

APPENDIX 4

ALSF ARCUS Database Results

INTRODUCTION

The ARCUS database developed from a pilot study undertaken in Derbyshire, Nottinghamshire and Oxfordshire in 2007; its aims were to assemble a database of known archaeological fieldwork projects on hard and soft aggregate extraction sites, to identify those sites with incomplete or inadequate levels of dissemination, and to assess the potential of these sites.

The Bedfordshire ARCUS Database Results

A total of fifty records were entered into the Bedfordshire ARCUS database and they represent the known extent of archaeological inventions undertaken as a result of aggregate extraction.

Period 0 (Pre 1900)

Five records were created for extraction sites where archaeological fieldwork had been recorded for the period prior to 1900 and the nature of the primary fieldwork for all the records was categorised as antiquarian/amateur observation and finds collections. The basic details of these projects are summarised below in table 1.

Table 1: Period 0 Basic Project Details

Name of project	Name(s) of quarry(ies)	HER/SMR number	HER/SMR location	Chronological period(s) represented	Nature of discoveries	Dissemination complete?
Clapham Road Cremations	Clapham Road	5124	Bedford Borough	Roman	Romano-British cremations recovered from probable sand/gravel quarry. Exact location uncertain and site wrongly identified as a brickfield	Yes
North of Bromham Road	North of Bromham Road	330	Bedford Borough	Roman	Stone-lined well found during gravel extraction in 1857. Contained pottery, animal and human bones, fragments of sculpture (possibly of Dionysus), the sole of a shoe & burnt stones.	Yes
Kempston Saxon Cemetery	South of Bedford Road	258 and 256	Bedford Borough	Palaeolithic, Roman and Saxon	Saxon cemetery 5th to 7th centuries found during gravel extraction 1863-64. Around 300 burials, grave goods shield bosses; spearheads, amber, glass, amethyst and paste beads, silver, gold and glass. Palaeolithic hand axes and Roman pot also found.	Yes
Saxon Cemetery, Deadman's Slade	Deadman's Slade	1	Central Bedfordshire and Luton	Saxon	Cremation burials dating to 6th century and grave goods including Cu brooches and a rock crystal bead.	Yes
Deep Spinney	Deep Spinney Pit, North of Bromham Road	328	Bedford Borough	Palaeolithic	Over 70 flint implements and animal bone recovered from Deep Spinney Gravel Pit in 1861.	yes

Period 1 (1900 - 1945)

Three records were created for extraction sites where archaeological fieldwork had been recorded for the period 1900 to 1945 and the nature of the primary fieldwork for all the records was categorised as antiquarian/amateur observation and finds collections. The basic details of these projects are summarised below in table 2.

Table 2: Period 1 Basic Project Details

Name of project	Name(s) of quarry(ies)	HER/SMR number	HER/SMR location	Chronological period(s) represented	Nature of discoveries	Dissemination complete?
West of Cardington Cross	Cardington	277	Bedford Borough	Bronze Age	Bronze Age inhumations/Beaker burials.	Yes
Double Arches Sand Quarry	Arches Quarry	1170	Central Bedfordshire and Luton	Roman	From 1915 onwards quarrying produced large quantities of Roman material, including pottery, inhumation burials and a well. Possible villa or high status site.	Yes
Chamberlain's Barn Quarry	Chamberlain's Barn Quarry	3	Central Bedfordshire and Luton	Bronze Age, Iron Age, Roman and Saxon	Two cremation cemeteries dating to the 6th and 7th centuries AD, with the presence of finds from the Bronze Age, Iron Age and Roman periods indicating earlier activity nearby.	Yes

Period 2 (1946 - 1971)

Six records were created for extraction sites where archaeological fieldwork had been recorded for the period 1946 to 1971 and the nature of the primary fieldwork for all the records was categorised as excavation. The basic details of these projects are summarised below in table 3.

Table 3: Period 2 Basic Project Details

Name of project	Name(s) of quarry(ies)	HER/SMR number	HER/SMR location	Chronological period(s) represented	Nature of discoveries	Dissemination complete?
Lower Park Farm	Lower Park Farm	975	Bedford Borough	Roman	Roman ditches and corn drying oven, plus 1st century burial, 2nd century settlement and Late 3rd century pits. Inundation post 3rd century.	Yes
Excavations at Bromham	Lower Park Farm West	565	Bedford Borough	Iron Age	Iron Age hut circle and pits	Yes
Excavations at Harrold	Harrold Pit and Folly Gravel Pit	64	Bedford Borough	Neolithic, Bronze Age, Iron Age and Saxon	Neolithic stone axe. Bronze Age ring ditches and cremations. Iron Age settlement. Two possible Saxon sunken feature buildings and 9th century inhumations.	Yes
Cox Hill Sand Pit	Cox Hill Sand Pit	453 and 750	Central Bedfordshire and Luton	Iron Age	Iron Age pits and ditches.	Yes
Belgic and Roman Farm at Wyboston	Forty Farm Gravel Pit	476 and 480	Bedford Borough	Iron Age and Roman	Belgic farmstead, with farm enclosure system, dividing land into eight plots. Inundation prior to smaller Roman farmstead with corn drying oven.	Yes
Excavations at Harrold Pit	Odell Quarry	543 and 2920	Bedford Borough	Neolithic, Bronze Age, Iron Age, Roman and Saxon	Neolithic shallow scoops, Bronze Age ring ditch with internal inhumation. Iron Age enclosed settlement and two phases of Roman farmstead and field system. Mid Saxon timber lined wells, with heavily truncated features of settlement.	Yes

Period 3 (1972 - 1990)

Eleven records were created for extraction sites where archaeological fieldwork had been recorded for the period 1972 to 1990 and the basic details of these projects are summarised below in tables 4 and 5.

Table 4: Period 3 Basic Project Details

Name of project	Name(s) of quarry(ies)	HER/SMR number	HER/SMR location	Chronological period(s) represented	Nature of discoveries
Newnham Marina	New Cut	986	Bedford Borough	Neolithic, Bronze Age, Iron Age, Roman, Saxon and Medieval	Late Neolithic/Early Bronze Age Flints. EIA settlement and boundaries, Belgic/Early Roman ditch system and post holes and 2nd 4th century AD Villa. Early Saxon finds and post holes within demolition layers and inhumation burial. Medieval furlong boundary.
Potton Quarry	Potton Quarry	658, 660	Central Bedfordshire and Luton	Roman	The site was stripped for sand extraction in 1980 a ditch was uncovered which produced pottery of the first to early second century AD.
Ring Ditch 'b' at Cople	Dog Farm	1618	Bedford Borough	Iron Age, Roman and Saxon	Late Iron Age/Roman limestone structure, with funerary pyre. Encompassed by ring ditch containing two Mid-Saxon burials
Excavations at Willington	Willington Plantation	14455, 14456 and 14457	Bedford Borough	Bronze Age, Iron Age and Roman	Salvage excavations of Bronze Age double ring ditch, Iron Age enclosed settlement, Roman field boundaries, small enclosure and cremations, and prehistoric oval enclosure
Salford	Salford Quarry	15146	Central Bedfordshire and Luton	Neolithic, Bronze Age, Iron Age, Roman, Saxon, Medieval and post medieval	Neolithic pits containing ritual deposits. Three Bronze Age ring ditches. EIA partially enclosed settlement, including 23 roundhouses, built in 2 phases. Four LIA cremations. A post built structure was identified as a possible Roman period barn.
Grove Priory	Grovebury Quarry	1870	Central Bedfordshire and Luton	Mesolithic, Neolithic, Bronze Age, Iron Age, Roman, Saxon and Medieval	Excavations of Medieval priory and manor site and of area quarry. Also found Mesolithic to Roman objects and Saxon settlement
Radwell Excavations	Moor End Gravel Pit	1797, 3247 and 3248	Bedford Borough	Bronze Age, Iron Age and Roman	Bronze Age ring ditches, Iron Age palisade ditch and EIA hut circle. Belgic cemetery. Roman ditch system, late Roman farmstead, including large timber building.
Radwell Quarry	Radwell Quarry	2662	Bedford Borough	Bronze Age and Roman	Bronze Age double ring ditch and Roman ditches. Undated enclosure and pit alignment.
Eggington Sand Pit	Eggington Sand Pit	9	Central Bedfordshire and Luton	Mesolithic, Iron Age and Roman	Mesolithic worked flint. EIA inhumations and pit, and Roman rubbish pits.
Roxton	Roxton	617	Bedford Borough	Bronze Age, Iron Age and Roman	Five Bronze Age ring ditches and post built structure. An Iron Age palisade, small scale settlement and Iron Age and Roman field system
Plantation Quarry, Willington	Willington Quarry	337 and 1478	Bedford Borough	Neolithic, Bronze Age, Iron Age and Roman	Late Neolithic-Early Bronze Age funerary Monuments. Iron Age temple, re-used in the Roman period. Iron Age and Roman settlements and Iron Age pit alignments

Table 5: Period 3 Nature of Fieldwork and Levels of Dissemination

Name of project	Name(s) of quarry(ies)	HER/SMR number	HER/SMR location	Nature of fieldwork (primary and secondary)	Most recent project stage	Dissemination complete?
Newnham Marina	New Cut	986	Bedford Borough	Excavation and Watching Brief	Post excavation in process	No
Potton Quarry	Potton Quarry	658, 660	Central Bedfordshire and Luton	Watching Brief	Fieldwork complete, grey literature report in HER	Yes
Ring Ditch 'b' at Cople	Dog Farm	1618	Bedford Borough	Excavation	Publication complete	Yes
Excavations at Willington	Willington Plantation	14455, 14456 and 14457	Bedford Borough	Excavation	Publication complete	Yes
Salford	Salford Quarry	15146	Central Bedfordshire and Luton	Evaluation and Excavation	Publication complete	Yes
Grove Priory	Grovebury Quarry	1870	Central Bedfordshire and Luton	Survey/geophysics and Excavation	Post excavation in process	No
Radwell Excavations	Moor End Gravel Pit	1797, 3247 and 3248	Bedford Borough	Excavation	Publication complete	Yes
Radwell Quarry	Radwell Quarry	2662	Bedford Borough	Excavation	Publication complete	Yes
Eggington Sand Pit	Eggington Sand Pit	9	Central Bedfordshire and Luton	Excavation	Publication complete	Yes
Roxton	Roxton	617	Bedford Borough	Excavation	Publication complete	Yes
Plantation Quarry, Willington	Willington Quarry	337 and 1478	Bedford Borough	Excavation and Watching Brief	Publication complete	Yes

Period 4 (1991 - present)

Twenty-five records were created for extraction sites where archaeological fieldwork had been recorded for the period 1991 to the present and the basic details of these projects are summarised below in tables 6 and 7.

Table 6: Period 4 Basic Project Details

Name of project	Name(s) of quarry(ies)	HER/SMR number	HER/SMR location	Chronological period(s) represented	Nature of discoveries
Ivel Farm	Manor Farm/Ivel Farm	13974	Central Bedfordshire and Luton	Palaeolithic, Iron Age, Roman, Saxon and Post Medieval	Palaeolithic hand axe, Iron Age cremation cemetery, storage pits, LIA/Roman drove way, boundaries, pits and enclosures. Saxon settlement including sunken feature buildings, possibly reusing of earlier enclosure. Post-medieval/modern boundaries.
Sandy Heath Quarry	Sandy Heath Quarry	1658	Central Bedfordshire and Luton	Mesolithic, Neolithic, Bronze Age and Modern	Mesolithic to Early Bronze Age flint finds. Undated trackway and field boundary. Palaeochannel, modern ditches and WW2 trenches.
Whitsundoles Farm	Whitsudoles Quarry	7721	Central Bedfordshire and Luton	Bronze Age, Iron Age, Roman, Saxon, Medieval and Post Medieval	Two EBA pits. Early to Mid Iron Age settlement features. LIA/ERO field system and Roman trackways. Two Saxon sunken feature buildings and a post built structure. Medieval ridge and furrow.
Maskell's Quarry, Harlington	Harlington Quarry, Old Park Barn	101	Central Bedfordshire and Luton	Iron Age, Roman and Saxon	Iron Age-Roman settlement, substantial building remains of possible villa and Roman cremations. Saxon cremation Urns and 6th century inhumations one found on concrete floor of building.
Kempston Box End	Kempston Box End	13976	Bedford Borough	Neolithic, Bronze Age, Iron Age and Roman	Cropmark of triple ditched boundary. Neolithic to Bronze Age residual worked flint. Evidence of prehistoric palaeochannels. Iron Age enclosure system and trackway. Southern enclosure contained pits and Roman cemetery and settlement
Warren Villas, Banks Land	Warren Villas/Banks Land	9835	Central Bedfordshire and Luton	No archaeological deposits	Trial trenching identified two former palaeochannels of the River Ivel and peat deposits
Elstow Borrow Pit	Elstow Borrow Pit	16082	Bedford Borough	Iron Age, Saxon and Medieval	Evaluation in area of Bedford Southern Bypass. Saxo-Norman enclosure field system and dispersed settlement features. Iron Age pit/post-hole
Stoke Hammond and Linslade	A4146 Borrow Pits	11192	Central Bedfordshire and Luton	Neolithic, Bronze Age, Iron Age and Medieval	Background Neolithic and Bronze Age flints, Iron Age field boundaries and pits and post-holes. Medieval ridge and furrow.
West of Gold Lane, Biddenham	Bromham Bypass	1866	Bedford Borough	Undated	Undated curvilinear ditch associated with cropmarks, including ring ditches
Dog Farm	Octagon Quarry	1480	Bedford Borough	Neolithic, Bronze Age, Iron Age, Roman and Medieval	Late Neolithic/Bronze Age ritual complex, including ring ditches (Scheduled Monuments 20745 preserved <i>in situ</i>). Iron Age/Roman temple site. Medieval ridge and furrow.
Grovebury Farm	Grovebury Quarry	1870	Central Bedfordshire and Luton	Undated prehistoric	Late prehistoric field boundaries.
Excavations at Broom	Broom Quarry	9093, 464, 3576, 623, 6741, 631, 18273, 18274 and 9095	Central Bedfordshire and Luton	Palaeolithic to Post Medieval	Palaeolithic to Post-medieval finds. Neolithic pits. Early Bronze Age to Middle Bronze Age funerary/ceremonial landscape and for Middle Bronze Age to Roman settlement and agrarian activity.
Black Cat Island	Black Cat Quarry	2664	Bedford Borough	Iron Age and Roman	Late Iron Age enclosed settlement and driveway. Roman coaxial field system.

Name of project	Name(s) of quarry(ies)	HER/SMR number	HER/SMR location	Chronological period(s) represented	Nature of discoveries
Warren Villas	Warren Villas	3527	Central Bedfordshire and Luton	Neolithic to post Medieval	Bronze Age ring ditch, Late Iron Age settlement, Roman farmstead, Saxo-Norman farmstead, riverside activity. Post-medieval boundaries and quarries.
Octagon Farm North/Willington	Octagon Farm	1480	Bedford Borough	Palaeolithic, Neolithic, Bronze Age, Iron Age, Roman and Medieval	Palaeolithic artefacts. Part of a Late Neolithic/Bronze Age ritual complex, including square ritual enclosure and ring ditches (Scheduled Monuments 20748 and 20479 preserved <i>in situ</i>). Iron Age temple site, Iron Age/Roman farmstead and field system. Medieval ridge and furrow.
Octagon Farm South	Octagon Farm	1480, 586	Bedford Borough	Neolithic, Bronze Age, Roman to Post Medieval	Neolithic/Bronze Age ritual complex, comprising of ring ditches. Small Roman settlement and subrectangular ditch enclosing three paddocks. Early to Middle Saxon settlement and occupation deposits. Medieval headland.
Octagon Farm	Octagon Farm	1480	Bedford Borough	Neolithic to Roman and Medieval	Neolithic/Bronze Age ritual complex, including Scheduled prehistoric enclosure (20745). The area was marginal land during the Iron Age/Roman period, only a drove way and possible field boundaries were identified. Medieval ridge and furrow.
Pratt's Quarry	Pratt's Quarry	18266	Central Bedfordshire and Luton	Roman and Medieval	Thin scatter of prehistoric/Roman finds probably from medieval manuring. Undated ditches
Sludge Beds	Octagon Farm Quarry	1480	Bedford Borough	Undated and Medieval	Linear anomalies and possible ridge and furrow
Castle Mill	Castle Mill Airfield	1480	Bedford Borough	Palaeolithic, Neolithic to Post Medieval	Palaeolithic artefacts. Part of Late Neolithic/Bronze Age Ritual complex, (ring ditches enclosures, includes some Scheduled Monuments preserved <i>in situ</i> 20748). Possible IA temple and IA/Ro settlement. Medieval and post-medieval occupation
Dairy Farm, Renhold/Willington	Dairy Farm Willington	594	Bedford Borough	Mesolithic, Neolithic, Bronze Age and Roman	Mesolithic/Neolithic/Early Bronze Age flint recovered from tree throws. Early Bronze Age ring ditches/hengiforms-forms. Middle Bronze Age coaxial field system. Discreet area of LBA pits and a gully, on top of ridge. Late Roman ditch. Scheduled Monument associated 27193, 27194 and 27182
Potton Quarry	ARC Quarry Potton	16120	Central Bedfordshire and Luton	Modern	Two modern circular/sub-circular rubble structures, with associated features. Possible soakaways for sewage beds.
Roxton Quarry Extension	Roxton Quarry	8802 and 14844	Bedford Borough	Palaeolithic to Saxon	Mesolithic to Roman artefact spread and possible Palaeolithic finds. Possible Late Neolithic/Early Bronze Age post holes and ditch. Middle Bronze Age to Iron Age boundary ditches and possible settlement. Saxo-Norman water management features.
Broom South	Broom South	631	Central Bedfordshire and Luton	Neolithic to Saxon	Dispersed Neo/BA artefacts and pits. EBA ring ditches. EIA pit alignments and settlements. MIA Enclosed settlements. Roman settlements, coaxial field system and droveways. Saxon settlements, including sunken feature buildings
Broom Quarry Extension	Broom Extension	9095	Central Bedfordshire and Luton	Neolithic to Saxon	Neolithic finds. Bronze Age ring ditches and two isolated cremations. Possible EIA unenclosed settlement. Middle to Late Iron Age enclosed settlements. Roman farmstead settlements, enclosures and paddocks. Saxon settlement including sunken feature buildings

Table 7: Period 4 Nature of Fieldwork and Levels of Dissemination

Name of project	Name(s) of quarry(ies)	HER/SMR number	HER/SMR location	Nature of fieldwork (primary and secondary)	Most recent project stage	Dissemination complete?
Ivel Farm	Manor Farm/Ivel Farm	13974	Central Bedfordshire and Luton	Evaluation and Excavation	MAP2 Assessment	No
Sandy Heath Quarry	Sandy Heath Quarry	1658	Central Bedfordshire and Luton	Evaluation and Watching Brief	MAP2 Dissemination	Yes
Whitsundoles Farm	Whitsundoles Quarry	7721	Central Bedfordshire and Luton	Survey/geophysics and Excavation	Post excavation in process	No
Maskell's Quarry, Harlington	Harlington Quarry, Old Park Barn	101	Central Bedfordshire and Luton	Evaluation	Publication complete	Yes
Kempston Box End	Kempston Box End	13976	Bedford Borough	Evaluation and Excavation	Post excavation in process	No
Warren Villas, Banks Land	Warren Villas/Banks Land	9835	Central Bedfordshire and Luton	Evaluation	Post excavation in process	No
Elstow Borrow Pit	Elstow Borrow Pit	16082	Bedford Borough	DBA and Evaluation	Post excavation in process	No
Stoke Hammond and Linslade	A4146 Borrow Pits	11192	Central Bedfordshire and Luton	Watching Brief	MAP2 dissemination	No
West of Gold Lane, Biddenham	Bromham Bypass	1866	Bedford Borough	Watching Brief	Fieldwork complete	No
Dog Farm	Octagon Quarry	1480	Bedford Borough	Evaluation and Excavation	MAP2 Excavation	No
Grovebury Farm	Grovebury Quarry	1870	Central Bedfordshire and Luton	Evaluation and Watching Brief	MAP2 Assessment	No
Excavations at Broom	Broom Quarry	9093, 464, 3576, 623, 631, 6741, 18273, 18274 and 9095	Central Bedfordshire and Luton	Evaluation and Excavation	MAP2 Archive Deposition	No
Black Cat Island	Black Cat Quarry	2664	Bedford Borough	Survey/geophysics and Evaluation	Ongoing Fieldwork	No
Warren Villas	Warren Villas	3527	Central Bedfordshire and Luton	Excavation and Watching Brief	Fieldwork Complete.	No
Octagon Farm North/Willington	Octagon Farm	1480	Bedford Borough	Evaluation and Excavation	Ongoing Fieldwork	No
Octagon Farm South	Octagon Farm	1480, 586	Bedford Borough	Evaluation and Excavation	MAP2 Excavation	No
Octagon Farm	Octagon Farm	1480	Bedford Borough	Evaluation and Excavation	MAP2 Excavation	No
Pratt's Quarry	Pratt's Quarry	18266	Central Bedfordshire and Luton	Fieldwalking and Evaluation	Ongoing Fieldwork	No
Sludge Beds	Octagon Farm Quarry	1480	Bedford Borough	DBA and Survey/geophysics	MAP2 Evaluation	No
Castle Mill	Castle Mill Airfield	1480	Bedford Borough	Evaluation and Excavation	MAP2 Assessment	No
Dairy Farm, Renhold/Willington	Dairy Farm Willington	594	Bedford Borough	DBA and Evaluation	Ongoing Fieldwork	No
Potton Quarry	ARC Quarry Potton	16120	Central Bedfordshire and Luton	Watching Brief	MAP2 Dissemination	Yes
Roxton Quarry Extension	Roxton Quarry	8802 and 14844	Bedford Borough	Evaluation and Excavation	MAP2 Excavation	No
Broom South	Broom South	631	Central Bedfordshire and Luton	Survey/geophysics, Evaluation and excavation	MAP2 Excavation	No
Broom Quarry Extension	Broom Extension	9095	Central Bedfordshire and Luton	Evaluation and excavation	MAP2 Excavation	No

CONCLUSIONS

The Bedfordshire ARCUS database represents a comparatively small number of projects; however they demonstrate that there has been a relationship between the archaeological resource and the aggregate producing geologies since 19th century.

Basic statistics show that 52% of all projects are considered to be adequately disseminated. However this number is actually misleading; of the 48% records which have not been fully disseminated, 42% represent projects undertaken in Period 4 which are ongoing and of the final 6%, two of the projects (4%) are close to publication. This means that only 2% of the records have actually not been adequately disseminated.

Unfortunately the 2% of inadequately disseminated sites represents the archaeological excavations at Warren Villas Quarry. The post excavation of this site is currently in stasis; the last publication was in 1996 when a short summary report was produced for *Bedfordshire Archaeology* (Dawson and Maull 1996). Since that time English Heritage, who had been one of the original funders have refused to pay for any further work. The archaeological resource at Warren Villas is multi-period, representing a palimpsest of human activity from the Mesolithic through to the Post Medieval. It is also in close proximity to Ivel Farm (Sandy) Quarry) where a broadly comparable record has been investigated and is currently undergoing post excavation analysis. Until both sites have been fully published our knowledge of this part of the River Ivel landscape will remain limited.