Turkey Pen Excavation

R.G. Matson
July 8, 2015

The Cedar Mesa Project was an NSF supported archaeological project on Cedar Mesa in SE Utah co-directed by Lipe and myself (Lipe 2014; Lipe and Matson 1971a,b, 1974, 1975, 2007; Matson 1991; Matson and Lipe 1975,1978; Matson et al. 1988, 1990). This project involved four components: 1) a regional survey project which consisted of the sampling of five of the 20 drainages within an 800 square kilometer area defined between the elevations of 5600 and 6800 ft. using 76 quadrats 400m on a side. Sites located within the quadrats were mapped and collected (Matson and Lipe 1975, 1978; Matson et al. 1988, 1990); 2) an inventory survey of the five drainage canyons which formed a population from which 115 sites were sampled using the same collection procedures as used in the quadrats (Matson et al. 1988, 1990); 3) a tree-ring and architectural survey of some two dozen cliff-dwellings in Grand Gulch and McLoyds Canyon (Bedell 2000; Bloomer 1989); and 4) a testing program involving some dozen sites. The testing was generally done on mesa-top sites to obtain tree-ring dates and clarify structural interpretations made on the basis of surface remains. The same testing program, however, also produced direct subsistence remains from Turkey Pen Cave, located adjacent to an alluvial remnant in Grand Gulch.

From the beginning (Lipe and Matson 1971a) we had structured our ideas around how Cedar Mesa inhabitants made their living. We were well aware that most aspects of our project would not be producing direct subsistence information, but Lipe thought direct subsistence information could be relatively easily obtained because of his previous experience in the Red Rock Plateau directly to the west of Cedar Mesa during the Glen Canyon Project (Lipe 1966, 1970). By excavating at a canyon rockshelter that was known to have BM II material and existing PII-III cliff-dwelling remains, we would have a good chance of getting remains of at least BM II and PII-III subsistence. And, of course, there already existed relatively abundant information about the latter.

The Turkey Pen site was one such site in Grand Gulch, one, in fact, investigated by Richard Wetherill in his discovery of the Basketmakers. Lipe had previously obtained Wetherill’s catalogue notes for this site and Blackburn and Williamson (1997) date the Wetherill’s work at this site as late 1893 or very early 1894 as well as in 1897. They also report on a previous investigation by Green in 1891. The Turkey Pen site was one of two alcoves visited with this testing in mind and was the one chosen by Lipe and me.

The general plan was to try to implement a “Junius Bird” style isolation of a block of midden and remove it layer by layer and transport it out of Grand Gulch. This was procedure that I learned about in graduate school in preparation for a not-to-be project in northern Chile (Bird 1943, True and Matson 1970). The plan was to excavate the loose debris from an existing pot hunting hole, straighten and clean up a stratigraphic profile and excavate two units on either side of the isolated block. This would give one view of three sides of the block and allow for precision removal of intact layers. This was the process we deemed necessary given the high density of material in the very...
organic deposits, which Wetherill had noted included seven feet of turkey droppings!

This small project was planned as five days for five people, with one day to walk into the site, set up camp, and set up for the excavation, three days of excavation, and then one day to back fill, take down camp and move out. Lipe would arrange for the horses to haul the material out and would go down to the site with the horses on the fifth day. It was carried out much as planned in August 7–11, 1972.

Thus in 1972 my crew (Susan Matson, Margaret Powers, Stuart Reeves and XXX?) and I excavated a filled in pit at Turkey Pen and cleaned off a face of this pit in the midden of Turkey Pen Cave and profiled the stratigraphy (Figure 1). We then isolated a 50 by 50cm block of midden by excavating and screening 50 X 50cm blocks on either side. The resulting block was then peeled off layer by layer and transported by horse to the mesa-top on the fifth day.

![Placement of Turkey Pen Excavations](image_url)

Figure 1. Turkey Pen Cleaned Profile Before Excavation

July 8, 2015–2
The only really untoward event was that the depression, which we thought was a looters pit, turned out to be some sort of pit structure. As we were removing the very loose, dusty fill—we used fabric masks—an occasional loose sandstone block was also encountered. As we went well deeper than a meter, we focussed on exposing the west edge of the pit where I intended to clean up the profile of what we anticipated was the undisturbed deposits just outside the pit. After we ran into more sandstone we realized there appeared to be a loose laid masonry wall deeper in the pit. We did not determine the function or the date of this relatively straight-walled pit, but basically clarified what we had. When we did so, we found that the deepest stratum, “D” (Figures 1 and 2) was relatively loose and possibly the reason for the construction of the masonry wall, as the higher parts of the intact deposit were relatively firm.

The seven feet of turkey droppings appeared to be a bit of an exaggeration, at least for this part of the shelter, as we found them down to only about five feet. We did discover that the dry human and turkey dropping fragments were rehydrated by human sweat, and produced a strong scent.

After the profile was straightened (actually straightened twice, a second time for a reason no longer recalled for certain, but probably because the first ended up with the masonry wall towards the bottom rather than giving us a vertical section of intact deposit.) I defined the layers and the profile shown in Figure 1 was drawn. The profiles were almost all drawn by S. Reeves; other figures, and the location map was by M.

Figure 2. Removed Central Column Profiles

July 8, 2015–3
Powers. The location with respect to the kiva shown in Figure 1 was also plotted, and that Pueblo II-III kiva was two years later redrawn with greater expertise as part of the Tree-Ring and Architectural survey and reproduced in Bedell (2000). Bedell (2000) should be consulted for further details about the overall site and the P II-III structural remains.

Once the profile was completed (Figure 1), we started to excavate the two side columns by the defined layers. The material removed was pass through a screen (another case for masks) and obvious artifacts, corn cobs and coprolites (both human and turkey) were collected from the screens. We apparently did not separate the east and west side column material but did keep the material in separate layers (A-2, B-3, etc). Since the material towards the bottom was loose, we did not initially excavate the side columns much past 100 cm below surface, as shown in the photograph here as Figure 3, also shown cropped in Matson 2014:25. We then profiled the three sides of the central column down to that level (Figure 2). After this we removed the layers, usually intact, by using trowels and dustpans to pry them apart on three sides, and put each one in a separate black garbage bag.

Once we had removed the layers from the A’s well into C’s, we gingerly excavated the side columns down to D-3, and profiled the central column to that point. The D layers were quite loose and we were not able to remove them as a single block, as was the case with most of the higher layers. Transportation out of Grand Gulch, though, resulted in significant crumbling of even the most firm layers. We stopped at D-3, some 145 cm below the surface.

This was an arbitrary stop and we do not know how close we were to either bedrock or the hardpan that were present at other exposures in the Turkey Pen rockshelter. There are bell-shaped hardpan cists, which we presume to be BM II elsewhere in the Turkey Pen rockshelter.

Because so many analyses have been done on this material, the integrity of the deposit needs to be discussed. From the information given above, two aspects should be clear; that the definition of layers in the side columns is less precise than in the central column and the D layers being much more loose, have more questions than those above. Because so many of the higher layers were removed as single clods and the layers did vary so much I don’t think there is much question that this is an intact stratigraphic column or about any mixture between layers. In my experience disturbance homogenizes layers, blending things together. This is not the case with these, as can be seen in the photograph published in Matson (2014) and the others I took at the time such as Figure 3.

There was a single rodent hole noticed in the excavation in Layers B-3 and B-4 in the west column. This also appears to have barely nicked the northern corner of the central column. Field sketches of this disturbance shows that it covered much of Layer B-4 of the west column, but are not clear whether it

July 8, 2015–4
ever extended into the central column. Because so much of the layers above the D’s are relatively compact I don’t think we would have missed any extensive rodent disturbance. The D layers, though, would be a different story. Further, as suggested above, it appears that the loose masonry wall undercut the more intact higher deposits. So less distance existed between the straightened profile and the prehistoric pit (if that is what it was) in the deeper deposits than the higher ones. So questions legitimately exist about the D layers. One of the first four dates was from D-1 (1490+/−75 BP) and was the most recent, suggesting the possibility that disturbance was present. The four D layer dates from human coprolites labelled D-AMS, (Figure 1), run in 2014, show that this layer is contemporary with the higher layers. So some disturbance may be present, but this layer as a whole is largely BM II and dates to about the same as the others.

Questions may arise about the integrity of the deposits because the radiocarbon dates do not clearly reflect the layer sequence, although all recent AMS dates support that the vast majority of the deposits date between AD 1 and 200. Given the high precision AMS dates available now, one would like to believe that they should be highly correlated with the layer sequence. Actually, given the “hook” in the calibration at this time, it is essentially impossible to get that kind of precision even with sigmas of 20 years. Read Geib and Hurst (2013) for the problems of trying to obtain relatively precise dates for this time period at the nearby Cave 7, also excavated by Wetherill.

The initial four “standard” radiocarbon dates (WSU 27XX) were from non-maize twigs selected by Kate Aasen and me in 1982 from different layers of the central column. Although not internally as consistent as one would like, these dates do indicate a Basketmaker II age, as was confirmed by the absence of sherds in both the screened isolating blocks and the bulk samples. Two further standard dates (WSU 35xx) on maize from the central column were reported by Matson and Chisholm (1991). All others are AMS dates, on either human or turkey coprolites or maize cobs, 27 at the time of this writing.

Initial Analyses.

The central column produced the coprolites analyzed by Aasen (1984) and the bulk midden samples analyzed by Lepofsky (1986), Radomski (1999) and Cordas (2000).

Aasen analyzed 28 human and two turkey coprolites, and the identified macrofossils are charted in Figure 4 (Matson 1991:93, 2006; Matson and Chisholm 1986, 1991). Note that 25 of the 28 coprolites had maize present, and in 17 of these the maize remains accounted for greater than 50 percent of the total macrofossil weight. Pinyon pine-nut hulls were found in 13 of the coprolites and in six of these exceed 50% of the total macrofossil weight. The next most abundant macrofossil, chenopod leaves, were found in 10 coprolites, and either chenopod or amaranth seeds were identified in three. Indian rice grass seeds are found in 9 coprolites and exceed 50% of the weight in two, in fact they are more than 90% in both cases.

Besides these “staples” lesser amounts of other resources are found in a few coprolites; Opuntia seeds in two, squash seeds in three, beeweed (Cleome) in one, Bur sage (Franseria) in two and Franseria spines in one. Clearly maize is the most important resource, making up over half by weight of the identified macrofossils,
The coprolite analysis indicates the dominance of maize and squash horticulture in the Basketmaker II diet at Turkey Pen. Maize is the most important resource, followed by pine-nuts, squash and Indian rice grass and augmented by a variety of tertiary resources. The analysis of Pueblo III coprolites at Hoy House (Scott, 1979), and Pueblo
coprolites from Antelope House (Fry and Hall 1986) show close similarities. The main
differences are the greater use of pine-nuts at Turkey Pen and the presence of beans at
Hoy House. The greater use of pine-nuts is in accord with Lipe’s (1966; 1970) proposed
explanation of the Basketmaker II and Pueblo settlement pattern differences in the Red
Rock Plateau, i.e., a greater reliance on pinyon nuts for the Basketmaker II than in later
periods.

Aasen (1984) also analyzed two turkey coprolites, both of which had maize
macrofossils and pollen. This convinced Bill and me that these turkeys were
domesticated, which Speller et al. (2010) later demonstrated by DNA from Turkey Pen
turkey coprolites. Further turkey coprolites were analyzed by Nott (2010). See Lipe et
al. (2015) for further Turkey Pen related turkey analyses.

In addition to Aasen’s coprolite work, Lepofsky has analyzed bulks samples from
Turkey Pen. Lepofsky (1986) analyzed seven 2 liter samples located throughout the
excavated column. The material was first floated, then sieved and sorted. Although all
of the 4 mm fraction was sorted only 25% of the succeeding 2 mm fraction was sorted,
with only the seeds, nuts and corn parts separated out. Only seeds were sorted out of
the final residual fraction. The results are seen in Figure in Matson and Chisholm
analyzed further midden samples from the central column, using Lepofsky’s
procedures, so we now have a total of 15 samples analyzed which essentially cover the
full column. The joint results are seen in Matson (2006; Matson and Chisholm (2007)
and in Figure 5. The two later analyses turned out to strengthen and confirm Lepofsky’s
results.

I have combined all three analyses, following the summary of Lepofsky’s done in
Matson and Chisholm (1991:Table 2). The one significance difference is that pinyon is
represented only by nutlet fragments in Figure 5. Generally maize remains dominate

July 8, 2015–7
the results, with pinyon clearly of second importance. Cheno-Ams, in all samples primarily represented by chenopods, are in all but one sample, as are *Oryzopsis*, although they occur in much larger amounts in six of the samples. Cucurbita are found in all but one sample, although Cordas (2000) points out that the remains may be misleading as the largest quantity by weight (D-2) is represented by a single stem. *Yucca baccata* is found in most samples and sometimes these triangular seeds occur in substantial numbers. Sunflower is only found in only five samples and never in large amounts. *Mentzelia* (blazing star or stickweed), on the other hand, is present in 12 samples, making its (and *Oryzopsis*) absence in the nearby Butler Wash BM II coprolites an enigma (Androy 2003). The important findings of this extended sampling is the dominance of maize, the nearly universal occurrence of pinyon nuts shells and the practically constant presence of squash, which is only occasionally recognized in coprolites (3/28 in Aasen’s 1984 study). It is also striking how the upper level samples appear to have about as much pinyon nut remains as maize (which is also present in Aasen’s coprolite study). Whether this is a reflection of actual importance in these layers, or a result of the better preservation of the high density nutshells, there does appear to be relatively equal weights of these two important resources in the upper layers of the midden according to these analyses.

The eight most important seeds, nuts and fruits, shown in Figure 5, does not reflect the range of remains that are present in these samples. All analysts reported lots of unknowns. Lepofsky (1984) also reported *Amaranthus*, *Chrenus*, *Chenopodium*, *Opuntia*, *Quercus*, *Phagmites*, and Juniper berries in addition to the eight resources reported in Figure 5. Radomski (1999) adds *Amelanchier*, *Atriplex*, *Celtis*, *Cleome*, and 26(!) different unknowns. Cordas (2000) questions Lepofsky’s *Phagmites* identification, and adds *Asteraceae*, *Cycloloma*, and *Portulaca* to this list. Thus a wide range of resources were used, but in terms of those identifiable in the midden, maize, pinyon nut hulls, *Oryzopsis* and *Cucurbita* (with maize the most ubiquitous) are the four most important by weight, the same four as originally shown by Lepofsky first analysis. The three most important non-domesticated remains in these midden analyses are Indian rice grass, Banana yucca (*Yucca baccata*) and pine-nuts.

Although Lepofsky et al.’s analyses support and extend the coprolite analysis, and gives greater emphasis to the importance of horticulture, it is not really very independent in terms of data source. Lepofsky noted that many of the food remains appeared to be derived from degraded coprolites, although she did take care to set aside all identified coprolite fragments. More importantly, since both coprolite and midden analysts were using data from the same test pit at the same site, the possibility of the same seasonal bias being generalized to the annual diet is present in both kinds of studies. Lepofsky, in particular, investigated this question and concluded that the remains show an emphasis on late summer and early fall material, but these are the resources that can be stored and used in much of the rest of the year.

There are, however, some resources that suggest a springtime use. *Mentzelia* is a springtime-early summer resource, as it can be used both as a green in the spring and its seeds can be eaten slightly later (Matson 1971; Smith 1973). Indian rice grass, while capable of producing seeds both in the spring and in the late summer after the monsoon is thought to be more productive in the spring. These two pieces of research,
by Aasen and Lepofsky et al., give a reliable and convincing picture of the Basketmaker II diet at the Turkey Pen site.

Other Turkey Pen Analyses.
There are many other analyses on material from Turkey Pen that have been begun since 2000 which either haven’t been finished or fully published yet. These include an analysis of human mitochondrial haplotypes by Brian Kemp from coprolites, an analysis of other animal genetic material found in human coprolites by Jenna Battillo, that of isotopes in human hair, including different amino acids by Catherine Cooper, and an analysis of the ancient DNA from corn cobs by Kelly Swarts. Preliminary results of some these analyses can be found in Lipe et al. (2010), Kemp et al. (2010), Cooper (2013) and Battillo et al. (2014). A more completely reported analysis of that on pollen analysis of turkey coprolites by Nott (2010), mentioned previously.

Aasen, Diane K.

Androy, Jerry

Battillo, Jenna, Karen D. Lupo, Jaime Mata-Miguez, Deborah A. Bolnick, William D. Lipe, and R.G. Matson
2014  No bones about it: aDNA sequencing of dietary remains from human paleofeces. Presentation at the 12th International Council on Archaeological Zoology International Conference at San Rafael, Argentina, September 26..

Bedell, Melanie L.
2000  Late Pueblo II and Pueblo III Dwellings and Community Patterns in Grand Gulch, Southeastern Utah. Unpublished Masters thesis, Department of Anthropology, Washington State University, Pullman

Bird, Junius

Blackburn, Fred M. and Ray A. Williamson

July 8, 2015–9
Bloomer, William W.

Cooper, Catherine
2013 Determining Short-term Dietary Change in the American Southwest: Seasonality Using Isotopic Analysis of Human Hair. MA thesis, Dept. of Anthropology, Univ. of British Columbia. Available at: https://circle.ubc.ca/handle/2429/45200

Cordas, Emily
2000 The Analysis of Macroplant Remains from a Midden Deposit in Turkey Pen Ruin In Cedar Mesa, Utah. MS on File, Laboratory of Archaeology, University of British Columbia, Vancouver.

Fry, Gary and H.J. Hall

Geib, Phil R. and Winston B. Hurst

Kemp, Brian, Cara Monroe, Phil Geib, William Lipe and R.G. Matson
2010 Genetic Analysis of Human Coprolites from Southeastern Utah. Presented at the 74th Annual Meeting of the Society for American Archaeology, April, St. Louis. Available at: https://research.wsulibs.wsu.edu/xmlui/handle/2376/2668

Lepofsky, Dana
1986 Preliminary Analysis of Flotation Samples from the Turkey Pen Ruin, Cedar Mesa, Utah. Paper on File, Laboratory of Archaeology, University of British Columbia, Vancouver.

Lipe, William D.


July 8, 2015–10
Lipe, William D. (editor)
2014 Tortuous and Fantastic: Cultural and Natural Wonders of Greater Cedar Mesa. 

Lipe, William D., R. Kyle Bocinsky, Brian S. Chisholm, Robin Lyle, David M. Dove, 
RG Matson, Elizabeth Jarvis, Kathleen Judd and Brian M. Kemp
2015 Cultural Contexts for Turkey Domestication in the Upland Southwest 
MS in submission to American Antiquity.

Lipe, William D. and R.G. Matson
1971a Human Settlement and Resources in the Cedar Mesa Area, S.E. Utah. In 
The Distribution of Prehistoric Population Aggregates edited by G. Gumerman, 
pp. 126-151, Prescott College Anthropological Reports, No. 1, Prescott.

1971b Prehistoric Cultural Adaptation in the Cedar Mesa Area, Southeast 
Utah. Proposal submitted to the National Science Foundation. The 
Research Foundation of State University of New York, Binghamton

1974 Prehistoric Cultural Adaptation in the Cedar Mesa Area, Southeast Utah. 
Proposal submitted to the National Science Foundation. Northern Arizona 
Society of Science and Art, Inc Museum of Northern Arizona, Flagstaff

1975 Archaeology and Alluvium in the Grand Gulch-Cedar Mesa Areas, 
Southeastern Utah. Four Corners Geological Society Guidebook, 8th Field 
Conference, Canyonlands, pp. 66-71, Four Corners Geological Society, 
Farmington, New Mexico.

2007 The Cedar Mesa Project: 1967-2009; Prologue to Matson, Lipe, and Haase, 
1990 Available at: https://circle.ubcc.ca/handle/2429/19586

Lipe, William D., R.G. Matson and Brian M. Kemp
2010 New Insights from Old Collections: Cedar Mesa, Utah, Revisited. 
Southwestern Lore 77: 103-111

Lipe, William D., R.G. Matson and Margaret Powers
1977 Archaeological Sampling Survey of Proposed Additions to the Existing Grand 
 Gulch Primitive Area. Museum of Northern Arizona, Dept. of Anthropology, 
Contract No. YA-512-CT6-200, Flagstaff

Matson, R.G.
1971 Adaptation and Environment in the Cerbat Mountains, Arizona. Ph.D. 
dissertation, University of California, Davis.


July 8, 2015–11


Matson, R.G. and B. Chisholm


2007 Basketmaker II Subsistence. Poster presented at 72nd Annual Meeting, Society for American Archaeology Austin, Texas, April 26, 2007. Available at: https://circle.ubcc.ca/handle/2429/39209

Matson, R.G. and W.D. Lipe


Matson, R.G., W.D. Lipe and W. Haase

1990 Human Adaptation on Cedar Mesa, Southeastern Utah. MS in possession of Sr. Author, and available at: http://circle.ubcc.ca/handle/2429/47011

Nott, Breanne M.
2010 Documenting Domestication: Molecular and Palynological Analysis of Ancient Turkey Coprolites from the American Southwest. Masters Thesis, Washington State University, Pullman. Available at: https://research.wsulibs.wsu.edu/xmlui/handle/2376/2690

July 8, 2015–12
Powers, Margaret A.  
1984  The Salvage of Archaeological Data from Turkey Pen Ruin, Grand Gulch Primitive Area, San Juan County, Utah. Division of Conservation Archaeology, San Juan County Museum Association, Contributions to Anthropology Series, No. 808, Farmington, New Mexico.

Radomski, Elizabeth  
1999  Continuing Analysis of Bulk Midden Samples from Turkey Pen Ruin, Cedar Mesa, Utah. Paper on File, Laboratory of Archaeology, University of British Columbia, Vancouver.

Reinhard, Karl J.  
1988  *Diet, Paratism, and Anemia in the Prehistoric Southwest*. Ph.D. dissertation, Texas A&M University, College Station, Texas.

Reinhard, Karl J.  

Reinhard, Karl J. and John G. Jones  

Scott, Linda J.  

Smith, Charlene  

Speller, Camilla F., Brian M. Kemp, Scott D. Wyatt, Cara Monroe, William D. Lipe, Ursula M. Arndt, and Dongya Y. Yang  

True, D.L. and R.G. Matson  
ADDENDUM

This table lists all 32 C-14 dates that have been run on samples from the Turkey Pen midden. It also includes 14 AMS dates received recently that are not shown on Figure 1. Column A shows the strata from which the samples were collected.
<table>
<thead>
<tr>
<th></th>
<th>Site No./Area</th>
<th>Lab Nos.</th>
<th>RC Years</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Cedar Mesa Turkey BM II dates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Turkey Pen</td>
<td>(A3) WSU-2751</td>
<td>1925 + 55</td>
<td>&quot;Twigs&quot;, Annuals</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>(42Sa3714) (B3) WSU-2757</td>
<td>2065 + 50</td>
<td>&quot;Twigs&quot;, Annuals</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>(C2C) WSU-2750</td>
<td>1860 + 45</td>
<td>&quot;Twigs&quot;, Annuals</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>(D2) WSU-2758</td>
<td>1490 + 75</td>
<td>&quot;Twigs&quot;, Annuals</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>(A6) WSU-3512</td>
<td>1980 + 50</td>
<td>Zea mays</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>(C4) WSU-3513</td>
<td>2050 + 80</td>
<td>Zea mays</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>(D2) Beta 256927</td>
<td>1750 + 40</td>
<td>AMS Turkey Coprolite</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>(D2) Beta 160502</td>
<td>1640 + 40</td>
<td>AMS Turkey Feather</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>(A6) AA 84948</td>
<td>1839 + 36</td>
<td>AMS Zea mays Cob</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>(A6) D-AMS5433</td>
<td>1927 + 26</td>
<td>Human Coprolite</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>(B1) D-AMS5431</td>
<td>1839 + 28</td>
<td>Human Coprolite</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>(B5) D-AMS5428</td>
<td>1897 + 26</td>
<td>Human Coprolite</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>(B5) D-AMS5434</td>
<td>1905 + 30</td>
<td>Human Coprolite</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>(C4) D-AMS5432</td>
<td>1833 + 31</td>
<td>Human Coprolite</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>(D2) D-AMS5430</td>
<td>1938 + 30</td>
<td>Human Coprolite</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>(D2) D-AMS5429</td>
<td>1919 + 27</td>
<td>Human Coprolite</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>(D3) D-AMS5435</td>
<td>1825 + 26</td>
<td>Human Coprolite</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>(A6) MAMS 23673</td>
<td>1876 + 19</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>(A6) MAMS 23674</td>
<td>1852 + 19</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>(A6) MAMS 23675</td>
<td>1863 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>(B2) MAMS 23676</td>
<td>1865 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>(B5) MAMS 23677</td>
<td>1910 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>(B5) MAMS 23678</td>
<td>1900 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>(C1) MAMS 23679</td>
<td>1869 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>27</td>
<td></td>
<td>(C1) MAMS 23680</td>
<td>2026 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td>(C2) MAMS 23681</td>
<td>1903 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td>(C2) MAMS 23682</td>
<td>1858 +20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>(C2) MAMS 23683</td>
<td>1907 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>31</td>
<td></td>
<td>(C2) MAMS 23684</td>
<td>1888 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>32</td>
<td></td>
<td>(C2) MAMS 23685</td>
<td>1881 + 20</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>33</td>
<td></td>
<td>(C2) MAMS 23686</td>
<td>1851 + 22</td>
<td>AMS Zea Mays Cob</td>
</tr>
<tr>
<td>34</td>
<td></td>
<td>(A1) Beta 256926</td>
<td>1010 + 40</td>
<td>AMS Turkey Coprolite</td>
</tr>
</tbody>
</table>