Building the Great Dolmens
Excavations at Presaddfed, Anglesey, 2013

Data Structure Report
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1. Introduction: Building the Great Dolmens project

Dolmens are one of the best known, yet least understood, types of monument in Britain and Ireland. These monuments have seen virtually no modern excavation or investigation, and we still have no definite date for the construction of these monuments, although there is the suggestion that this was at a potentially early date in the Neolithic (Cummings and Whittle 2004; Kytmannow 2008). If this is the case, dolmens may well be the earliest form of monumentality in Britain and Ireland and may be able to inform our understanding of the transition to the Neolithic. In addition to this we have little understanding of how these monuments were constructed, even though some dolmens employ enormous stones. These were extraordinary feats of engineering, where people were quarrying, hauling and lifting stones that were up to 150 tonnes in weight. It is also obvious that many dolmens were architectural failures, in the sense that at some sites the capstone was never successfully placed on top of uprights, yet this idea of monumental failure, and its impact on society, has not been explored in any depth. Moreover, we have only a very limited understanding of how these sites were used once they were constructed, either successfully or unsuccessfully. Did people abandon monumental failures, or did they use them as if they were successful constructions? Did these sites all start off as burial chambers, or was this a 'secondary' use? The other key element of the project involves thinking beyond typological classification. We advocate a critical approach to the traditional monument typology of Britain and Ireland by focussing instead on the construction processes involved, and the overall 'effect' that people were trying to achieve when building these sites, instead of the minutiae of typological classification. Since this is the case, some sites that have not been previously classified as dolmens will need to reclassified and considered as part of our project. Overall, then, a new project addressing all these issues is being initiated in order to understand this crucial class of monument, and potentially the beginnings of monumentality in Britain and Ireland.

In order to answer our research questions our research project is approaching the Neolithic monumental record of Britain and Ireland in three key ways:

1. Survey: by undertaking geophysical survey around a number of dolmens, we can look for traces of the construction methods used to build the dolmens (pits, ramps, quarries and so on).
2. Geological assessment: we have already noted that many dolmens are built from stones that are both local and non-local. In order to fully understand the biography of these monuments, the geological assessment of multiple sites in different areas is an essential component of the project.
3. Excavation: five sites will be selected in Wales, England and Ireland that appear to be ruinous but, for our purposes, will allow us to focus on their construction. We will also select sites for

excavation that show signs of monumental disaster, and where we can identify and excavate a nearby quarry or pit. Because dolmens are relatively simple constructions, and since they very rarely produce large quantities of material culture, it is realistic to excavate quickly. This report details the excavation in 2013 of our second target site, Presaddfed on Anglesey (Ynys Mon). Garn Turne, Pembrokeshire was our first target site and separate Data Structure Reports exist for that excavation.

Figure 1. Presaddfed during excavation, showing the collapsed northern chamber and the standing chamber to the south

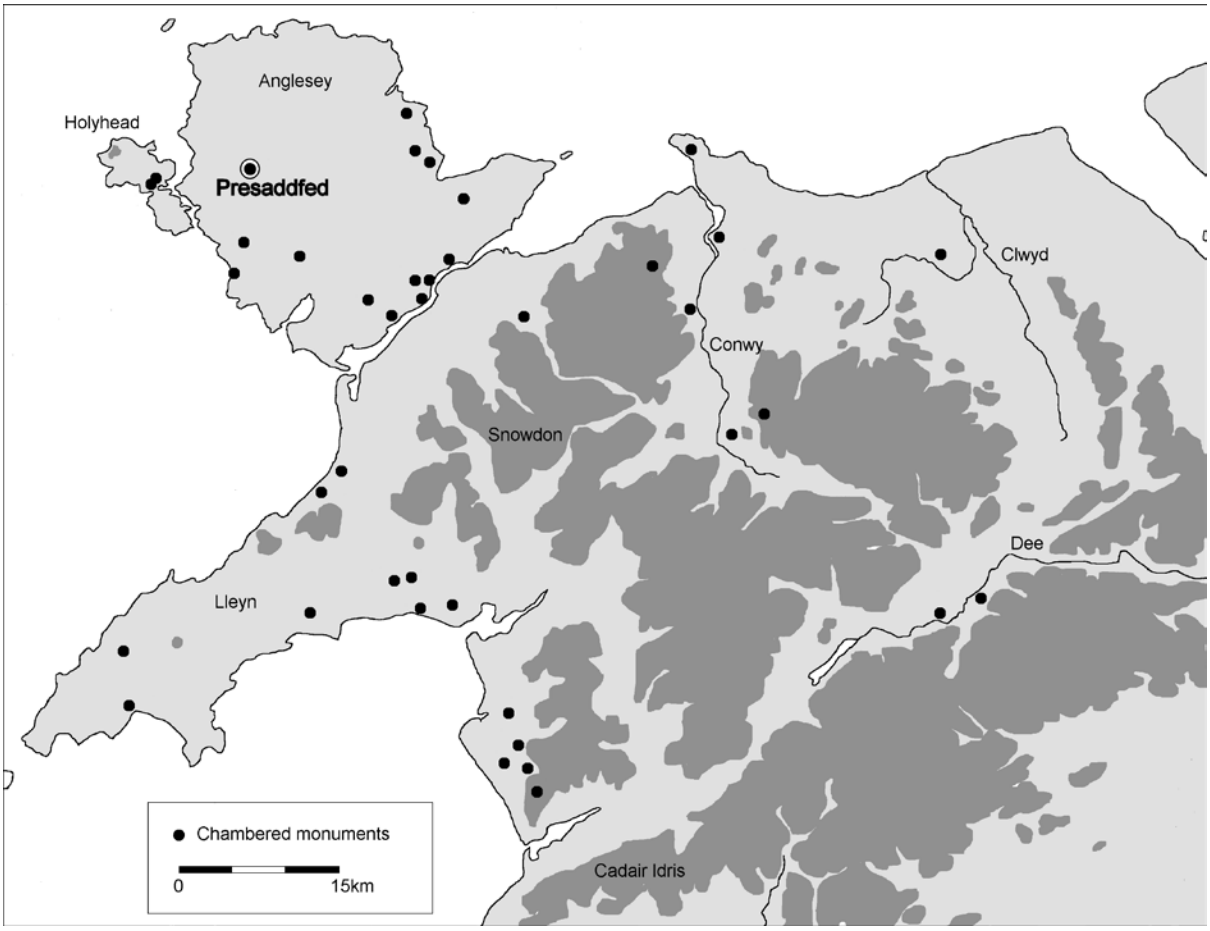

Figure 2. The location of Presaddfed in north-west Wales, and in relation to other chambered tombs in the region

2. Presaddfed excavation methodology and previous work

Presaddfed was chosen for investigation for a number of key reasons:

1. One of the chambers at the site had collapsed. This meant it offered excellent potential for exploring our aim of identifying construction processes because we could examine the area surrounding the dolmen without affecting its structural integrity.

2. It has not been previously investigated, so any archaeological deposits should not be disturbed.

Prior to excavation a detailed measured survey using a total station was made of the monument and geophysical survey was conducted (Figure 3).

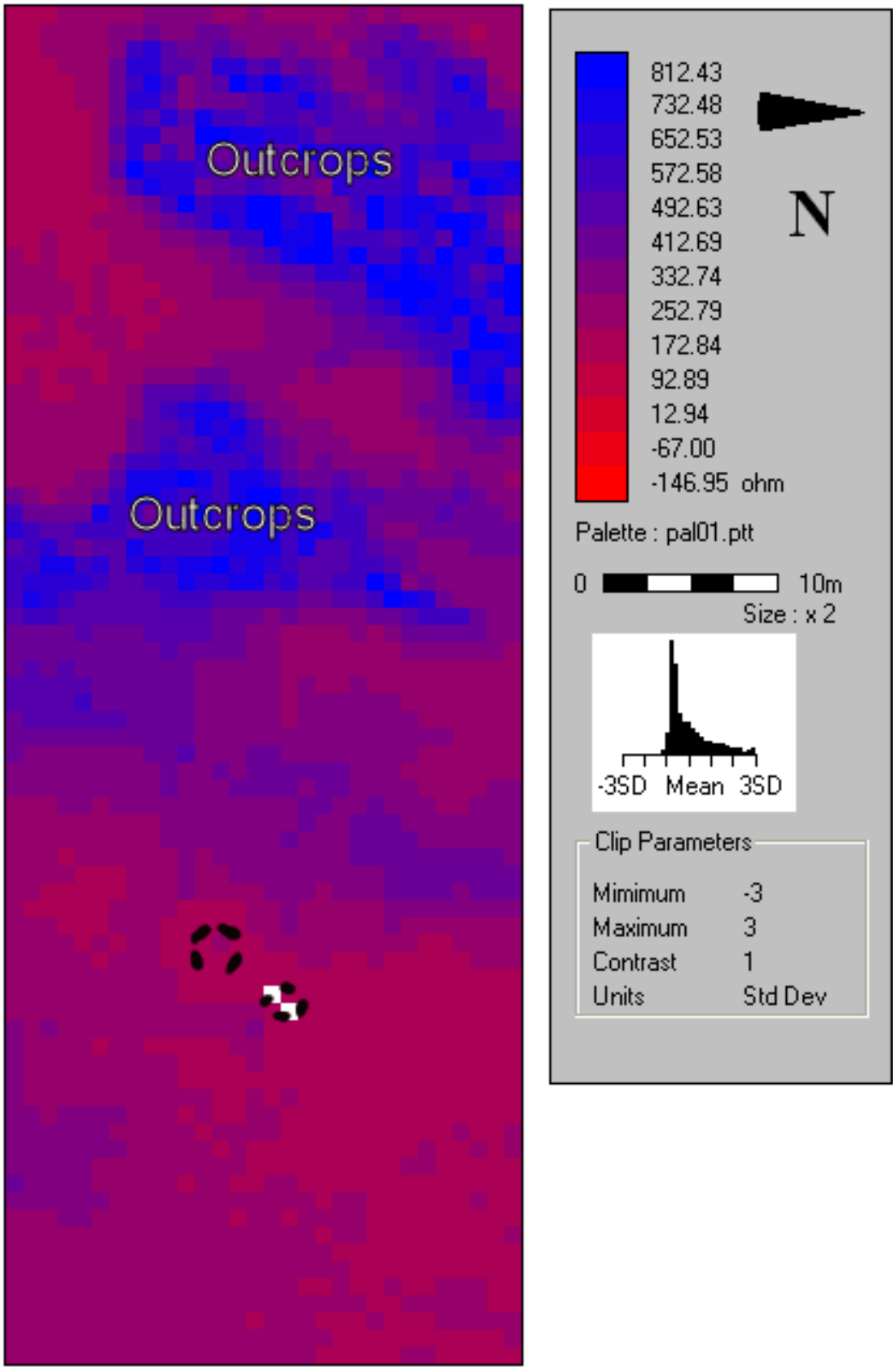

Figure 3. Geophysical survey of Presaddfed conducted in July 2013 prior to excavation

We followed standard archaeological procedure in the UK. We excavated using a trowel and hand-shovel and all archaeological deposits were dry sieved where possible to recover finds. The deposits were recorded in plan and section. Find locations were recorded in three dimensions and by context using a total station. The recovery of samples for palaeobotanical analysis followed English Heritage guidelines (2002). Accordingly any sealed archaeological contexts that were excavated were sampled for flotation, as well as a random selection of other contexts.

The documents and finds that result from the excavations – comprising photographs, drawn plans, written documents and artefacts – will be preserved and maintained as a record of the fieldwork. Digital data – photographs, geospatial data, CAD drawings etc. – will be prepared and archived in accordance with industry standards of good practice (Eiteljorg *et al*. 2003; Gillings and Wise 1998; Richards and Robinson 2000). The deposition of the archive will be prepared and undertaken in consultation with CADW and in accordance with current best practice (Archaeological Archives Forum 2007; Richards and Robinson 2000).

3. Context narratives

Trench A

Rationale for trench location: to look for a quarry for the extraction of stone for the dolmen.

Trench A was 4x4m and exposed outcropping bedrock through the trench (007). One section of this bedrock had been quarried (Roger Anderton *pers. comm*.). The piece of stone removed from this area was not large enough to have been part of the monument as it currently exists. Overlying the bedrock was a bright orange silty loam to the west of the trench (006), and a grey-yellow silty loam to the east of the trench (005). 005 was overlain by a thin grey silty clay (004) and a browny-orange silt (003). Both sides of the trench had a deposit of ploughsoil (002) beneath the topsoil (001). These deposits seem to represent differential silting and clay deposition events either side of the main bulk of the outcrop. Only modern finds were located in this trench, including a large piece of a plough which was wedged up against the quarried face of the outcrop (SF 1). The current tenant farmer remembered his father breaking a plough in this field in 1970.

Figure 4. Trench A post-excavation shot, showing the local outcropping mica-schist (007), with the quarry face highlighted in red

Figure 5. Tip of a plough found next to the quarried face in Trench A (SF 1)

Trench B

Rationale for trench location: to look for a quarry for the extraction of stone for the dolmen.

Trench B was 4x4m and exposed outcropping bedrock to the north of the trench (015). Many sections of this bedrock had been quarried and broken up (Roger Anderton *pers. comm*.). As with Trench A, the pieces of stone removed from this area were not large enough to have been part of the monument as it currently exists. Overlying the bedrock throughout the trench was a thick deposit of dark orange-brown silty loam (014). In this fill, and immediately overlying the quarried bedrock, two flints were found (SF 4 and 5). Topsoil (013) overlay the silty loam 014.

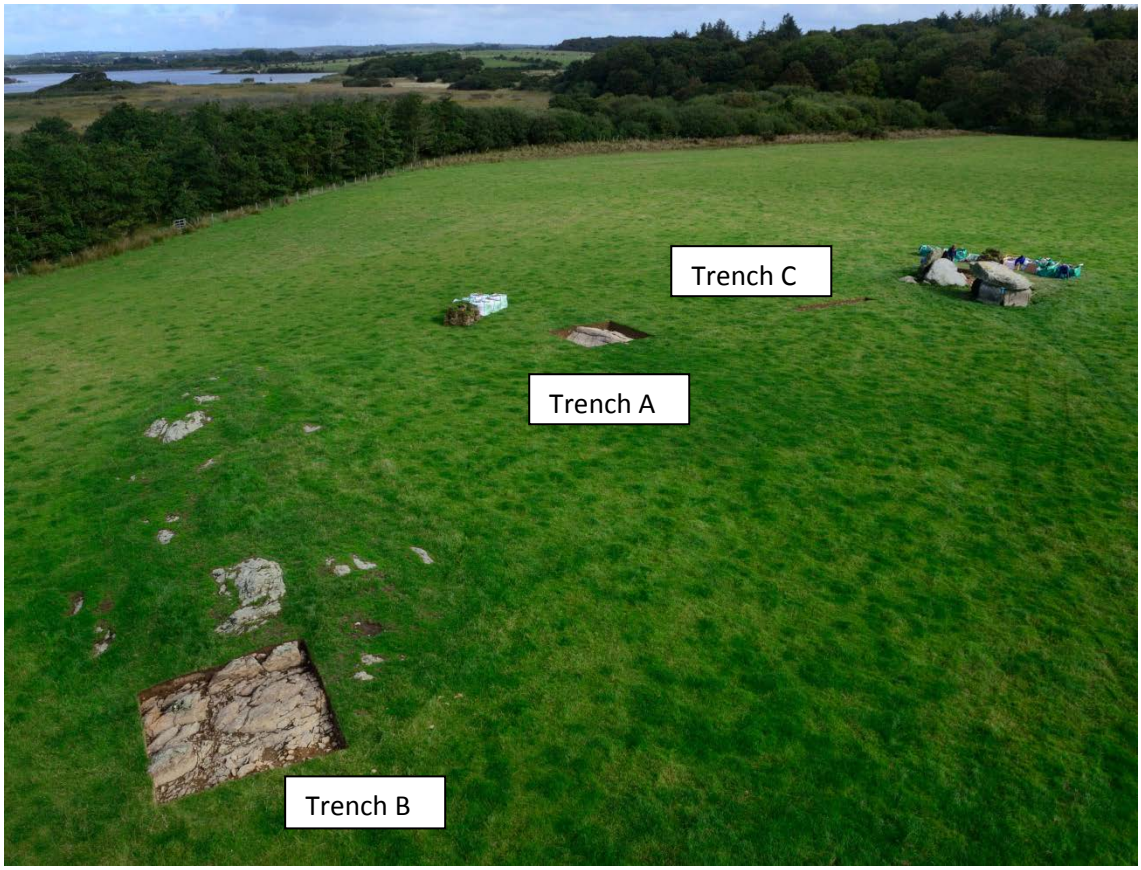

Figure 6. Trench B in relation to the other trenches and the monument at Presaddfed.

Trench C

Rationale for trench location: to look for a quarry for the extraction of stone for the dolmen and explore the outcrop visible in the geophysical survey only.

Trench C was 6x1m and contained only topsoil, ploughsoil, and the natural till.

Trench D

Rationale for trench location: to look for remnants of construction immediately around the collapsed chamber.

Trench D was roughly 4x4m (see Fig. 7). It was originally opened as a 3x3m trench, but expanded by 1.25m to the north and 1m to the east in order to explore features exposed during excavation.

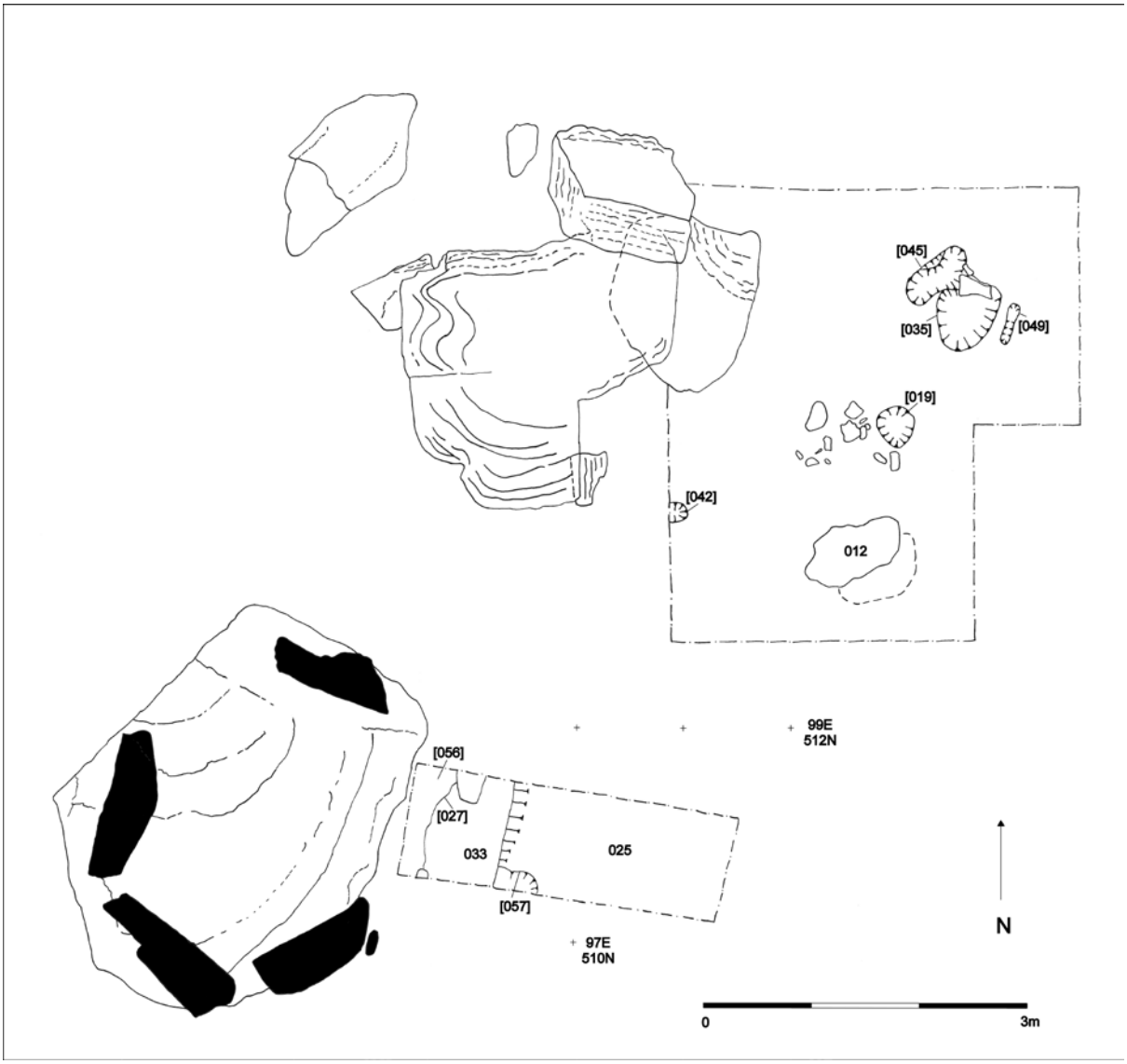

Figure 7. Plan of Trenches D (top) and E (bottom) at Presaddfed

The first event in trench D was the cutting of a socket for the only stone which remains upright in this chamber. The socket [046] was clearly visible in section as a thin line of iron pan, and was cut into a natural clay layer (040). Within the socket was the standing stone itself, and a single fill (048), along with packing stones (052): see Fig. 9. The collapsed upright had also sunk into the natural clay (040), but no socket was visible for this stone.

Various features were cut into the natural. At this stage we cannot be sure that these are all contemporary, although it seems possible that they may all relate to the construction, and possibly use, of the monument. First, was a small posthole to the south of the chamber and visible in section (cut 042, fill 041). Another posthole was found in the middle of trench D (cut 019, fill 018, the latter containing a hammerstone SF18). The largest feature was a scoop hearth, visible as a large spread of charcoal in plan (fill 020, cut 035). There were multiple

fire-cracked stones in the hearth fill, along with substantial quantities of charcoal. Fire-cracked stones were also found at the base of scoop hearth (022). Immediately next to the scoop hearth was a shallow hearth (fill 044, cut 045) which may predate the main scoop hearth. A small linear feature was also found to the east of hearth (cut 049, fill 050): the function of this is unknown, but it was filled with charcoal.

Immediately around the monument was a substantial rammed stone platform. The base of this platform comprised a clay layer (038), followed by the rammed stone platform itself (016). The platform was very heavily compacted. On top of the rubble bank were spreads of small stones (011) to the south of the trench, and to the north (034).

To the south of the trench was a thick domed spread of much drier silty clay. All of these features and deposits were overlain by 009, an accumulation of a light orange-brown, friable silty loam: two pieces of flint (SF 9 and 14) and a hammerstone (SF 11) were found in this layer. A considerable number of modern finds were also found in this fill (Fig. 8). To the north this fill was covered by CADW plastic sheeting and gravel (010), and to the south, topsoil (008).

Figure 8. Modern finds from trench D

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Trench E

Rationale for trench location: to look for a pit which may have been from where the capstone was excavated from the earth. Material filling this pit should date construction. Its location was predicated on avoiding causing structural damage to the standing monument.

Trench E was 1x3m and was placed to the east of the standing monument (see Fig. 7). At the western end of the trench we found the remains of a pit cut into the natural [056] with a silty clay fill (055). Probably contemporary with this was the remains of a posthole [057] with a brown silty loam fill (058). We suggest that these relate to the original construction of the standing chamber at Presaddfed, the pit being the remains of where the glacial erratic which was used as the capstone was excavated from the earth. The posthole may have assisted in lifting or manoeuvring this stone around. However, both of these features were substantially obscured by a deep cut [027], towards the bottom of which we found post-medieval pottery sherds. This cut must therefore be recent. Unfortunately it obscured most of the original cut. It may well date to the use of the standing chamber at Presaddfed as a domestic dwelling in the 19th century: its precise function, however, is unclear. This modern cut was filled with a loose brown clay (033) on top of which was a substantial rubble bank (032). The bank was cut by another modern feature to the west [059], which was filled with a brown silty clay (054). On top of these recent deposits was a layer of plastic sheeting and gravel laid down by CADW (010) to the west of the trench and to the east of the trench, humic plough-soil (024) containing a single flint (SF17). All other finds from this trench were modern.

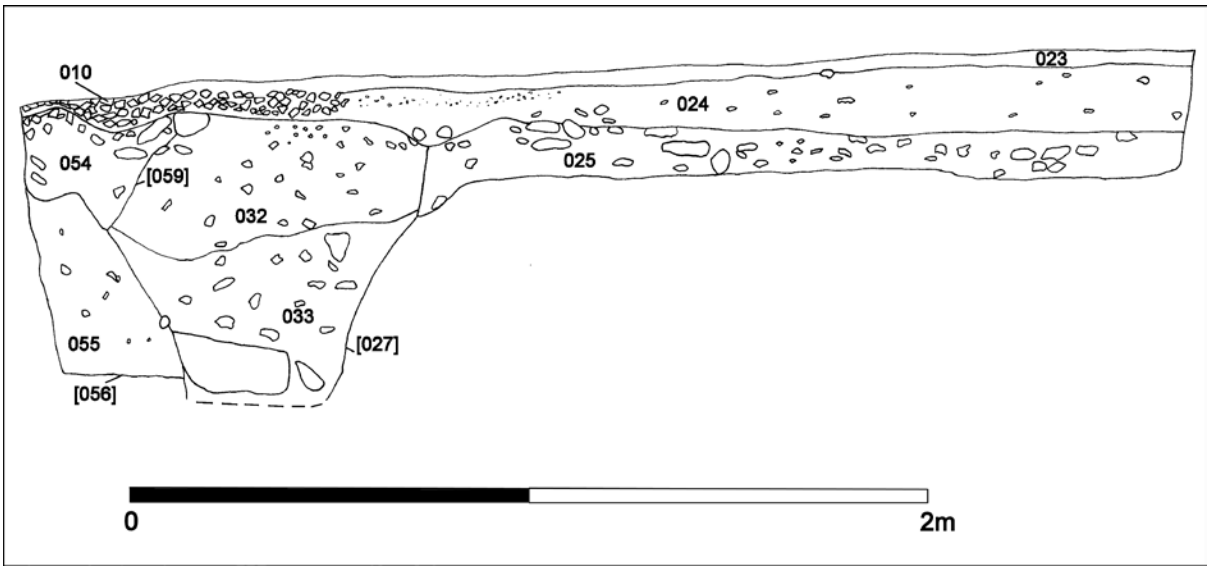

Figure 11. South-facing section of Trench E, showing the original cut for the capstone extraction [056] disturbed by the modern cut [027]

Initial interpretations

Trenches A and B were opened in order to locate prehistoric quarries. We thought these outcrops may have been the source of the stones used to construct the monument. These trenches exposed quarries which were almost certainly prehistoric in date, but the stones extracted from these locations were not large enough to be those found in the monument as it stands today. We suggest, therefore, that these outcrops were quarried for stones used to assist in the construction process.

The geologist confirmed that the stones used in the monument were almost certainly glacial erratics. This relates not just to the large capstones but also the uprights. These stones were potentially lying around and used *in situ* to create the monument. This means that Presaddfed is identical to dolmens in SW Wales, were glacial erratics were also extracted and turned into monuments *in situ*. It appears we found the remnants of the extraction pit for the capstone in the southern chamber in Trench E. Unfortunately, this was obscured in the most part by extensive modern activity.

Trench D provided evidence that the stone which is still standing today was the first component of this chamber to be erected. It sits within its own socket. Whether this stone stood for a few hours, a few days, a few years or a few hundred years may be resolved if there is datable carbonised material from the fill of the socket as compared with the other constructional elements on site. The hearths produced substantial quantities of carbonised material which would be suitable for dating, but it is not clear stratigrahically how these features relate to the construction and/or use of the chamber.

One of the most surprising elements of the excavation was the lack of prehistoric material from the trenches. This suggests the construction site was kept clean of everyday material, and may also hint at the fact that the site was constructed relatively quickly. The more substantial quantities of modern material may date to the use of the chamber as a dwelling in the early nineteenth century.

Figure 12. The entire collection of lithics from Presaddfed

Registers

Context register

Context No.	Trench	Description	Date
1	A	Topsoil	01/09/2013
2	A	Silty loam - ploughsoil	01/09/2013
3	A	Silt: brown-orange under ploughsoil	03/09/2013
4	A	Grey silty clay	03/09/2013
5	A	Glacial till- yellowy grey	03/09/2013
6	A	Orange silt over bedrock	03/09/2013
7	A	Bedrock	03/09/2013
8	D	Topsoil	03/09/2013
9	D	Ploughsoil	03/09/2013
10	D	CADW gravel and sheeting	03/09/2013
11	D	Spread of small stones	03/09/2013
12	D	Slab to E of chamber	03/09/2013
13	B	Topsoil	04/09/2013
14	B	Soil accumulated in bedrock	04/09/2013
15	B	Bedrock	04/09/2013
16	D	Rammed stone platform near dolmen	06/09/2013
17	D	Orange natural (glacial till) under (009)	06/09/2013
18	D	Fill of post hole	09/09/2013
19	D	Cut of post hole (fill 018)	09/09/2013
20	D	Charcoal spread NE corner (hearth)	09/09/2013
21	D	Silty clay, grey, N of trench	09/09/2013
22	D	Stones at base of charcoal fill	09/09/2013
23	E	Topsoil in trench E	14/09/2013
24	E	Ploughsoil	14/09/2013
25	E	Glacial till- yellowy grey	14/09/2013
26	D	Large stones- field clearance?	14/09/2013
27	E	Pit cut: modern feature (unknown)	14/09/2013
28	E	Fill of feature (linear, E end)	14/09/2013
29	E	Cut of feature (linear, E end)	14/09/2013
30	E	Fill of feature (linear, centre)	14/09/2013
31	E	Cut of feature (linear, centre)	14/09/2013
32	E	Rubbly bank in cut [027]	14/09/2013
33	E	Fill of pit [027]: modern	14/09/2013
34	D	Stones on top of rammed stone platform	14/09/2013
35	D	Cut of scoop hearth	14/09/2013
36		Context not used	
37	D	Stone stuck into (036) platform	16/09/2013
38	D	Orangey-grey clay layer under rammed platform	17/09/2013

39	D	Grey silty loam behind platform	17/09/2013
40	D	Grey clay under (038): natural	17/09/2013
41	D	Fill of feature, W side of trench, possible post hole	17/09/2013
42	D	Cut of feature, possible post hole	17/09/2013
43	D	Very loose fill to N trench, next to platform	17/09/2013
44	D	Fill of shallow hearth next to [035]	17/09/2013
45	D	Cut of shallow hearth next to [035]	17/09/2013
46	D	Socket (cut) for 'standing stone'	18/09/2013
47	D	Orangey-grey clay under (039)	18/09/2013
48	D	Fill of [046] socket, pale grey-brown clay	18/09/2013
49	D	Cut for feature next to hearth (linear)	18/09/2013
50	D	Fill for feature next to hearth	18/09/2013
51	D	Dry gravelly fill, S end of trench	19/09/2013
52	D	Packing stones for 'standing stone'	19/09/2013
53		Context not used	
54	E	Fill above platform (032)	19/09/2013
55	E	Brown silty clay, fill of [056] original pit	19/09/2013
56	E	Cut for base of original capstone extraction pit	19/09/2013
57	E	Cut of post hole, S side	19/09/2013
58	E	Fill of post hole, S side	19/09/2013
59	E	Cut for small feature into (032), fill (054)	19/09/2013

Drawing register

Plan No.	Trench	Description	Date
1	D	Pre-ex plan of trench D	06/09/2013
2	D	Section of post hole [019]	09/09/2013
3	D	Plan of standing chamber	09/09/2013
4	D and E	Master plan of trenches D and E	14/09/2013
5	D	Section through hearth (W facing)	16/09/2013
6	D	Section through hearth [044]	17/09/2013
7	D	Mag sus readings in trench D	17/09/2013
8	D	Section through trench D edge (E facing)	19/09/2013
9	D	Section through trench D (E facing N end)	19/09/2013
10	E	S facing section, trench E	19/09/2013
11	A	S facing section, trench A	19/09/2013
12	A	N facing section, trench A	19/09/2013
13	B	E facing section, trench B	19/09/2013
14	D and E	Post-ex plan	19/09/2013
15	D	S facing section, trench D	19/09/2013
16	B	W facing section, trench B	19/09/2013
17	B	S facing section, trench B	19/09/2013
18	D	S facing section overlay	19/09/2013
19	E	Post-ex plan of trench	19/09/2013

Finds register

Find No.	Context	Description	Easting	Northing	Height	Note
1	2	Ploughshare	70.877	522.884	49.115	Not retained
2	2	Hammerstone	71.812	523.697	49.01	Discarded
3	9	Chert	100.499	514.561	49.346	
4	14	Flint	43.859	508.103	49.13	
5	14	Flint	43.456	507.612	49.12	
6	13	Hammerstone	44.763	507.579	49.338	Discarded
7	13	Hammerstone	43.146	506.188	49.018	
8	13	Hammerstone	43.129	507.922	49.137	
9	9	Flint	98.931	512.85	49.326	
10	9	Chert	98.696	514.261	49.266	
11	9	Hammerstone	99.596	513.405	49.32	
12	9	Chert	100.263	512.922	49.292	
13	9	Chert	99.107	514.212	49.258	
14	9	Flint	100.857	515.113	49.275	
15	20	Pot	100.73	515.81	49.237	
16	40	Flint	98.831	515.254	49.115	
17	24	Flint	97.823	510.835	49.306	
18	18	Hammerstone	100.162	514.782	49.054	

Samples register

Sample No.	Context	Description	Date
1	20	Charcoal spread	09/09/2013
2	18	Fill of post hole	09/09/2013
3	20	Hearth (main excavation)	14/09/2013
4	16	Platform, S end of trench	16/09/2013
5	44	Fill of smaller hearth	17/09/2013
6	16	Platform, N end of trench	17/09/2013
7	32	Rubble platform, trench E	18/09/2013
8	47	Clay layer next to standing stone	19/09/2013
9	48	Fill of socket [046]	19/09/2013
10	55	Fill of original pit for capstone	20/09/2013

Photographic register

Photo No.	Date	Trench	Description	Dir	Conditions
1	02/09/2013	A	Broken plough next to outcrop	S	Cloudy
2	04/09/2013	A	(007) Bedrock excavated	N	Cloudy
3	04/09/2013	A	(007) Bedrock excavated	S	Cloudy
4	09/09/2014	D	(016) Pre-excavation	S	Sunny
5	09/09/2013	D	(016) Pre-excavation	N	Sunny
6	09/09/2013	D	(016) Pre-excavation	NW	Sunny

7	09/09/2013	D	(020) Charcoal spread	E	Sunny
8	09/09/2013	D	(022) small stones excavated	E	Sunny
9	09/09/2013	D	[019] excavated	N	Sunny
10	09/09/2013	D	[019] excavated	N	Sunny
11	14/09/2013	E	Trench E, various contexts, pre-excavation	S	Cloudy
12	14/09/2013	E	Trench E, various contexts, pre-excavation	E	Cloudy
13	14/09/2013	D	Trench D with extension (020)	E	Cloudy
14	14/09/2013	D	(020) Pre-excavation	S	Cloudy
15	14/09/2013	D	(020) Cleaned	N	Cloudy
16	14/09/2013	D	(034) and (016) in extension of trench D	W	Cloudy
17	14/09/2013	D	(034) and (016) in extension of trench D	SSW	Cloudy
18	16/09/2013	D	Hearth [035] in section	E	Sunny
19	16/09/2013	D	(034) and (016) cleaned	W	Cloudy
20	16/09/2013	E	(032) Cleaned	W	Cloudy
21	16/09/2013	E	(032) Cleaned	S	Cloudy
22	16/09/2013	D	[035] Hearth, post-excavation	N	Cloudy
23	16/09/2013	D	Second hearth, pre-excavation	N	Cloudy
24	16/09/2013	D	(036) Pre-excavation	W	Cloudy
25	18/09/2013	D	[045] Post-excavation	E	Sunny
26	18/09/2013	D	Socket [048]	W	Sunny
27	18/09/2013	D	(047) Cleaned	W	Cloudy
28	18/09/2013	D	(049) linear feature	N	Cloudy
29	20/09/2013	B	Post-ex of trench B	N	Cloudy
30	20/09/2013	E	E-facing section	W	Cloudy
31	20/09/2013	E	S-facing section	N	Cloudy

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