Metal Detecting survey of the site of the 'Battle of the Ford of the Biscuits',

Arney Co. Fermanagh.

On behalf of

Department for Communities
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Metal Detecting survey of the site of the 'Battle of the Ford of the Biscuits', Arney Co. Fermanagh.

A report submitted to the Historic Environment Division: Department for Communities on work undertaken with Cleenish Community Association, funded by the Historic Environment Fund.

NISMR: FER 229:057

IGR H 20786 36985

Licence No. AE/17/13M

Brian Sloan

1. Introduction

A systematic metal-detecting survey was undertaken by the Centre for Archaeological Fieldwork, Queen's University Belfast (CAF) on behalf of the Historic Environment Division: Department for Communities (HED: DFC) in the environs of the site of the 'Battle of the Ford of the Biscuits' (August 1594). The project was funded through the Historic Environment Fund by the HED: DFC and was undertaken by Dominic Cafolla and Jim Beggs, under the archaeological supervision of Brian Sloan (Licence No. AE/17/13M). The fieldwork was staggered and took place over 8 days in February and March 2017, with involvement from the local community over two weekends (25th February and 10th-11th March).

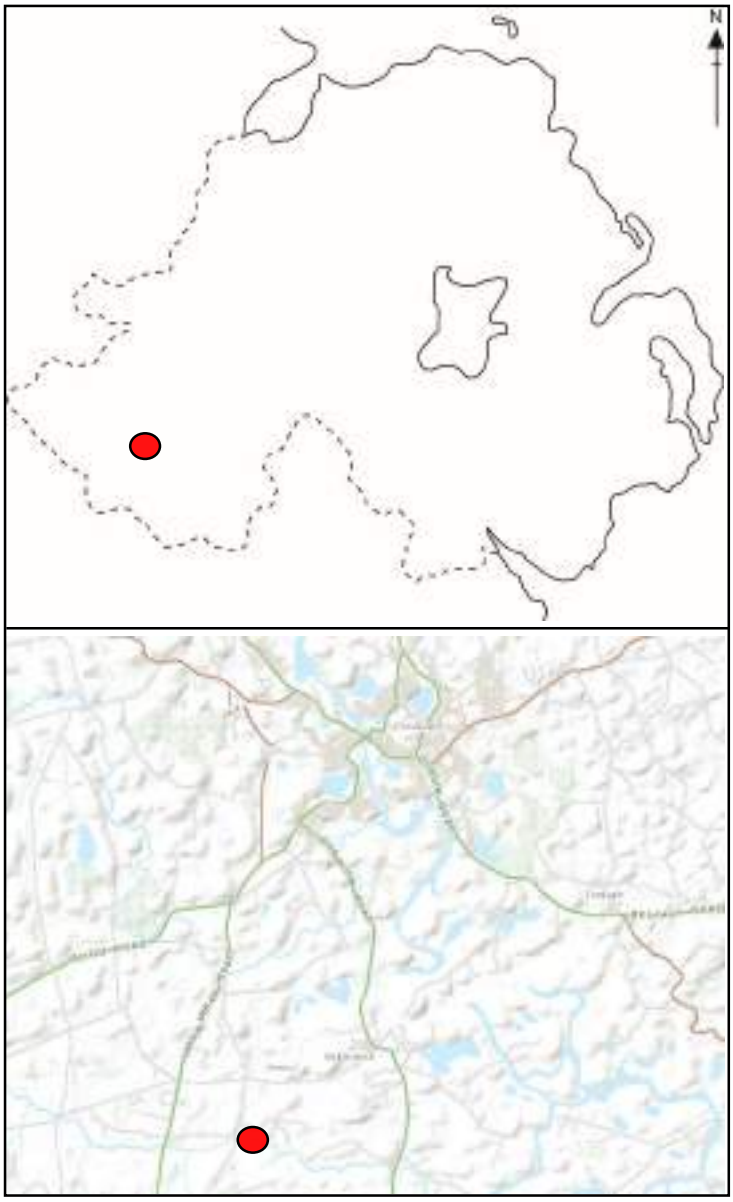

Figure 1: General location map showing the survey area.

The Northern Ireland Sites and Monuments Register (NISMR) allocates the signifier FER 229:057 to the Battle of the Biscuits, although the location is given at Dromane Bridge approximately 2km to the east of the current area of study. However, the recovery of both musket balls and 'slugs' further upstream at the ford in the Arney River suggests that the focus of the battle was further upstream than previously thought (Sloan & Redmond 2014, 35).

2. Historical Background (Sloan & Redmond 2014)

The Battle of the Ford of the Biscuits was the opening battle of the Nine Years War (1594-1603). The victory which the Irish forces won under Sir Hugh Maguire and Cormac McBarron O'Neill (the brother of the Earl of Tyrone, Hugh O'Neill) was critical in giving the Irish the confidence to carry a small rebellion into a larger scale conflict against the English Crown.

The origins of this battle lie in the suppression of Maguire's rebellion of the previous year. Forces were dispatched from Dublin to deal with the insurrection, with a notable victory being scored against him by the Crown in October 1593 at Belleek (*Cal. SPI* 1592-1596, 189). However, Maguire's power was still formidable, so Captain John Dowdall was ordered to stay on in Fermanagh and continue the war, establishing a base known to the English as Castle Skeagh or Skea, a captured Maguire stronghold, which is identified with the site of Castle Balfour in Lisnaskea (O'Neill & Logue 2014, 913). Dowdall was left with 300 men (*Cal. SPI* 1592-1596, 180) which whom he ambushed and harassed Maguire through the winter in the early part of 1594. Dowdall then directed his attention towards the Maguire stronghold of Enniskillen Castle. It fell to the Crown on 2 February 1594, after a nine-day siege (O'Neill & Logue 2014, 914).

Maguire was determined to retake his stronghold, and set out with O'Neill and Hugh Roe O'Donnell to take the castle at Enniskillen. They laid siege to it on 17 May 1594 (*ibid.* 914). The constable of the castle, Eccarsall, had sent letters to constable of Cavan for aid, to no avail. By 11 July, the siege had escalated, with Eccarsall's letters becoming more frantic in tone (*TNA SP* 63/173, f. 130). A forces were gathered under the command of Sir Henry Duke and Sir Edward Herbert, Sheriffs of Cavan (Trimble 1919, 69) and Captain John Fuller as Marshall (Byrne 1903, 80) to bolster the beleaguered defenders. The way of their approach is noted as being through Belturbet, Co. Cavan and along the western shore of Upper Lough Erne, before being attacked by Maguire's forces at the River Arney, close to modern Drumane Bridge (Trimble 1919, 69).

The English force is noted as being 600 infantry with 46 horse (*Cal. Carew MSS* 1589-1600, 95). However, O'Sullivan Beare estimated it at 2500 men, to have included 400 cavalry (Byrne 1903, 80), perhaps taking into account the various persons connected with the supply train, the maintenance of the army, and the usual assortment of camp followers, with the Gaelic Irish forces numbering around a

1000 men (*ibid*. 80). Maguire and O'Neill had their gunmen attack the English through the night as they camped close to the river to harass them (*ibid.* 80). It is not noted if there were many casualties in this phase of the engagement, but the lack of sleep would certainly have affected the capabilities of the English forces to fight the following day.

The English column that was advancing to Enniskillen was a mixture of soldiers, Irish levies and supplies for the castle. The force was divided into three divisions, supported by cavalry and gunmen, with the supplies being split into two groups, and placed between the divisions of soldiers for protection (*ibid.* 80). As the column approached the ford to cross the river, the cavalry was forced to dismount, as they were rendered ineffective by the marshy ground close to the river. The Irish contingent took this as their opportunity and attacked the English ranks from both the front and rear. Through a combination of musket fire and pikemen, the Irish forces drove the third English division into the second through the group of supplies, routing both. The first division of English were able to break through the Irish lines at the ford, and crossed the river, and the English force was able to attempt to regroup on the other side of the river. They were still under fire at this point, and so threw out wings of shot to attempt to allow the army to regroup. Captain Fuller led this skirmish, but was killed "*being pierced by a javelin*" (*ibid*. 81).

At this point, the entire English column is noted as being in total disarray. Duke and Herbert gave the order to abandon the mission, and made amount to escape, falling back towards the ford, where they came under renewed fire. They attempted to cross at a more difficult ford, "*perceived an arrow shot higher up the river*" (*ibid.* 81), approximately 100-150m upstream. Due to the panic within the English ranks, and the depth of the ford, a number of soldiers drowned while attempting to cross, and the other soldiers used the bodies of their comrades as a bridge to escape (*ibid*. 81). Those soldiers that managed to cross the river were afforded a relatively unimpeded escape, owing mainly to the Irish forces being distracted by looting the abandoned baggage train and English dead, wounded and captured (O'Neill & Logue 2014, 920), but also the lack of the deployment of Irish cavalry, for which no record exists. The light cavalry was very effective at pursuing fleeing enemies, and in this situation, their deployment would have led to much higher casualties (*ibid.* 920).

Duke and Herbert sent a letter of their account to the Lord Deputy, which is noted in the Calendar of the State Papers. They wrote that "*they are glad that they escaped alive, considering the immense number of the enemy"* (*Cal. SPI* 1592-1596, 262). They also gave the figures of the dead and wounded, 56 officers and soldiers killed, and 69 wounded (*ibid.* 262). It seems that they did not count their Irish levies within this number, as O'Sullivan Beare notes that over 400 perished (Byrne 1903, 81).

3. Previous work

The identification of the site of the Battle of the Biscuits was a component of a community-led investigation into the Arney area, initiated in 2014 and led by Dr. Paul Logue, HED, on behalf of the Cleenish Community Association as part of a programme (Battles, Bricks and Bridges) funded by the

Heritage Lottery Fund (Sloan 2014). This fieldwork involved a metal detector survey of the environs of the Ford across the Arney River in an attempt to identify clusters or 'hot-spots' of lead shot which might advise on the location of the battle.

The 2014 investigation identified two areas in which lead shot was recovered (Figures 5 and 6). These were land in the vicinity of the 'Red Meadows' in Sessiagh townland (Area 1) as well as the banks immediately north and south of the Ford (Area 2). Area 1 produced a total of 67 lead shot of various calibres, indicating a substantial episode of firearm discharge in this vicinity. However, it appears that this area was used as a firing range in the past and it is likely that the presence of this shot is an indicator of this rather than representing an episode relating to the battle.

The investigation in Area 2 provided more compelling evidence of the battle with 5 projectiles being recovered. Fields on both sides of the river were surveyed, with lead shot (totalling 2 artefacts) being found, but much more important was the presence of lead slugs (totalling 3 artefacts) in both fields. Slugs are non-spherical bullets, created by hammering larger calibre shot into smaller calibre (Foard 2009, 9). The advantage here being that a smaller, lighter gun could fire a bullet with the same penetrative stopping force, while being much more manoeuvrable than a standard musket. Slugs were made for military purposes exclusively, being specifically designed to penetrate armour. It is extremely unlikely that the 3 slugs and 2 shot found across both these fields are representative of anything other than the Irish attack on the English forces trying to cross the River Arney.

4. Methodology

During the excavation of a field drain to the immediate north-east of Arney Bridge and on the northern side of the river, a cannonball was recovered. The presence of this arefact is curious and warranted further exploration. As such, the metal detector survey commenced in this area and worked its way east towards the fort (NISMR FER. The survey was carried out using both north/south and east/west transepts, with any targets being excavated, spotted by GPS and bagged immediately (Appendix 1).

The decision was taken to concentrate the survey on the southern side of the river, as according to historical accounts of the battle this should have afforded the best opportunity to recover lead shot due to the attack from the Irish forces from the northern bank. However, the northern side of the river was also subjected to survey, particularly during the community weekends and built upon work initiated in 2014 (Figure 4).

The areas were subjected to metal detecting using 1.5m transects allowing an overlap of the detector head ensuring maximum coverage of the search area. The transects were on the whole carried out in a North/South direction although where the terrain dictated these were changed to an East/West direction. Identified targets were immediately excavated, logged and bagged and the excavation holes backfilled. Once the target item was recorded and removed, the surrounding area was again scanned this time using a spiral pattern working out from the initial find to a diameter of approximately 1.5 - 2m. This ensured that any other adjacent items, or fragments of the initial artefact, were recovered.

A Leica CS15 GNSS rover to survey grade accuracy (+/- 3cm) was utilised to record the find-spots. This data was inputted into GIS giving an accurate plan of the recovery sites allowing the production of distribution maps (Figures 8 and 9) as well as an ortho-rectified oblique aerial photograph illustrating the distribution of lead shot recovered during 2014 and 2017 (Figure 10).

5. Ground conditions

Persistent wet weather, as well as the heavy clay nature of the topsoil and subsoil, meant that the ground was generally saturated during the period of investigation. It is not clear how the condition of the ground effects the signal from buried artefacts (Dominic Cafolla *pers comm*). However, given the consistent nature of the weather and ground conditions throughout the project, it is not anticipated that this was a debilitating factor in the recovery of artefacts during this investigation.

The majority of the finds were recovered from the topsoil and varied in depth from 0.05m to 0.4m. On the whole the topsoil appeared to overlie the subsoil which consisted of a tenacious mid-grey clay. Fragments of brick were common occurrences throughout the fields investigated, testifying to the disturbance of this area during the production of bricks in the early modern period (Figure 2). It is thought that the areas closest to the river would have been affected by the spreading of redeposited river silt following the dredging of the River Arney during the 1970s (Eddie Brogan *pers comm*).

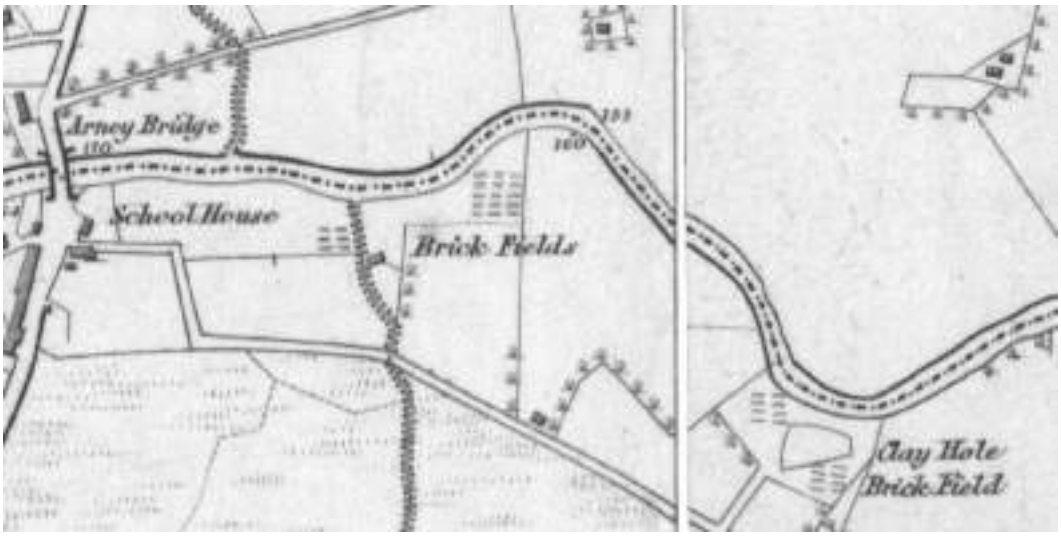

Figure 2: Excerpt of the 1st edition OS 6-inch map (1835) illustrating the presence of 'clay holes' and 'brick fields' along the southern bank of the River Arney.

6. Community involvement

The project ran during February to March 2017. During this period, two community weekends were carried out; 25th February and 11th-12th March. These afforded the opportunity for local people to

participate in the metal detecting survey, as well as the experimental re-construction of a Bronze Age sword that was recovered from the River Arney in the 1960s (this work was undertaken by Johnny Hamill). In total, over 60 people took part in the events indicating the strength of the interest in the local heritage which such events can kindle.

7. Results of the survey

A total of 219 metal artefacts were recovered during the investigation. The assemblage consists of corroded iron fragments (37%), unidentifiable materials (32.9%), Copper alloy items (20.6%), lead artefacts (9.1%) and a single sherd of brown glazed earthenware (0.4%) (Figure 3). The recovery of the ceramic sherds is curious as it produced a definite metallic response on the detector. It is possible that a small fragment of iron had become mixed with the clay when the pot was manufactured or that the glaze has undergone a thermal-reaction in the kiln. The overall majority of the recovered assemblage is deemed to be relatively modern in date. A number of coins of varying degrees of preservation were recovered, although a cursory examination of them indicate they predominantly date to the late-nineteenth and twentieth century. A full list of recovered artefacts is included as Appendix One at the rear of this report.

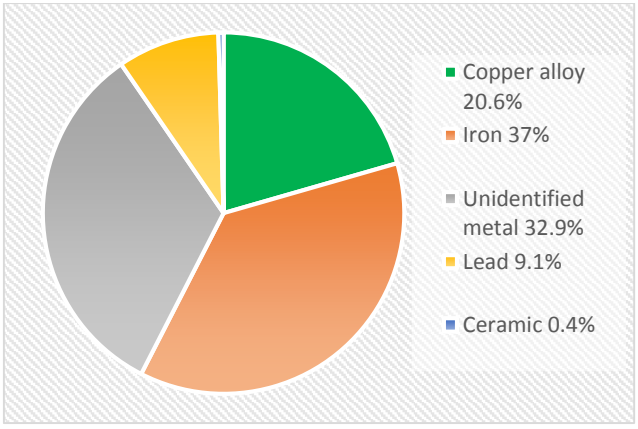

Figure 3: Types of materials recovered during the 2017 metal detecting survey.

A total of four lead shot were recovered during the 2017 investigation (Figure 8). These include two musket balls (FNs. 154 and 178), a possible pistol shot (FN. 163) (Figure 4) and lead shot that has suffered damage through firing (FN. 248) (Figure 5). Three of these artefacts (FNs. 154, 163 and 178) were recovered from the southern bank of the river and their recovery locations might mean that they were residually deposited here following the dredging of the river. Cartographic evidence suggests that this area has undergone substantial alteration during the brick manufacturing process (Figures 2 and 8) again questioning the validity of their recovery locations. The damaged shot (FN. 248) was recovered

from a relatively step slope on the northern side of the river, with no cartographic evidence of ground disturbance in this area.

Figure 4: Lead shot recovered during the community day 25h February 2017. The number beside each shot denotes the GPS signifier (please refer to Appendix 1). ***NB: 0233 = FN. 154, 0242 = FN. 163 and 0271 = FN. 178.***

Figure 5: Lead shot (FN 248). This artefact has become significantly damaged following discharging from a weapon.

GPS Signifier	Find No.	Diameter (mm)	Weight (grms)
0233	154	16	2.6
0242	163	12	1.0
0271	178	16	2.8
0506	248	17	2.4

Figure 6: Diameters and weights of the lead shot recovered during the 2017 investigation.

8. Discussion

The survey of the fields to the north and south of the River Arney produced a wide range of artefacts. The majority of this assemblage is comprised of corroded iron fragments and unidentifiable metal and are likely to be modern in date (Figure 3). Of the lead artefacts recovered, only four of these were positively identifiable lead shot (FNs. 154, 163, 178 and 248) with the rest of the lead comprising scrap fragments/off-cuts and fishing weights (Appendix 1). The locations of these artefacts is interesting with three (FNs 154, 163 and 178) being recovered alongside the southern riverbank. It is possible that these are residual artefacts having ended up in this location by the spreading of dredged material from the river. If this is the case, only one of the 2017 lead shot (FN. 248) was actually recovered from an '*in situ*' position, and the fact that this shot has been damaged following discharge from a weapon, lends further support to this being recovered from the location where it was deposited.

Taking the lead shot recovered from the 2014 and 2017 investigations together (excluding the 67 that were recovered from Area 1 in 2014) means that there is a total of nine from the area of the ford (this total includes the three 'slugs' that were recovered in 2014). Ordinarily this might seem a very small amount given the scale of the activity during the battle. However, taking metal detecting surveys carried out at other battle sites into account, then this may actually be the norm when investigating such sites. For example, only 24 lead shot were recovered following metal detection across the site of the Battle of Kinsale (1601) despite an estimation of over 12,000 troops having been involved (Shiels 2008, 141). This is further borne out when looking at the results of a survey carried out at the site of the Battle of the Boyne (1690) when only five lead shot were recovered (Cooney et al 2002, 9).

In relation to the Arney survey, a number of potential reasons could have hampered the recovery of lead shot. The area around the river, particularly along its southern bank has been disturbed during the brick manufacturing process that was common here until the mid-twentieth century (as evidenced by the numerous clay holes and brick fields on the 1st edition 6-inch OS map of 1835) (Figures 2 and 8). Spent or lost shot could easily have been excavated with the clay during the brick manufacture, and when these clay holes came to be backfilled the modern detritus might even mask signals from surrounding artefacts (Dominic Cafolla and Jim Beggs *pers comm*). The dredging of the river during the 1970s may also have had a negative effect on the recovery of lead shot. Local information states that the bottom of the river was dredged and the material piled up in mounds along both the northern and

southern banks. This material was subsequently bulldozed flat (Eddie Brogan *pers comm*). If the depth of this bulldozed material exceeds c. 0.4m then it is likely that the signal from the metal detector is not reaching the old ground surface, never mind penetrating it.

The 2014 survey of Area 1 produced 67 lead shot of varying sizes. This figure far exceeds any other assemblage from an Irish Battle site. The interpretation of the assemblage representing the remains of a relatively modern firing range came about following local information (T.P Owens *pers comm*; Sloan & Redmond 2014) although this remains tentative. It is possible that this area does indeed represent an element of the battle, a picture which should become clearer following the analysis of the lead shot from both the 2014 and 2017 investigations.

9. Recommendations

The investigations into the site of the Battle of the Biscuits has revealed the presence of lead shot on both the northern and southern banks of the River Arney. It is recommended that these artefacts are presented to a specialist for measurement and weighing in an attempt to date the shot. This is of particular importance to the shot recovered from 'AREA 1' during 2014. These have provisionally been identified as representing a relatively modern firing range, although an analysis of the various shot should confirm this assertion.

The 2017 investigation covered a large swathe of ground on both the north and south side of the river. However, it can be recommended that further survey in the area is carried out in the future, perhaps even extending the investigation area as far as Dromane Bridge to the east.

The artefacts recovered during this investigation are currently archived at the Centre for Archaeological Fieldwork Queen's University Belfast. It is recommended that they are returned to the Cleenish Community Association.

10. Acknowledgements

The metal detecting was undertaken by Dominic Cafolla and Jim Beggs, with the assistance of Mick Addy (volunteer). Archaeological assistance was provided by Matthew Addams. Paul Owens (QUB Masers Student) provided assistance during the community weekend 11th-12th March. Thanks are due to Barney Devine of the Cleenish Community Association for all assistance, support and organisation over the period of the investigation. Dr. Colm Donnelly (CAF) and Dr Paul Logue (Historic Environment Division: Department for Communities) are due particular thanks for help and support, as well as the Historic Environment Fund (HEF) for funding the investigation. Dr Siobhan McDermot downloaded the GPS data and produced the distribution maps for which the author is extremely grateful.

Gratitude is due to Eddie and Ellen Brogan, as well as the wider Arney community for their unwavering enthusiasm and support throughout the period of the investigation.

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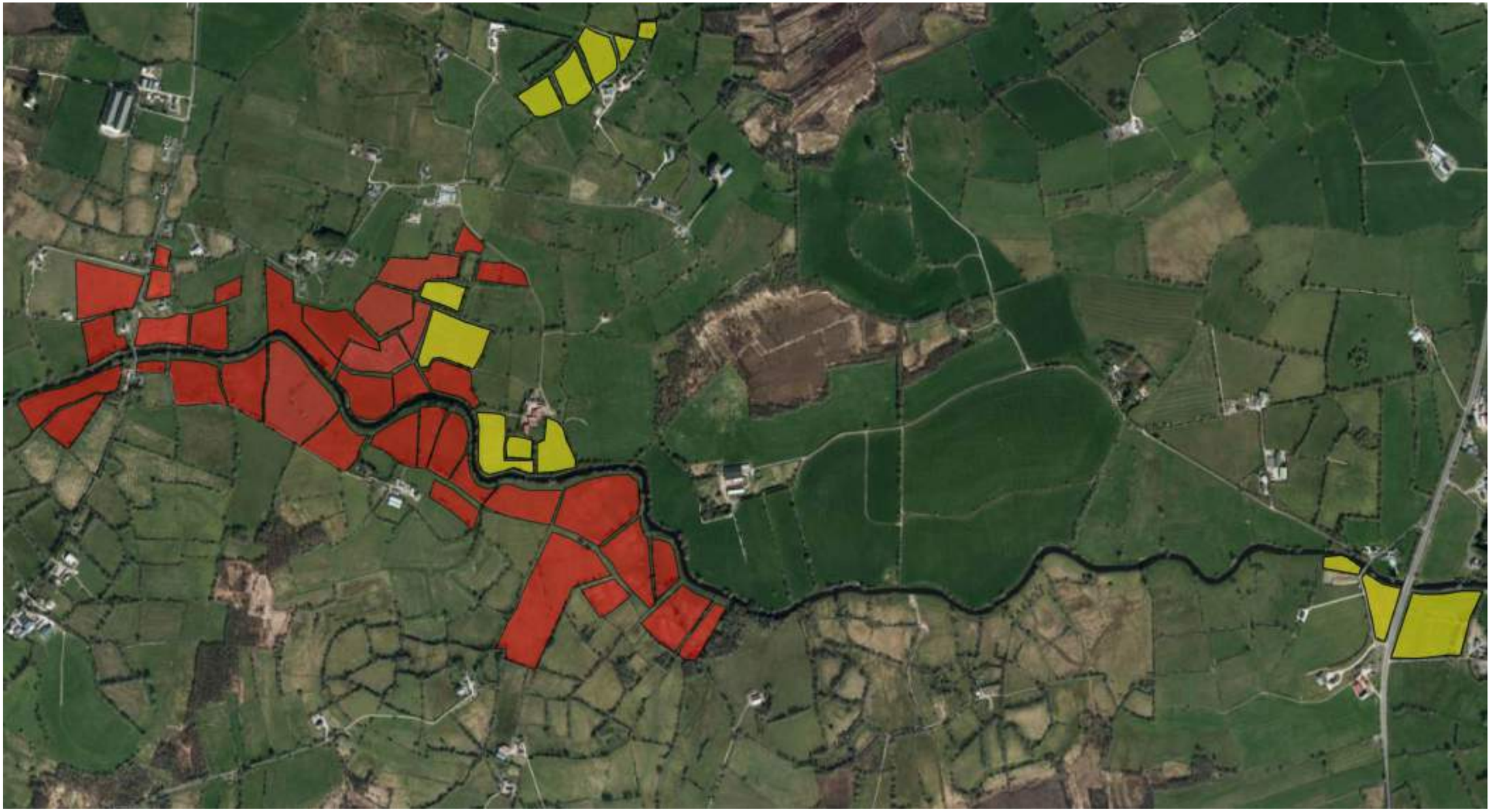

Figure 7: The River Arney showing the survey areas undertaken in 2014 (in yellow) and 2017 (in red) (overlaid on HED:DFC Map viewer ortho-image *http://doeni.maps.arcgis.com/apps/webappviewer/index.html?id=f30dc61c86e44bb5bc19b5cacfe43cdc***).**

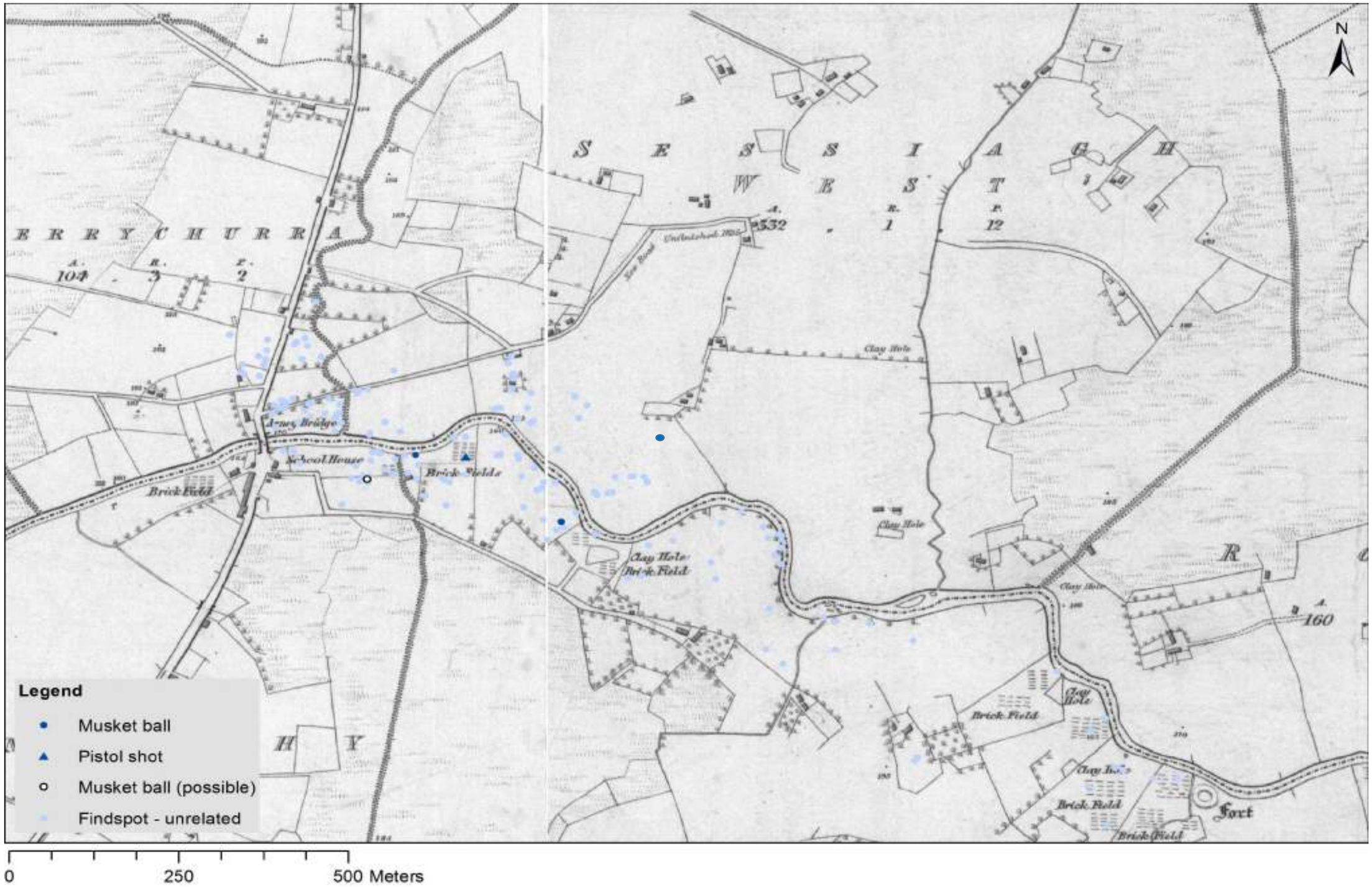

Figure 8: Artefacts recovered during the 2017 survey overlaid on the 1st Edition OS six-inch map (image provided by Dr. Siobhan McDermot CAF). The artefacts relating to the battle are depicted in darker blue.

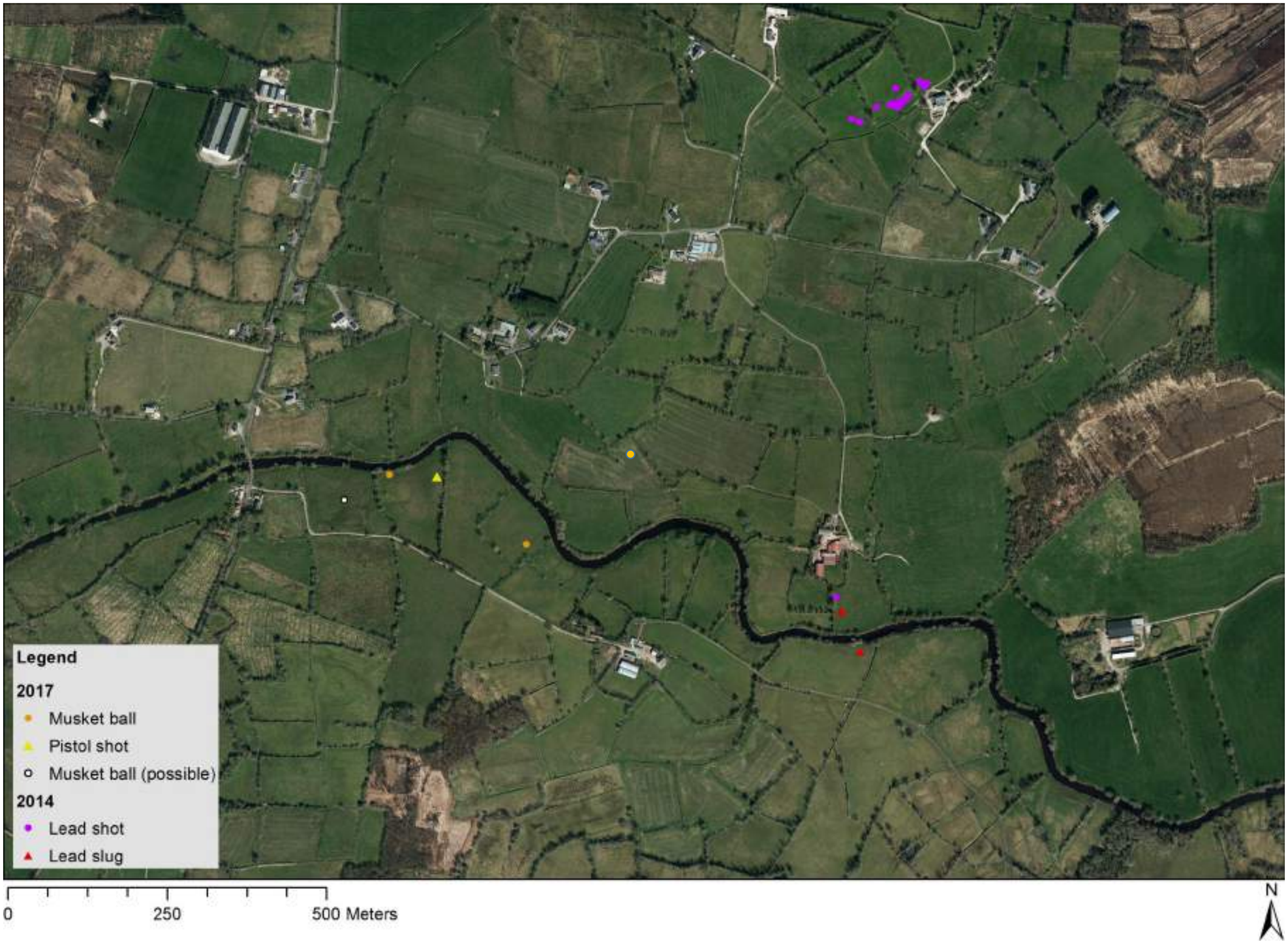

Figure 9: Image showing the location of shot recovered from both the 2014 and 2017 surveys (image provided by Dr. Siobhan McDermot).

Figure 10: Oblique aerial view of lead shot find-spots from 2014 (red dots) and 2017 (yellow dots) looking from the south-east onto the north-west. Ortho-rectified aerial photographs, 2006, draped over Digital Terrain Model visualised in ArcScene 10.2.

Appendix One: Finds from the metal detecting survey

Point ID	Code	Material	Comment	FIND_ID
GPS001	FSM	iron	cannonball	FN45
GPS0018	FSP	metal & plastic	electrical component	FN46
GPS0019	FSM	copper alloy?	button	FN47
GPS0020	FSM	copper alloy?	buckle	FN48
GPS0021	FSM	iron	corroded unidentifiable	FN49
GPS0022	FSM	iron	horseshoe	FN50
GPS0029	FSM	iron	corroded/unidentifiable	FN51
GPS0030	FSM	iron	corroded/unidentifiable	FN52
GPS0031	FSM	iron	corroded/unidentifiable	FN53
GPS0032	FSM	iron	corroded/unidentifiable	FN54
GPS0033	FSM	iron	corroded/unidentifiable	FN55
GPS0034	FSM	iron	corroded/unidentifiable	FN56
GPS0035	FSM	iron	corroded/unidentifiable	FN57
GPS0036	FSM	metal	corroded/unidentifiable	FN58
GPS0037	FSM	metal	corroded/unidentifiable	FN59
GPS0038	FSM	iron	corroded/unidentifiable	FN60
GPS0039	FSM	metal	toy tractor	FN61
GPS0052	FSM	brass/copper alloy	modern bullet	FN62
GPS0053	FSM	lead	corroded/unidentifiable	FN63
GPS0054	FSM	iron	corroded/unidentifiable	FN64
GPS0055	FSM	iron	iron hoop	FN65
GPS0056	FSM	iron	buckle	FN66
GPS0057	FSM	iron	corroded/unidentifiable	FN67
GPS0058	FSM	iron	corroded/unidentifiable	FN68
GPS0059	FSM	iron	corroded/unidentifiable	FN69
GPS0060	FSM	iron	corroded/unidentifiable	FN70
GPS0061	FSM	metal	corroded/unidentifiable	FN71
GPS0062	FSM	iron	corroded/unidentifiable	FN72
GPS0063	FSM	metal	coin	FN73
GPS0064	FSM	metal	coin	FN74
GPS0065	FSM	metal	buckle	FN75
GPS0066	FSM	copper alloy	corroded/unidentifiable	FN76
GPS0067	FSM	metal	wire	FN77
GPS0068	FSM	metal	corroded/unidentifiable	FN78
GPS0069	FSM	metal	corroded/unidentifiable	FN79
GPS0070	FSM	iron	corroded/unidentifiable	FN80
GPS0071	FSM	metal	washer	FN81

GPS0072	FSM	metal	2p coin	FN82
GPS0073	FSM	metal	corroded/unidentifiable	FN83
GPS0074	FSM	metal	button	FN84
GPS0075	FSM	iron	corroded/unidentifiable	FN85
GPS0076	FSM	metal	clasp	FN86
GPS0077	FSM	iron	corroded/unidentifiable	FN87
GPS0097	FSM	metal	cast iron?	FN88
GPS0098	FSM	metal	5p coin	FN89
GPS0099	FSM	iron	corroded/unidentifiable	FN90
GPS0109	FSM	iron	corroded/unidentifiable	FN91
GPS0110	FSM	metal	washer	FN92
GPS0111	FSM	metal	washer	FN93
GPS0112	FSM	metal	washer	FN94
GPS0113	FSM	metal	50p coin	FN95
GPS0114	FSM	metal	jam jar lid	FN96
GPS0115	FSM	metal	coin	FN97
GPS0116	FSM	metal	poss. musket ball	FN98
GPS0117	FSM	metal	coin	FN99
GPS0118	FSM	metal	button	FN100
GPS0119	VOID	BLANK	matthew not paying attention	FN101
GPS0120	FSM	metal	tunic button	FN102
GPS0121	FSM	metal	nail	FN103
GPS0122	FSM	metal	coin	FN104
GPS0123	FSM	metal	coin	FN105
GPS0124	FSM	metal	button	FN106
GPS0125	FSM	lead	corroded/unidentifiable	FN107
GPS0126	FSM	iron	corroded/unidentifiable	FN108
GPS0127	FSM	metal alloy	coin	FN109
GPS0128	FSM	*	?	FN110
GPS0129	FSM	iron	iron	FN111
GPS0130	FSM	iron	horseshoe	FN112
GPS0131	FSM	iron	axe	FN113
GPS0132	FSM	iron	buckle	FN114
GPS0133	FSM	iron	iron	FN115
GPS0134	FSM	metal	button	FN116
GPS0135	FSM	metal	button	FN117
GPS0136	FSM	silver	silver coin	FN118
GPS0137	*	*	large iron, not recorded (Gate??)	FN119
GPS0142	FSM	iron	nail	FN120
GPS0159	FSM	iron	iron	FN121
GPS0160	FSM	metal	lock	FN122
GPS0161	FSM	metal alloy	coin	FN123
GPS0162	FSM	metal alloy	coin	FN124
GPS0163	FSM	metal alloy	coin	FN125

GPS0164	FSM	metal	clasp?	FN126
GPS0165	FSM	iron	buckle	FN127
GPS0166	FSM	metal	button	FN128
GPS0167	FSM	metal	button	FN129
GPS0168	FSM	metal alloy	coin	FN130
GPS0169	FSM	iron	nail	FN131
GPS0170	FSM	lead	lead	FN132
GPS0171	FSM	metal alloy	medal	FN133
GPS0172	FSM	iron	iron	FN134
GPS0178	FSM	iron	horseshoe	FN135
GPS0179	FSM	brass	brass knob	FN136
GPS0188	FSM	iron	iron	FN137
GPS0189	FSM	metal alloy	alloy rings	FN138
GPS0190	FSM	iron	iron	FN139
GPS0219	FSM	iron	key	FN140
GPS0220	FSM	iron	iron	FN141
GPS0221	FSM	lead	lead	FN142
GPS0222	FSM	metal alloy	coin	FN143
GPS0223	FSM	metal	spinner	FN144
GPS0224	FSM	iron	iron	FN145
GPS0225	FSM	iron	buckle	FN146
GPS0226	FSM	lead	lead	FN147
GPS0227	FSM	metal	hinge	FN148
GPS0228	FSM	metal	copper/brass??	FN149
GPS0229	FSM	lead	lead fishing weight	FN150
GPS0230	FSM	lead	lead	FN151
GPS0231	FSM	metal	spoon	FN152
GPS0232	FSM	iron	horseshoe	FN153
GPS0233	FSM	lead	musket ball	FN154
GPS0234	FSM	iron	nail	FN155
GPS0235	FSM	metal	wire??	FN156
GPS0236	FSM	iron	nail	FN157
GPS0237	FSM	wood/metal splinter	knife handle with blade fragment	FN158
GPS0238	FSM	metal	spoon	FN159
GPS0239	FSM	iron	iron	FN160
GPS0240	FSM	iron	nail	FN161
GPS0241	FSM	metal alloy	medal	FN162
GPS0242	FSM	lead	pistol shot	FN163
GPS0243	FSM	iron	horseshoe	FN164
GPS0244	FSM	iron	horseshoe	FN165
GPS0253	FSM	metal	button	FN166
GPS0254	FSM	iron	iron	FN167
GPS0255	FSM	metal	gun	FN168
GPS0256	FSM	iron	iron	FN169

GPS0257	FSM	iron	iron	FN170
GPS0258	FSM	??	??	FN171
GPS0259	FSM	iron	iron	FN172
GPS0266	FSM	metal	metal	FN173
GPS0267	FSM	iron	horseshoe	FN174
GPS0268	FSM	iron	iron	FN175
GPS0269	FSM	metal alloy	coin	FN176
GPS0270	FSM	??	??	FN177
GPS0271	FSM	lead	musket ball	FN178
GPS0272	FSM	iron	washer	FN179
GPS0273	FSM	iron	iron	FN180
GPS0274	FSM	iron	iron	FN181
GPS0275	FSM	iron	washer	FN182
GPS0276	FSM	iron	iron	FN183
GPS0277	FSM	metal	button	FN184
GPS0278	FSM	iron	iron	FN185
GPS0279	FSM	iron	iron	FN186
GPS0280	FSM	metal	metal	FN187
GPS0281	FSM	metal	metal	FN188
GPS0313	FSM	metal	coin	FN189
GPS0314	FSM	metal	brooch	FN190
GPS0315	FSM	metal	coin	FN191
GPS0331	FSM	metal	coin	FN192
GPS0332	FSM	metal	lead	FN193
GPS0333	FSM	metal	metal	FN194
GPS0344	FSM	metal	button	FN195
GPS0345	FSM	metal	nail	FN196
GPS0346	FSM	metal	coin	FN197
GPS0347	FSM	metal	metal	FN198
GPS0348	FSM	metal	nail	FN199
GPS0349	FSM	metal	bullet casing	FN200
GPS0366	FSM	metal	button	FN201
GPS0367	FSM	metal	iron	FN202
GPS0368	FSM	metal	coin	FN203
GPS0369	FSM	metal	metal	FN204
GPS0370	FSM	metal	lead	FN205
GPS0371	FSM	metal	coin	FN206
GPS0396	FSM	metal	button	FN207
GPS0397	FSM	metal	metal	FN208
GPS0398	FSM	metal	metal	FN209
GPS0399	FSM	iron	iron	FN210
GPS0400	FSM	metal	metal	FN211
GPS0401	FSM	metal	button	FN212
GPS0402	FSM	metal	button	FN213

GPS0431	FSM	copper alloy	coin	FN214
GPS0432	FSM	lead	lead	FN215
GPS0433	FSM	iron	iron	FN216
GPS0434	FSM	copper alloy	coin	FN217
GPS0453	FSM	ceramic, gave off metallic signal	pottery	FN218
GPS0454	FSM	iron	horsehoe	FN219
GPS0455	FSM	metal	button	FN220
GPS0456	FSM	metal	button	FN221
GPS0457	FSM	metal	button	FN222
GPS0458	FSM	metal	penknife	FN223
GPS0459	FSM	iron	iron handle?	FN224
GPS0483	FSM	metal	belt stud	FN225
GPS0484	FSM	copper alloy	coin	FN226
GPS0485	FSM	iron	iron	FN227
GPS0486	FSM	copper alloy	coin	FN228
GPS0487	FSM	copper alloy	coin?	FN229
GPS0488	FSM	metal	button	FN230
GPS0489	FSM	metal	button	FN231
GPS0490	FSM	lead	lead	FN232
GPS0491	FSM	iron	buckle	FN233
GPS0492	FSM	iron	horseshoe	FN234
GPS0493	FSM	metal	button	FN235
GPS0494	FSM	lead	lead	FN236
GPS0495	FSM	lead	lead	FN237
GPS0496	FSM	iron	iron	FN238
GPS0497	FSM	metal	button	FN239
GPS0498	FSM	copper alloy	coin	FN240
GPS0499	FSM	metal	silver spoon?	FN241
GPS0500	FSM	copper alloy	coin	FN242
GPS0501	FSM	copper alloy	coin	FN243
GPS0502	FSM	metal	metal	FN244
GPS0503	FSM	copper alloy	coin	FN245
GPS0504	FSM	metal	door knob	FN246
GPS0505	FSM	metal	metal	FN247
GPS0506	FSM	lead	leadshot fired	FN248
GPS0507	FSM	copper alloy	coin	FN249
GPS0508	FSM	metal	ring	FN250
GPS0547	FSM	metal	button	FN251
GPS0548	FSM	iron	iron	FN252
GPS0549	FSM	copper alloy	coin	FN253
GPS0550	FSM	metal	spoon	FN254
GPS0551	FSM	lead	lead	FN255

GPS0552	FSM	copper	copper?	FN256
GPS0553	FSM	iron	iron	FN257
GPS0554	FSM	metal	button	FN258
GPS0555	FSM	metal	ring	FN259
GPS0556	FSM	metal	pipe	FN260
GPS0557	FSM	copper alloy	coin	FN261
GPS0558	FSM	metal	button	FN262
GPS0559	FSM	metal	button	FN263
GPS0560	FSM	metal	button	FN264
GPS0561	FSM	copper alloy	coin	FN265
GPS0562	FSM	metal	lock	FN266
GPS0563	FSM	lead	lead	FN267
GPS0564	FSM	lead	lead?	FN268