

<IV OVERVIEW OF ARCHAEOLOGY>

<Introduction>

This chapter is intended to give the reader a brief overview of the Anasazi occupation on Cedar Mesa. Little attention will be paid to our model of adaptation or our specific hypothesis. Our treatment of both site types and environment variability is of the simplest nature. This review is in preparation for the following chapters where each occupation is dealt with in depth, but separately. So some sort of framework--an understanding of the main features of the archaeological record--is needed to set the stage for the more detailed analyses which follow.

Our focus in the Cedar Mesa project is on the Anasazi occupation; from previous work we knew that most of the archaeological material on Cedar Mesa appeared to be of this tradition. The quadrat and drainage canyon surveys confirmed this pattern; little archaeological material was found other than Anasazi. In spite of well over 100 aceramic sites being collected during the quadrat survey, none were identified as Archaic, and only about 6 projectile points were found that appeared to be pre-Basketmaker II. This issue is discussed in more detail in Chapter V, where we review Basketmaker II in more detail, but we were unable to find a verifiable Archaic site and so conclude that the pre-Basketmaker II population must have been very low.

Just as the pre-Anasazi occupation appears to be sparse, so was the post-Anasazi Indian occupation, presumably by the Southern Paiute. No Paiute pottery was found during the quadrat or canyon surveys, but some was found in our camp at Todie spring! The near absence of identifiable Paiute material suggests a low post-Anasazi population density, as not a single site was identified as Paiute. While it may be that non-Anasazi assemblages are present in the 600 plus sites we have identified as Anasazi in the quadrat and drainage canyon surveys, we were unable to identify any. Thus the prehistoric non-Anasazi occupation of Cedar Mesa was minimal.

We encountered a few historic Anglo cowboy sites, and several historic Navajo wood cutting camps; all appeared to be post World War II in date. A single Navajo or Paiute sweat lodge was found in the North Road drainage. In addition, several historic oil wells were found in the West Johns canyon, probably dating to before World War I (Gregory 1938). With these few historic exceptions, all identified sites were prehistoric. Most prehistoric sites that were identified could confidently be assigned to the Anasazi tradition, and most of these could be placed in some time period within this tradition. Very small sites often could not be identified with any certainty to time period, and their assignment to the Anasazi tradition, while probable, must remain tentative.

The distribution of Anasazi sites on Cedar Mesa is not uniform. Table IV-1 gives summary statistics for the

Matson, Lipe, and Haase (Aug. 88) IV-3
various periods for the five drainages. Table IV-2
summarizes the drainage canyon inventory. In addition to
the five drainages surveyed as part of the Cedar Mesa
Project, we also have information from the previously
mentioned Grand Gulch Primitive Area Extension inventory
(Lipe, Matson and Powers 1977) which extends the range of
our survey. While no collection took place during this
survey, many of the same procedures were used to locate and
record sites and thus these data are relatively comparable
(Table IV-3). The lowest and driest of the five project
drainages surveyed was Hardscrabble. The Primitive Area
Extension survey completed 23 400 meter quadrats in an even
lower area to the south and west of Hardscrabble, in the
Slickhorn drainage. The Extension survey also completed a
total of 24 400 meter quadrats were also surveyed in the
Pine and Dripping Canyons drainages west of Grand Gulch
(Figure IV-1) at an elevation roughly equivalent to
Hardscrabble.

Using these seven sources of data we get an overall
impression of site density in Figure IV-2, which shows the
numbers of sites per quadrat in each area. We have chosen
to illustrate the data using a form of Box-and-dot plots, as
earlier used in the climate review. Each dot represents the
number of sites found in a quadrat. The rectangular box
outlines the central half or midbreadth, of the
distribution, or from the first and second quartile boundary
to that between the third and fourth quartiles. The line
across the middle of the box is the median, the point that

Matson, Lipe, and Haase (Aug. 88) IV-4
has half of the quadrats with more sites above it, and the
half with fewer sites, below it. We have included the mean
as a star in the box as well. A row of dots is, of course,
a series of quadrats with the same number of sites. In some
case^s, when we are dealing with the number of artifacts, a
row of dots may not really be ties, but values that can not
be distinguished or plotted at this scale.

Figure IV-2 illustrates that the number of Anasazi sites
per quadrat ranges from 0, for a number of quadrats in
several drainages, to 13 from one quadrat in the Bullet
drainage. The least amounts of material are seen in the
lowest and southwesterly drainages, Slickhorn and
Hardscrabble. West Johns shows higher amounts, but the
largest number of sites are seen in the three northern
drainages, Bullet, North Road and Upper Grand Gulch, which
have medians of 8, 5, and 6 sites per quadrat. While the
Pine-Dripping Canyon area is just off northeastern part of
the mesa as we have defined it, the elevation there is low,
approximately that of Hardscrabble, which it resembles in
terms of numbers of artifacts.

Figures IV-3a and 3b show the total number of artifacts
per quadrat rather than number of sites per quadrat we
derive Figure IV-3a and 3b. By "artifacts" we include
sherds and debitage as well as tools. We have included only
material found on sites, as we can not be as sure of
affiliation of the off-site material to particular periods.
Figure IV-3a shows each quadrat artifact total, but on a
geometric scale. Since artifact totals are based on

Matson, Lipe, and Haase (Aug. 88) IV-5 collections we can not use the Slickhorn and Pine-Dripping Canyons material. Figure IV-3b shows the same information, but on a linear scale. These box plots are somewhat more "standard" in that they do not show data locations within the boxes, as these would not fit using this scale. The lines or "whiskers" extending from the boxes ending in x's indicate the last data location within a "midbreadth" of the quartiles or "hinges", thus leading to the name of "box-and-whisker" plots. Data outside of a midbreadth from the quartiles are shown as dots (Hartwig and Dearing 1979:23-31).

The mean artifacts per quadrat increases from Hardscrabble, on the left in Figures IV-3a and 3b, to Upper Grand Gulch on the right. This order is also roughly that of increasing elevation. The order of drainages, however, is not unassailable. In both Figure IV-2 and 3, Hardscrabble is notable for low numbers of sites and artifacts and Upper Grand Gulch for the broad range of both the number of sites and number of artifacts. The general trend suggests that the amount of use of an area increases with elevation, with the lower elevation quadrats barely within the Anasazi use area or niche.

Exploring this idea further, the 76 quadrats from the five drainages are plotted by elevation against number of sites per quadrat in Figure IV-4a and number of artifacts per quadrat in IV-4b. Given that exposure effects are not taken into account, the trend for sites shows increasing numbers at higher elevations. The trend for artifacts

Matson, Lipe, and Haase (Aug. 88) IV-6 (Figure IV-4b) is not so clear, but no quadrat with an elevation of less than 1829m (6000 ft), a total of 15, has more than 2000 artifacts, while 11 (of 61) do that are at higher elevations. One might expect the number of sites and artifacts to be correlated and we do find that a linear correlation coefficient of +.406 results.

To summarize the Anasazi occupation as a whole, more sites and artifacts are found on the higher elevation quadrats and on the higher and more northerly drainages. It appears that the lowest quadrats are possibly outside the main Anasazi niche, but there is not good evidence that this is the case for the highest elevation quadrats.

<Basketmaker II Period>

The Basketmaker II is the earliest clear occupation of Cedar Mesa, and almost half of the sites appear to belong to this time period. Some 130 Basketmaker II components were found in the five drainage quadrats, an additional 21 in the Slickhorn survey and 23 in the Pine-Dripping Canyons area. An additional 84 Basketmaker II sites were inventoried in the five drainage canyons.

We have dates from five different mesa-top Basketmaker II sites and these all fall between AD 200 and AD 400. This 200 year period is the same one found by Berry (1982:88) to include most good Basketmaker II dates in the Four Corners area. We discuss our dates in more detail in Chapter V; for now we give our judgement that probably all of the Cedar Mesa mesa-top Basketmaker II material fits within this

Matson, Lipe, and Haase (Aug. 88) IV-7
period.

All Cedar Mesa Basketmaker II sites are non-ceramic and most have abundant fragments of limestone, thought to have been used for stone boiling. In nearly all cases the limestone must have been brought to the sites by human agency. Large corner and side notched dart points, bifacially flaked T-drills, one handed manos and a high frequency of certain lithic materials (Keller 1982) are also common attributes. On some sites shallow pitstructures with long vertical-slab-lined entrance ways, such as were excavated by Lipe in 1969 and 1970 (Lipe 1978) are present. Sites range from small "lithic scatters" to ones with abundant architectural and artifactual material.

In terms of sites per quadrat, Basketmaker II is fairly well spread across the mesa (compare Figure IV-5 with IV-2) with the medians ranging from 0 to 2.5. No upper quartile is greater than 3 or less than 1; no lower quartile is greater than 1, or less than zero. West Johns, the southern most drainage, has as many sites as any other drainage, indicating that Basketmaker II sites are well spread from north to south. Upper Grand Gulch appears to have fewer sites than Bullet or North Road. This may indicate that the Basketmaker II niche barely incorporates this area, as Upper Grand Gulch is the highest as well as the most northerly drainage. The Pine-Dripping Springs area is almost as far north as Upper Grand Gulch but much lower, and has at least as much material.

The two areas with the fewest sites, however, are

Matson, Lipe, and Haase (Aug. 88) IV-8 Slickhorn and Hardscrabble, indicating that these areas are close to the lower edge of the Basketmaker II niche. Figure IV-6 shows the five drainage areas in terms of artifacts per quadrat. Here Hardscrabble and Upper Grand Gulch are the two lowest suggesting that our sampling scheme includes the full range, or niche space of Basketmaker II sites. Note that in Figure IV-6 that the scale is linear to 1000 artifacts and geometric after that. A comparison of this figure with Figure IV-3b shows a much more even distribution of Basketmaker II sites than of the Anasazi occupation as a whole, with four of the five box plots in Figure IV-6 show very similar distributions.

Plotting the number of artifacts by elevation of quadrats (Figure IV-7) does not appear to be too informative. Most large sites are between 1829 and 2010 m (6000 and 6600 ft) and there are a number of empty quadrats above 2010 m (6600 ft).

This generally even distribution of sites on the mesa top is also seen in the canyon drainages. All five canyons had significant numbers of Basketmaker II sites, ranging from 6 in Upper Grand Gulch, to 29 in Bullet (Table IV-2). The proportion of Basketmaker II sites to other sites ranged from 1/6 to 1/3 of the total canyon sites. The total of 84 Basketmaker II sites represents a more or less full inventory. While this total appears impressive on first glance, it is small compared to the 1652 Basketmaker II sites predicted on the basis of the quadrat survey to be in the five drainages. Nor do the canyon sites appear to be

Matson, Lipe, and Haase (Aug. 88) IV-9
any larger than the mesa-top sites. The ratio of sites
found in drainage canyons compared to the Basketmaker II
sites expected in the drainage as whole on the basis of the
quadrat survey ranged from 4.3 to 5.9 percent. Even though
some Basketmaker II sites are undoubtedly obscured
underneath later Pueblo sites in canyon rock shelters, it is
clear that the main focus of the Basketmaker II occupation
is on the mesa top.

In the canyons Basketmaker II sites are found both in
shelters and in open areas on colluvial or loess deposits in
broad canyons. The use of shelters appears to be most
common in the larger canyons, especially in those that had
alluvial fill. Canyon use included the use of caves as
burial locations. While we can not make a claim for the
canyons to have been very important in terms of numbers and
sizes of sites, the unique environment, the existing sites
and the use as burial locations gives the canyon environment
added importance in the overall Basketmaker II settlement
pattern.

<Basketmaker III Period>

In many ways this period is a contrast to the
Basketmaker II; many fewer sites exist, it appears to be a
shorter time period, and it is much more localized in
occurrence. Our dating of the Cedar Mesa Basketmaker III is
from late AD 600's to, perhaps very early AD 700's, and this
agrees with dates from the nearby U-95 project (Wilson 1974,
Dalley 1973) which took place from Comb Wash to northeastern

Matson, Lipe, and Haase (Aug. 88) IV-10
Cedar Mesa . This leaves a definite hiatus between

Basketmaker II and III of some 200 or 300 years. A similar gap has been recognized over a much broader area by Berry (1982:88). We thus appear to have a hiatus followed by a short (probably less than a hundred years) occupation Cedar Mesa during the Basketmaker III period. As we will point out later, there is another hiatus of around 350 years after Basketmaker III making identification of Basketmaker III components fairly easy.

There does, however, appear to be a trend for Pueblo period people to reoccupy Basketmaker III sites. This meant that a number of components were only recognized later in the analysis after the pottery had been classified and then rechecked to see if the plain gray sherds were truly Lino or Chapin Gray. This has resulted in an increased number of Basketmaker III components from earlier, preliminary reports (Matson and Lipe 1975, 1978, Lipe and Matson 1975).

Cedar Mesa Basketmaker III sites included small scatters with a few gray sherds as well as one with over 9000 artifacts. While some sites appear to have pithouses with antechambers, as well as above ground slab based "bins", not all architectural features were interpretable. The usual lithic material, including ground stone, was present as well.

In contrast to the earlier period, the Basketmaker III period is barely present in the south end of the mesa. No sites were encountered in the Slickhorn drainage, only two in Hardscrabble, and only 4 of 22 quadrats in the West Johns

Matson, Lipe, and Haase (Aug. 88) IV-11 drainage having this period present (Figure IV-8). The three drainages in the north all have substantial numbers of sites present, although all drainages have many quadrats empty of this material. The low number found in the Pine-Dripping Canyons area indicates that this period is essentially absent at lower elevations to the northwest.

Very few sites were found in the two southern drainage canyons (0 and 1 site in Hardscrabble and West Johns, Table IV-2) indicating a low density of population both on the mesa top and canyon bottom. While larger numbers are found in the more northerly drainages, the number found in any canyon never exceeds 3 percent of the total number expected in a drainage on the basis of the quadrat survey. The use of the canyons thus appears to have been minimal during this period.

These figures suggest that the Basketmaker III niche did not include much of the southern mesa; not even the higher parts of West Johns had much material. On the northern half of the the mesa, however, there is little evidence of any falling off in abundance in the higher elevations.

Figure IV-9 shows some of the relationships between number of sites and elevation. This figure consists of the 45 quadrats of the Hardscrabble, Bullet and North Road drainages, in groups of five, arranged in a west to east transect across the mesa. To do this the linear distance scale on the bottom had to be "adjusted" slightly in order to have equal groups of five. The general picture, though is clear. Basketmaker III sites are rare until 1950 m (6400ft)

Matson, Lipe, and Haase (Aug. 88) IV-12 in elevation is reached. The exception to this is in the five eastern most quadrats in North Road. As indicated previously, North Road tends to have more effective moisture than its elevation would indicate because of its eastern exposure. An alternative explanation is that there was a high population density during this time to the east in Comb Wash, and that the Cedar Mesa occupation was marginal to this center. Certainly a population center existed in Comb Wash during the next period, which is basically a hiatus in our Cedar Mesa study area.

All six quadrats with 3 or 4 Basketmaker III sites in them are above 1981 m (6500ft). More quadrats had sites than not above 1950 m (6400 ft) while only 9 of the 44 quadrats below this had Basketmaker III sites present. This pattern is shown on Figure IV-10. Note that most of the aberrant quadrats are from the North Road drainage. This relationship has a strength of $+0.394$ significant at $.001$ according to Pearson's r .

Figure IV-11 shows the same transect as before but uses artifacts per quadrat rather than sites. This figure gives us basically the same pattern but shows that the largest site in the transect is in the eastern most group of quadrats, actually in North Road 11.

Basketmaker III sites have much lower occurrence than do Basketmaker II sites in the quadrat survey as a whole, with only 47 Basketmaker III components in the five drainages. In the three most northern drainages, however, Basketmaker III period sites are as abundant as those of the earlier

Matson, Lipe, and Haase (Aug. 88) IV-13
period. Basketmaker III components are actually more common
in Bullet and Upper Grand Gulch, and slightly less common in
North Road. In terms of actual numbers of artifacts in this
area, more Basketmaker III artifacts were found than those
of the earlier period, although this figure varies from
drainage to drainage, and the presence of pottery in the
later occupation makes direct comparisons tenuous.

In summary, then, this period is present to a significant
extent only in the more northern, higher elevations and in
the east. It is almost absent from the southern and lower
portions of the mesa, and it is not significantly present in
the canyons. A range of sites are found, with pithouse
sites being among them. In spite of the relatively fewer
numbers overall, where this period does occur, it occurs in
about as much abundance as the earlier aceramic Basketmaker
II sites.

<Pueblo I- Early Pueblo II Period>

There is little evidence for any occupation of our study
area on Cedar Mesa, from the end of the Basketmaker III
period to late Pueblo II--approximately from AD 730 to AD
1050 or 1060. In none of our surveys or incidental work
have we found a Pueblo I site on Cedar Mesa. Pueblo I or
early Pueblo II pottery is very rare on Cedar Mesa and never
makes up more than a small fraction of the ceramics of any
site. The only occurrence of any extent of neck banded
pottery is in North Road 11, on the largest Basketmaker III

Matson, Lipe, and Haase (Aug. 88) IV-14 site in the quadrat survey. Lipe, who has extensive experience with Pueblo I and Basketmaker III ceramics from his work on the Dolores Project in Colorado, carefully inspected this ceramic assemblage in 1982 and judged it to be largely representative of late Basketmaker III. Thus our best judgment is that we lack any Pueblo I component on Cedar Mesa, in spite of inventorying and collecting some 600 sites.

The absence of Pueblo I on Cedar Mesa reflects another occupational hiatus. We have no indication that Basketmaker III extends past the very early A.D.700's, and our Pueblo II material appears to date after A.D.1050. If Pueblo I components underlay Pueblo II/III sites, the distinctive neckbanded Pueblo I pottery should still appear in the collections, as should Pueblo I painted types. If we ignore North Road 11 we have only 10 neck banded Pueblo sherds recorded from the other 75 quadrats. The maximum number of these sherds found on any one site was 3, and Basketmaker III components were present in all cases. This period is simply one where Cedar Mesa was not inhabited on a full time basis.

This hiatus is striking because of the abundance of material just to the east in Comb Wash. Matson and Lipe have made casual reconnaissances and found large Pueblo I sites there; Lipe in 1978 made a short no-collection survey which also demonstrated extensive Pueblo I presence. The Ute-95 work has also demonstrated Pueblo I occupation here (Dalley1973,Wilson 1974), and Green (1974) and DuBlooís

Matson, Lipe, and Haase (Aug. 88) IV-15 (1975) and Green and Dubloois (1978) have shown the presence of an extensive, if unclear Pueblo I use of Milk Range Point to the northeast of Cedar Mesa. Thus there is no question of the presence of Pueblo I occupation just to the east, and we have no doubt that if one defined Cedar Mesa to extend closer to Comb Wash than we did, that Pueblo I sites would be found on the slopes close to Comb Wash (Green 1969, 1970).

The absence of Pueblo I on the intermediate elevations of Cedar Mesa and its presence in the low lying Comb Wash and high elevation Milk Ranch Point appears to agree with the Pueblo I settlement pattern in many other places in the southwest. This may have been due to an emphasis on flood water irrigation in broad, low lying washes at this time and dry-farming at the upper elevation margin of the rain-fall farming niche.

Because of the lack of large scale systematic work in the Comb Wash area, we cannot be sure that the Pueblo I occupation is not underlain there by an extensive Basketmaker III occupation. Thus the Basketmaker III occupation on Cedar Mesa may be influenced by a possible population center to the east.

In spite of the presence of a substantial occupation just to the east, the Pueblo I-early Pueblo II period is one where Cedar Mesa was not occupied. While some minor seasonal use of it may have occurred, the absence of any verifiable components is in dramatic contrast with the time periods before and after.

This period of occupation on Cedar Mesa was very extensive and the remains today are abundant and visible. Based on ceramic and tree-ring dates, this occupation begins about AD 1060 and continues until AD 1270 with some evidence of a possible hiatus in the mid to late twelfth century. In the Pueblo II period, which following Lindsey, Ambler and Stein (1967), we extend to AD 1150, we find ceramics both of the Kayenta branch (especially Sosi and Dogoszhi black-on-whites, Tusayan Black on red, and Citadel and Tusayan Polychromes) and ceramics from the Mesa Verde tradition. Almost all pottery in the succeeding Pueblo III period is of the Mesa Verde tradition. Whether the changes in ceramic traditions are indicative of population movements is difficult to say, and will be discussed in more detail later.

The distribution of sites across the drainages (Figure IV-12) is more similar to that of the Basketmaker III period than to Basketmaker II. Note how most quadrats are empty in Slickhorn and Hardscrabble, while only half of the quadrats have Pueblo sites in West Johns. In contrast, the medians of the three northern drainages range from 1.5 to 3 Pueblo sites per quadrat. There appears to be a peak of occupation in the Bullet drainage, although this is not so clear if one looks at amount of artifacts (Figure IV-13). These figures suggest a settlement pattern like that of the Basketmaker III, but given the longer time involved, the greater density of artifacts and sites does not necessarily mean that the

Matson, Lipe, and Haase (Aug. 88) IV-17
population at any one time was necessarily greater.

Inspecting our east to west transect (Figure IV-14) we again see a definite peak in the higher elevations, but with the eastern most group of five quadrats not tailing off as expected. Comparison of this figure with that for Basketmaker III (Figure IV-9) suggests that the Pueblo period is not quite as sensitive to environmental differences as the earlier. Looking at the artifact distributions (Figure IV-15) we see a generally similar situation. In both cases the pattern of increasing occupation at higher elevations is broken only at the extreme right, and in both cases, is due to a single quadrat, North Road 11, which has large numbers of both Basketmaker III and Pueblo sites, which also have large amounts of material.

The mesa-top sites are generally small, with the largest common site being "Prudden units", consisting of a kiva, a small number of surface rooms (either masonry or jacal), and a dense trash area, usually to the southeast of the kiva. There are many other small sites, which we will later describe in detail, that appear to be limited activity sites. In addition, there are habitation sites which are not Prudden units, but instead appear to be a single habitation for a nuclear family. Thus the mesa-top occupation is both dispersed, in that many small sites were occupied, and concentrated, in that population was densest at the higher elevations. There are also a few larger sites, at which population was aggregated, both these are

Matson, Lipe, and Haase (Aug. 88) IV-18
still small by many southwestern standards. Larger sites
are found, once again, to the east, in the Comb Wash and
Cottonwood Wash areas.

The canyons also have abundant Pueblo sites. From our
tree-ring work, existing structures appear to date from two
time periods. There is a smaller cluster of dates at A.D.
1110 to 1140 and a much larger cluster between A.D. 1240 and
1270. Ceramic collections suggest the last occupation was
by far the larger. Thus there is a late Pueblo III emphasis
in the canyons. There is a total of 175 Pueblo sites in the
five drainage canyons and the Pueblo sites dominate the
archaeological material found in the canyons. For the area
and the Pueblo II/III period as a whole, however, the
canyons are not very significant. In no case are more than
about one seventh of the total expected number of sites for
a drainage area found in its canyon. For the terminal
Pueblo III, however, the canyon occupation may be a very
large part of the whole.

While there are a few sites in the canyons that do appear
to be larger than the maximum mesa-top size of Prudden
units, most are no larger than their mesa-top equivalents.
Many consist of only storage structures, and there is a
tendency of sites that have both habitation and storage
structures to have defensive structures around the storage
structures or have them in areas of difficult access.

The distribution of canyon sites (Lipe and Matson 1975)
is not as closely related to canyon bottom alluvium as one
might think. While there is a tendency for the largest

Matson, Lipe, and Haase (Aug. 88) IV-19 sites to be in the main canyon of Grand Gulch which did have extensive alluvium, sites are also located in areas that never had any canyon bottom alluvium, making this relationship very weak. Canyon bottom farming, then, does not fully account for canyon cliff dwellings. An alternative explanation--that frequency of cliff-dwellings correlates with surrounding mesa-top site densities--is also weak. A number ^{OF} canyon sites exist in areas of the Hardscrabble drainage without associated alluvium or abundant nearby mesa-top sites.

We will report later in the volume (Chapter VII) on how we divided the Pueblo occupation into four periods. Sites during the Pueblo period consist of habitations, and where they are preserved, obvious storage sites, as well as a number of indeterminate limited activity sites. The canyon sites, though visually impressive, appear to be less important for habitation than their mesa-top counter parts. The mesa-top pattern shown so far can be summarized as similar to the Basketmaker III but less sensitive to environmental and geographical variation, and with more numerous sites.

<Conclusion>

In this brief exploratory overview, we have only used the coarsest measures. We have made little use of site types, nor of our finer Pueblo phase distinctions. Little attention is paid to our general model of adaptation and less to testing our specific hypotheses. Our purpose is to

Matson, Lipe, and Haase (Aug. 88) IV-20
give the reader a general overview of the outer parameters
of the archaeological data, and the gross differences
between occupations. Before we can examine the details of
our ideas about the prehistory of Cedar Mesa we need to
develop a sharper understanding of the composition and
structure of the archaeological record. Then we can
examine the distribution of finer grained archaeological
variables in relation to finer grained environmental
details.