made to correlate these sites with those recorded on the Hopi Buttes survey since the sites recorded on the pipeline survey could not be plotted on a detailed map and consequently were difficult to relocate on our survey. Furthermore, the construction of the pipeline considerably altered the landscape of the right-of-way, making site definition difficult. Therefore, all sites encountered in the vicinity of the two pipelines were given new site numbers.

#### Site Distribution and Environment

It is evident that the Anasazi settlement pattern in this area was determined mainly by climate, geologic history, and local resources. Unlike many regions in the arid Southwest, the sites in the Hopi Buttes district are not clustered primarily along water courses but instead are more or less evenly scattered throughout, with some minor groupings. There are also

Storage Pit. Roughly rectangular. Centered 0.40 m from northwest wall. Sandstone slab lining on sides and bottom. Length 0.50 m. Width 0.40 m. Depth below floor 0.20 m. Slabs extend above floor maximum of 0.20 m. Slabs set in brown clay plaster. Brown sand flecked with charcoal in fill.

Miscellaneous Holes. Four large amorphous depressions were found in the floor. All depressions unlined and may be result of erosion.

Roof. Probably beams laid horizontally across upper course of walls.

Fill. Fine-grained blowsand and numerous sandstone slabs from wall fall. Few slabs in bottom 0.20 m of fill.

Material Culture. A scraper, a mano, and a fragment of Glycymeris shell bracelet in fill. A mano, five restorable Walnut Black-on-white bowls, and a Walnut Black-on-white jar in floor fill.

#### Room 6 (Plate 27)

Phase. McDonald.

Type of Structure. Surface dwelling.

Shape. Rectangular.

Dimensions. Maximum northeast-southwest 3.80 m; maximum northwest-southeast 2.75 m. Average depth of floor 1.10 m below present ground surface, directly on old occupation surface.

Walls. Southeast wall of clay construction and others are sandstone masonry. Clay wall well constructed and contains a few small, scattered sandstone pieces. Patches of single coat of light gray plaster remain on clay wall. Masonry walls of good construction. Stones fairly even in size. Two stones thick in most places. Average amount of brown clay mortar. In places mortar used as partial plaster. Maximum remaining height 0.90 m. Average width of clay wall 0.20 m. Average width of masonry wall 0.35 m.

Entrance. None noted. Possibly through roof.

Ventilator. Center of southeast wall at floor level. Wall collapse at this section makes shape and dimensions difficult to determine. Approximate width 0.20 m. Height 0.30 m. A number of small sandstone pieces in this section of wall suggest ventilator may have been partially slab lined.

Floor. One coat of light gray plaster over entire floor. Good condition. Some erosion west of hearth. Wall-floor juncture at right angles.

Hearth. Rectangular. Approximate center of room 0.80 m from ventilator opening. Slab lined on sides. Floor on native soil. Dimensions northeast-southwest 0.50 m; northwest-southeast 0.46 m. Depth 0.30 m. Slabs extend above floor level 8 cm maximum. Gray ash and small chunks of charcoal in fill.

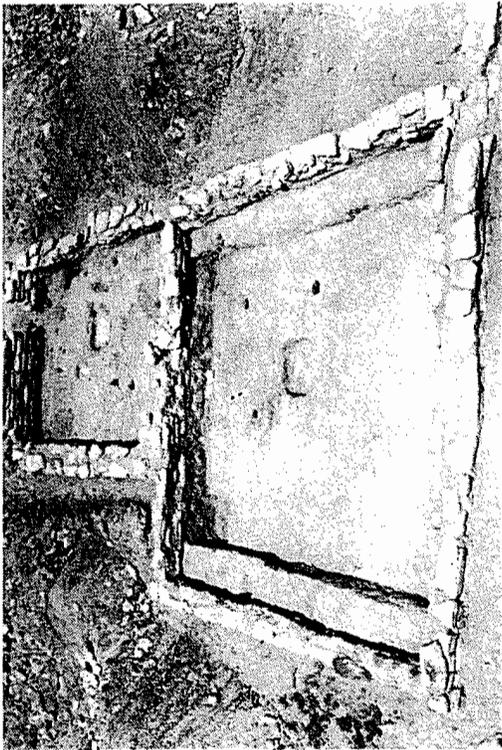


PLATE 26. The Plaza site: Room 1. This room is designated a kiva because of its large size, the presence of side benches, and its semi-subterranean nature.



PLATE 28. The Plaza site: Kiva 2.



PLATE 25. The Plaza site. Oblique aerial view to the northeast.



PLATE 27. The Plaza site: Room 6.