A - Ceramic

B - Faunal Bone

C - Shell

D - Stone

E - Metal

F - Plaster

G - Charcoal

SU - year - area - context - material

SU 16 Z ~~001~~ 108, 92 - 001 - A

Test Trench 1 = 108.92

S'URACHI SURVEY 2016

Linda Gosner
Jessica Nowlin
Nuri Van Dommelen

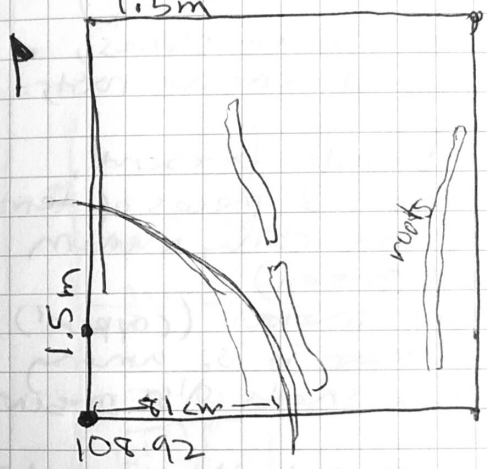
June 29 – July 18

★ 29.6.2016 S'Urachi Survey Day 1

Test Trench 1 = 108.92

000
A
B

This morning we set up the first test trench in Su Padrigheddou off of the survey point 108.92.



In Δ000 we cleared the topsoil down to the level that the test unit was originally cleared.

Photos
op ✓
cl ✓

We found both bone and ceramics, some diagnostic. Soil is dark brown, clumpy and loose. Some thick roots are emerging.

Δ001 This is dark soil with frequent inclusions of small stones and a large quantity of faunal bones and ceramic. Most, or all of ceramic ancient, some diagnostic and construction materials.

001
A
B

★ 30.6.2016 S'Urachi Survey Day 2 TT1

Δ001, Lot 2 This morning we are continuing to excavate Δ001. Consistency growing more compact. High concentrations of bone and ceramic, but several bits of black plastic have turned up, so we are still in a layer of modern mixing.

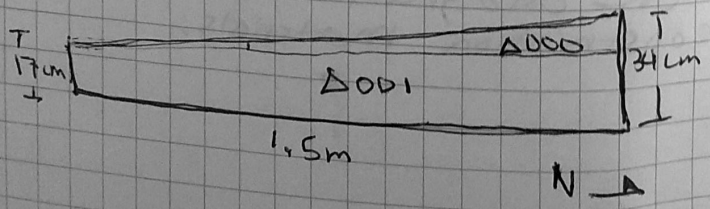
Bags
A
B
C
E

Soil has frequent small stones, some charcoal, and various roots.

Photos
-end of day (Δ001)

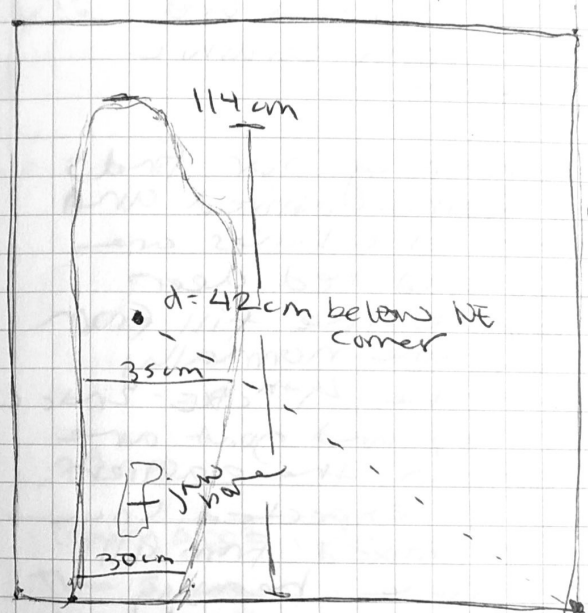
Ceramic from all periods present, including at least 2 pieces of terra sigillata and an early modern glazed piece (green). 1 piece of flat metal (copper?), but unclear what it is, among finds. Some sea shells also present.

Giuseppe came to cut the weeds and help excavate for a while, so progress was steady. The Δ001 layer continues and may indeed be very deep if this is the result of plowing to plant eucalyptus trees. Giuseppe recounted walking in Su Padrighedda years ago and finding large squared-off stones "from an ancient village"



★ 1.7.2016 S'Urachi Survey Day 3 TT1

This morning we are continuing with Δ001, Lot 3 We encountered an ashy deposit in the South edge of the trench that seems to be a part of the same layer. We first thought it might be a new one, but it has no clear edges and ash and lime are concentrated around a jaw bone and other larger fragments, which explains the slight change in color.



★ We are using the NE corner as a level w/ line level, so will need to take the point at some point

The fill Δ001 is continuing down with an enormous quantity of bones, mostly cow and some nearly whole. Ceramic is also abundant, though the volume is much lower. Soil is relatively loose with roots, charcoal, and other organics.

Bags
A E
B E
D-obsidian

Photos
Δ001 ashy deposit in process
Δ001 end of day.

At the end of day we took levels, and we are down to 71 cm below NW corner. There is no sign of this layer stopping and we may have to step the trench before long.

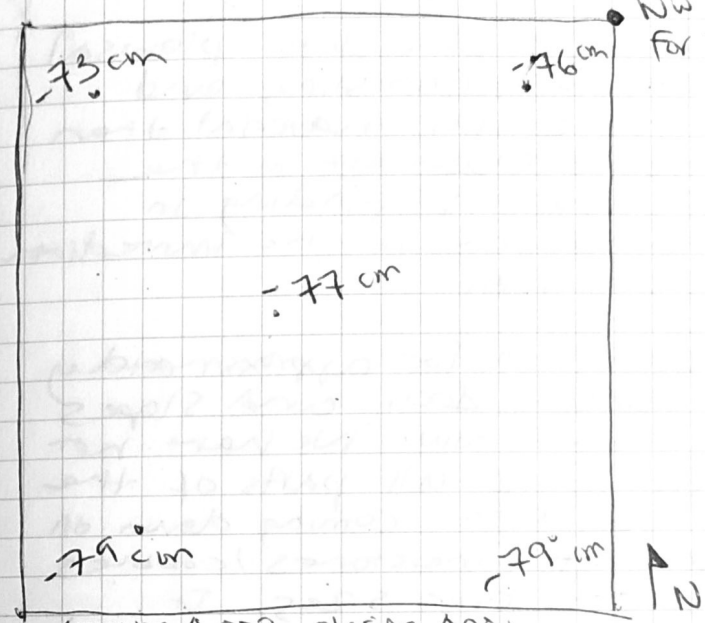
In the lab we counted and weighed bones and ceramic for TT1, Δ000.

We finished washing our finds from today. Damia arrived and reports that the bones are mostly cow and red deer. This is similar to the fill from Trench E, and are normally abundant in the 4th c.BCE - 2nd c CE range (ish). Sheep and goat are more abundant in the earlier periods. This is expected since the pottery is mixed from all periods, but more heavily post-Phoenician. Hopefully we will get to some legit stratigraphy before long.

★ 3.7.16 S'Urachi Survey Day 4 TT1

Δ001, Lot 4 This morning we are continuing to excavate Δ001, which quickly ended.

Bags
A
B
C



(opening Δ002, closing Δ001)

Photos
- Closing Δ001
=
- opening Δ002

The quantity of bone and pottery dissapated. A new layer seems to be appearing, which is much more clayey with orange and yellow inclusions. We cleaned up, took pictures and levels.

Δ002, Lot 1 This layer is dark brown with orange and yellow inclusions. Very clay-ey and clumpy. Fairly compact consistency.

Bags
A
B
D

Photos:
Δ002 end of day (casual shot)

There are very few materials, which include broken sherds (many of which seem Phoenician/Punic not earlier, and bones, 1 chert and 1 obsidian.

It seems clear that the plowing didn't reach much below 80 cm, but that the land in this area has been extremely disturbed by modern modifications.

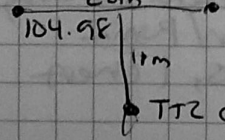
The assemblage from the plowsoil is extremely interesting and perhaps has earlier material than were found elsewhere in the site, but lack of finding in tack architecture in the immediate are is not high.

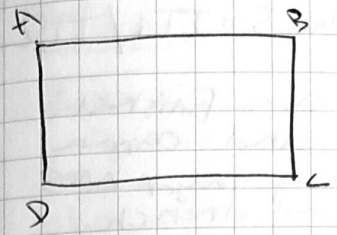
Δ002 continued for approximately 20 cm below Δ001 and slopes down to the NW. We have not yet found it in all parts of the trench. We are coming down on a layer of riverstones/cobbles of small and large sizes. It appears to be virgin soil so we may be at the end of the trench. Will decide tomorrow after finishing Δ002 and excavating in Δ003 to make sure it is not anthropogenic.

In Lab: we are trying to decide the placement of the second test trench, TT2. in gis:

WGS1984 UTM Zone 32N
Coordinate: GCS WGS 1984

8°35' 0.463E 40°0'53.787°N





[UTM coordinates]

A. 464451.022 x
4429499.155 y

B. 464453.020 x
4429499.225 y

C. 464453.055 x
4429498.226 y

D. 464451.056 x
4429498.156 y

4.7.16 S'Urachi Survey Day 5 TT1/TT2

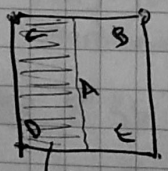
Δ002, Lot 2 [TT1] Today we finished excavating Δ002 and came down on the rocky layer Δ003 in all parts of the trench. It is quite uneven, but present throughout and appears to be natural. We had very few finds in Δ002, only 1 piece each of A, B, and D!

Bags
A
B
D - obsidian

Camera ran out of batteries so while we wait for the new camera we set up TT2, which is in the spot north of the road between 104.98 and 106.98.

We located the NW corner with the Trimble and then laid out the unit geometrically from there. Giuseppe has cleaned the whole area and we are ready to begin digging there.

Camera arrived and we made photos of Δ002 end. Then we excavated 1/2 of trench to make sure that Δ003 is a natural layer - It is:



A. -86
B. -90
C. -96 cm
D. -92
E. -87

Levels before Δ003

↳ excavated part of Δ003

Photos
Δ002 closing

Test Trench 2 105.9

Photos
Δ000 opening
Δ000 end of day progress

Bags
A
E
Glass

Δ000, Lot 1 This is the topsoil of our new trench, TT2. The trench is 1x2m and located north of the road. Giuseppe cleared the dense layer of grass and thorny plants that had grown since last year, and the soil in this first layer is full of roots and organic material (animal droppings too). There are frequent small-medium sized rounded stones. Several (2 or 3) large stones were scattered throughout.

The material we are getting is mostly modern - glass pieces from bottles as well as an oxidized metal tool or chunk of iron. There is some lead glazed pottery (brown) and a few ancient pieces. Some are Carthaginian amphorae pieces.

Coming down to the bottom of Δ000, a layer of sand is emerging below the last small stones, which are still part of Δ001.

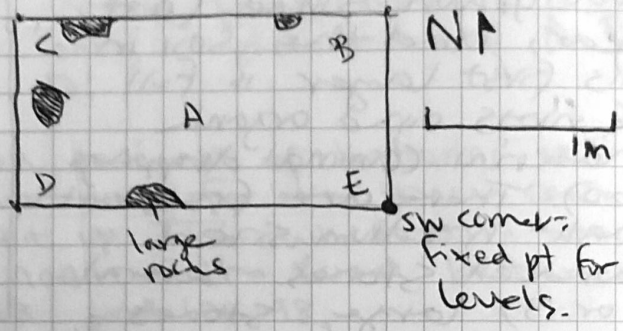
5.7.16 S'Urachi Survey Day 6 TT2

Bags: A, E

Photos: Δ000 closing (= Δ001 opening)

Δ000, Lot 2 This morning we finished clearing the topsoil in TT2 and found both ceramics and a few oxidized iron nails and bits of iron.

Δ000 closing
A - 19 cm
B - 15 cm
C - 16 cm
D - 17 cm
E - 20 cm



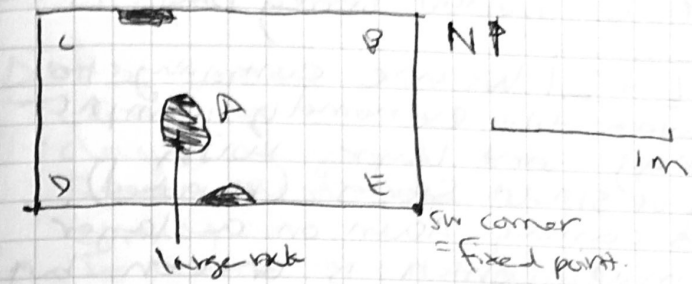
Δ001, Lot 1 The layer below the topsoil (000) is a sandy soil layer which is light brown with yellowish orange pockets. There are some roots as well as small-medium sized rounded stones. The fill is surprisingly compact with chunks of hardened stone-like sand and rocks that have been so exposed to iron oxide that they appear almost like metal.

Bags: A, E

Finds include extremely worn pottery (all ancient) as well as an rusted nail (not ancient)

Photos: Δ001 closing (= Δ002 opening) II

The level is uneven but relatively shallow and slopes down to the south and to the west.



Closing levels Δ001

A-27 cm
B-25 cm
C-27 cm
D-29 cm
E-32 cm

Δ002, Lot 1 This layer is an extremely (!), uncomfortably compact layer with stones (small-medium and a few large) and pockets of orange, oxidized soil. Soil is light brown + orange. Some of the rocks and pottery have clumps of mud attached to them, though the layer is otherwise very dry. Unclear what these are at the moment.

Bags: A

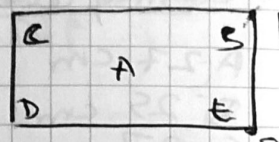
6.7.16 S'Urachi Survey Day 7 TT2

Δ002, Lot 2 We are continuing to excavate this extremely compact orangy sand layer with lots of small stones (rounded). It is coming down on a layer of mud, which is uneven but seems to cover the whole trench.

Bags
A

Photos
Δ002 closing = Δ003 opening

A = -47 cm
B = -39 cm
C = -40 cm
D = -30 cm
E = -35 cm



Closing levels Δ002 = opening Δ003

The levels D and E are significantly higher than the rest of the trench. This reflects a natural slope upward in the clayey Δ003, but the more linear E-W cut visible in photos is an artificial creation by us (oops!).

Δ003, Lot 1 This layer is dark brown and clayey with small and medium sized semi-rounded stones. It is compact but not nearly as much as Δ002. It contains high quantities of ceramic (Punic mostly) and a few faunal bones.

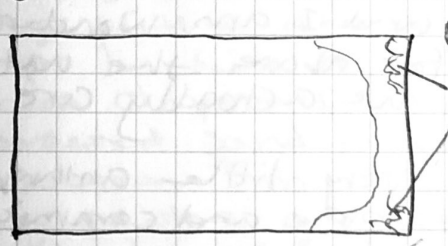
Bags
A
B

glass bead.

7/7/16 S'Urachi Survey Day 8 TT2

Δ003, Lot 2 Today we are continuing with the dark brown clayey layer. There are many stones and more pottery coming out.
It seems that it might occasionally be inundated in this area when the water table rises, which would explain both the residual moisture and the fragile state of the pottery, which dissolves when scrubbed with a brush.

Bags
A
B



The soil is compact and rocky in these corners and generally more rocky in the eastern 75cm of the trench at this level (c. -65cm). Very difficult to make a clean section.

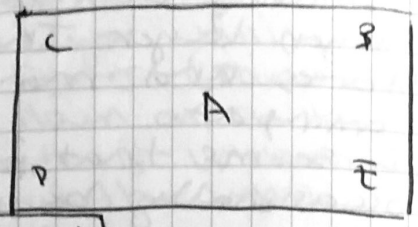
Δ003
Levels End of Day

A - 74 cm
B - 73 cm
C - 66 cm
D - 68 cm
E - 72 cm

9/7/16 S'Urachi Survey Day 9 TT2

Δ003 closing = Δ004 opening

A = - 73 cm
B = - 71 cm
C = - 65 cm
D = - 65 cm
E = - 71 cm



Δ004, Lot 1

After the day off it is quite clear in the scarp that we are at a new layer, still muddy but with much fewer pieces of ceramic. It is also extremely wet, and I am wondering how far above the water table we actually are.

Photos
Δ003 closing = Δ004 opening

Bags
A
B

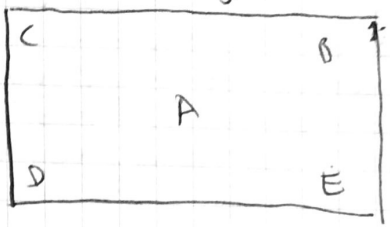
There is very, very little anthropogenic material - some bone and ceramics, but this layer is ~~going~~ appearing to be the end of the occupational layer. Possible fluvial layer. We will finish excavating tomorrow down to c. 1 meter ish. to finish the trench.

The new trench will be called 98.108 (SU #45) after the survey unit. We will do a 1.5 x 1.5 because trenches with a 1 meter side are impossible to do with the toolkit we are currently working with.

10/7/16 S'Urachi Survey Day 10 TT2

Δ004 closing / TT2 closing

A = - 97 cm
B = - 97 cm
C = - 93 cm
D = - 97 cm
E = - 100 cm



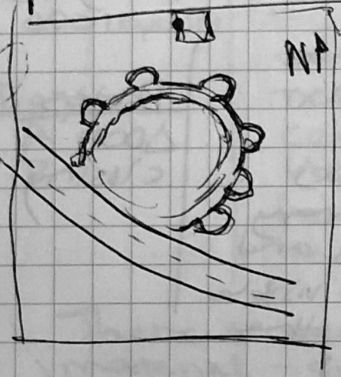
This morning we finished cleaning up the sections for TT2 (405.9) and took final photos. We still need to draw the section and finish context sheets. The western edge of the trench does slope because of the very hard deposit of stones and rendered sand that is visible in section. This may be the edge of the geophysical anomaly visible in the gpr data.

Photos
Δ004 closing

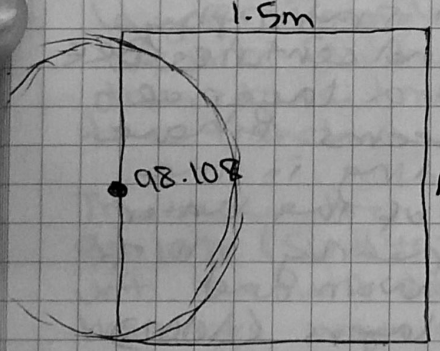
This area has sound stratigraphy from the c. 4th - 2nd centuries BCE that appears to be a layer of fill. There also seems to have been periodic flooding in the area or raising of the water table that made nearly all of the ceramic very worn and weak. The sandy layers (Δ002) appear to have come in with later flooding after the abandonment of the area. The fill layer (Δ003) has some deposits of very clayey, but uneven soil. I wonder if any of these could be extremely melted mudbricks (?)

although there are no features of particular interest in this 2x1 trench, the area clearly has good stratigraphy for the later occupation of the site that is not very far below the surface. This could be a good candidate for a larger trench in the coming years.

Trench 3 = TT3 = 98.108



This trench is located at the survey unit 98.108 north of the nymphe. This is where we found a great deal of punic and Roman material last year and where the microtopographical survey shows some interesting almost rectangular raised areas.



We placed the trench with the center of SU98.108 at the midpoint of the western edge of the trench. The TT3 shape is a 1.5x1.5m square, which should be significantly easier to dig than the very awkward 2x1m test trench we just finished.

[17] [Today is not as balls.]

Δ000, Lot 1

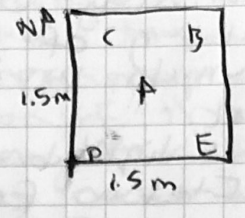
This topsoil layer was partially excavated in the making of SU98.108 last year, which produced a lot of material.

The soil is light brown and very dry. ~~or~~ It has frequent small-medium sized rocks and a ton of grass (dried) and roots of grass.

[18]

11/7/16 S'Urachi Survey Day 11 TT3

A = -29.5 cm
B = -~~29.5~~ 21.5 cm
C = -24 cm
D = -28 cm
E = -21 cm



Δ000 closing = Δ001 opening

Δ000, Lot 2 We finished cleaning the topsoil layer and found more ceramic and bones. At least one piece of terra sigillata was in there. The ceramic from yesterday and today is otherwise all from the ~~same~~ 4th - 3rd century BCE.

Bags
A
B

Photos
Δ000 closing = Δ001 opening

Δ001, Lot 1 The layer below the topsoil is light brown and relatively loose. It has pebbles and some small rocks as well as various roots, though fewer than the layer above.

The layer is continuing down much deeper in the afternoon with no change. There is a fairly high number of bones (medium long) as well as a large quantity of pottery of the same general 4th-3rd appearance as yesterday. However, these pieces are generally on the smaller side.

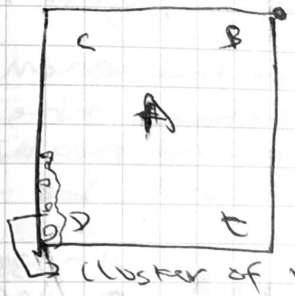
Bags
A
B
C
D obsidian

Photos
Day end photo

12/7/16 S'Urachi Survey Day 12 TT3

Δ001, Lot 2 Today we are continuing with the now very deep layer under the topsoil. It continues to be loose with pottery, bone, and small stones.
Andy has left and my finger was injured by the tent yesterday so progress is slow.

A = -111cm
B = -107cm
C = -108cm
D = -94cm
E = -106cm



Δ001 closing
Δ002 opening

Δ002, Lot 1 Under Δ001 we are coming down on a dark, clayey layer with frequent white inclusions. This layer is much more compact than the alluvial fill above.
We started noticing it around a cluster of rocks in the SW corner of the trench (various kinds of stone). This appears to be the top of a wall, roughly constructed with medium and small, rough stones as well as mud/clay mortar. We will see if this is the case after digging more tomorrow

Bags
Δ002
A
B
C

- Closing photos Δ001
- end of day photos.

Bags Δ001
A
B
C

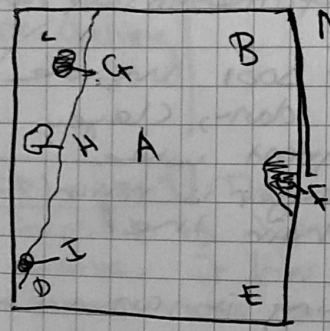
13/7/16 S'Urachi Survey Day 13 TTS

Photos
Δ002 close up of "wall" in corner

Bags
A
B

Δ002, Lot 2 Today we are continuing to excavate the darker brown more clayey layer beginning with the eastern side of the trench, which is somewhat higher as a result of trying to clean the wall yesterday.

Spent the morning trying to define the wall better and realized that it would be impossible



Δ002 Pairing
A. - 133 cm
B. - 135 cm
C. - 133 cm
D. - 134 cm
E. - 137.5 cm
F. - 120 cm

Δ003 opening
G. - 122 cm
H. - 103 cm
I. - 95 cm

to draw without cutting the scarp back because it is at least 20 cm in from the 1.5 m western line. As a result we spent the entire afternoon cleaning the edges and made a huge mess in the terrible edges. We will spend at least one or two more days on this trench in order to draw the wall and see if there is deeper stratigraphy.

#15/7/16 S'Urachi Survey Day 14 TTS

Cleaning Lous We are spending the morning cleaning the edges of the trench so that we can finish exploring the wall feature and draw it and then see if there is any stratigraphy in the eastern half of the trench associated with the wall.

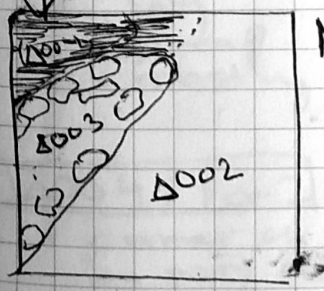
Bags
A
B
C

Δ003, Lot 1 After breakfast we have been cleaning the wall and got a bit of material from the mud between the stones - some ceramic and bone. Wall is poorly built of a variety of stone types.

Photos
Δ003 wall close ups.

Bags
A
B
plaster

Δ004, Lot 1 On the NW side of the wall the soil is dark brown w/ yellow inclusions. Compact but less so than Δ002 and retains more moisture. Because it is such a small area that is visible, it is hard to tell the full extent or why it is different from Δ002, but the wall definitely forms the dividing line between the two.



Levels

Δ004 opening

A = -119 cm

(current = -139 cm)

Δ002 closing

Stone = -141 cm

Southern part of trench

Δ003

Δ002

16/7/16 S Vrachi Survey, Day 15 TT3

Δ002, Lot 3 This morning we are continuing to clear the dark brown soil of Δ002 to see if some large stone we are coming down on go across the trench. If so, this will be a good stopping point. Material frequency is starting to decrease, though we have some of all the usual suspects.

Bags
D
A
B

Giuseppe Puggioni

Notes from Damir re: TT1

- very fragmented faun plan.
- Pig
- Dog
- Sheep
- mostly cow.

Δ004, Lot 2 We excavated the corner of the trench with its very dark soil with yellow inclusions. I came down on the face (western) of wall Δ003. It is clear now that Δ004 is only on the western side of the wall and that the wall partially collapsed on top of it, which explains the disarray of the top of the wall.

Bags
A
B

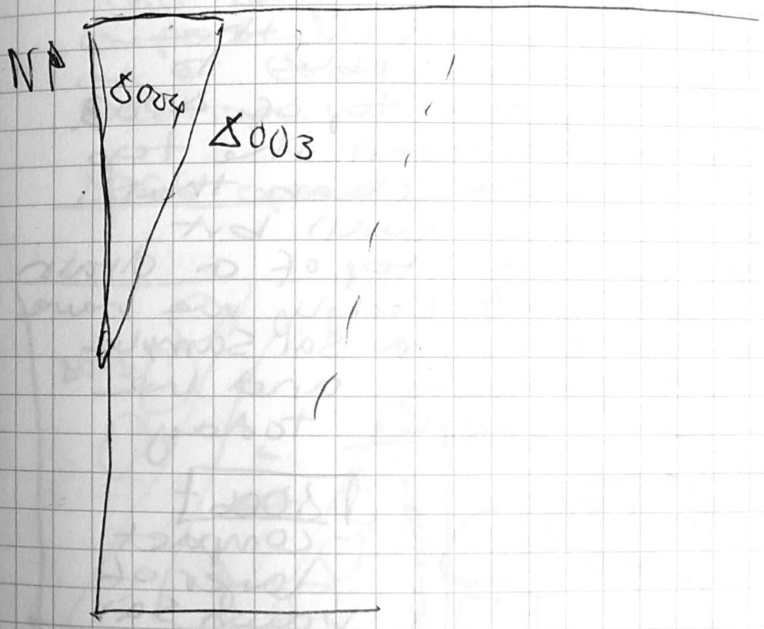
We spent the afternoon drawing the ~~North~~ East section of TT1 and the North section of TT2 and revising context sheets.

The bones and notes from Damien and Sam are almost complete.

17/7/16 S'Vrachi Survey Day 16 TT3

This morning we finished the section drawings and context sheets for TT1 and TT2. These can now be inked and everything will be done aside from the ceramic study

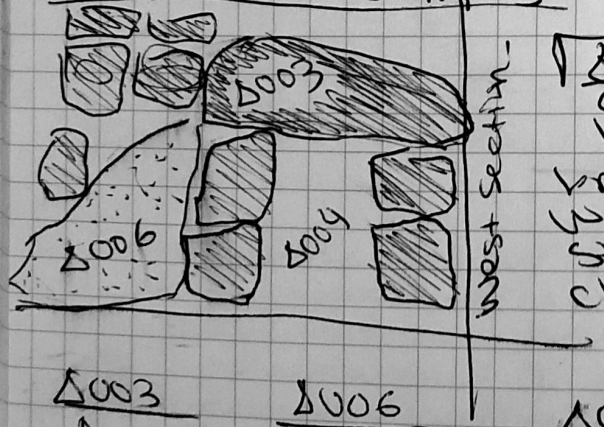
Δ004 Size



18/7/16 S'Urachi Survey Day 7

We spent this morning on pottery counts and weights since we needed to wait for Alfonso to excavate wall Δ003. Unclear whether we can finish now → what we have new inventaker from the Soprintendenza.

In the second half of the morning we were able to finish drawing the top of Δ003. We then removed the top and it became clear that this was not a wall but instead the top of a drain with fill Δ004. Luckily we have already taken a soil sample of Δ004 previously and we took new samples today.



Δ006 t
compact layer of brown soil with small stones and charcoal.

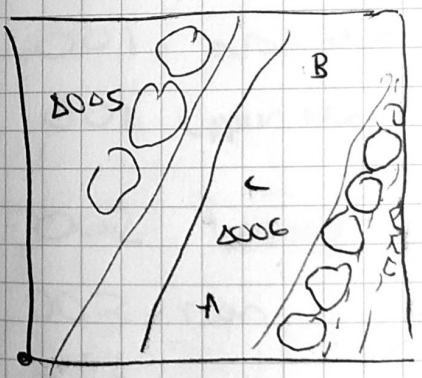
Δ003
A
B

Δ006
A
B

Δ004
A
B

Δ004: Fill of drain, very dark brown silty soil with packets of yellow and black inclusions (look almost like the colors of the liken that grew on the different basalt blocks around the site. Possibly grew here when this space was still open and periodically again as it was filled. This layer is only partially exposed because it runs at a diagonal into the section.

Δ006 opening levels



A = -143 cm
B = -141.5 cm
C = -138 cm

Photos

Δ006 opening.
=
Δ004 process
+ detail

In the afternoon we are continuing to excavate (frantically) and we are removing Δ006, which runs up against the drain stones that are a part of Δ003. This seems to run between Δ003 and Δ005, so there may have been a change

in context that was not immediately evident. We did keep Δ002 in its day separately (Labeled upper and lower), so Δ002 lower likely contains some of Δ006

Soil sample bags to be done 20ff

40l of 001
80l of 002
40l of 004
20l of 006

} all from FT3 98.108

SU162 98.108

000 Non-Diag: 8.87 498+9
001 Non diag: 10.22 854
002 Upper Non-diag: 1.35 kg 120

002 lower: ~~1.34kg~~ .9kg 86
003 non : .12 1.7
004 non
006 non
cleaning 2.14kg

Bones Damia

- distinction between ferile sheep that remained wild and domesticated sheep and other similar animals.
  [you have both contemporaneously]
- 80%+ domestic and rest wild
- sheep dominant (+goat)
  ↳ sheep always more than 90% of sheep/goat assemblage
  1.5-2 years
- sometimes eating dog.
- ~~Horse~~, donkey
- ~~Chicken~~

	D	E → more Nuragic strategies?
cattle	16.6%	33.7%
caprine	65.9%	50%
pig	17.4%	15.4%

- cattle → mostly adult.
- pig → mostly → 2 year

No cats!

Trench 1 (Su Padrigheddou)

74.6% domestic
25.4% wild.

cattle 52.2
pig 20.0
caprine 20.1
dog 1.6

small variety of species
high % cattle
high % of red deer with wild game.