

Waterlands

Prehistoric Life at Bar Pasture, Pode Hole
Quarry, Peterborough

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... let me tell you

about the Fens

G. Swift, Waterland 1983

The problem of the Fens has always been the problem of drainage.

They ceased to be water people and became land people;

They ceased to fish and fowl and became plumbers of the land.

They joined the destiny of the Fens, which was to strive not for, but against water.

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Kathren Henry and Dr Barbara McNee produced the pottery, briquetage and clay artefact illustrations. Marion O'Neil drew the flints. The figures were produced by Karen Francis and Gary Coates.

Summary

Between 2006 and 2017, staged archaeological investigations were undertaken on land at Bar Pasture Farm, Pode Hole Quarry, Thorney, Peterborough. The work was conducted on behalf of Aggregate Industries (UK) Ltd in fulfilment of an archaeological Planning Condition relating to the permitted 'Bar Pasture Extension' of the existing sand and gravel quarry. During this time, ten consecutive excavation phases (1-10), were conducted in advance of their respective quarry phases in accordance with an approved scheme of archaeological works (Richmond 2006). The investigations consisted of so-called 'strip, map and sample' excavations across the 55 hectare quarry.

The earliest record for a human presence on the Site is of Mesolithic date, merely represented by a handful of residual flint tools. These artefacts bear witness to the brief, transient activity of hunter-gatherers visiting the fen-edge landscape up to 9000 years ago. The earliest dated feature on the Site is a substantial and extensive waterhole complex that was established during the Early Neolithic period. The general location of this feature, being a 'watery place', appears to have remained in sporadic use during the subsequent Late Neolithic, Beaker and Early Bronze Age periods and may have been used for the votive deposition of pottery vessels. A short distance from the waterhole complex were identified a number of pits containing Grooved Ware and Beaker pottery. Several groups of pits elsewhere on the Site appeared to be associated with the scant remains of suggested Beaker buildings.

During the Early Bronze Age proper, a number of large circular burial mounds were constructed within a dedicated 'Barrow Field'. These formed part of the much more extensive monumental landscape of barrows that is known to have extended all along the fen edge at this time. One barrow contained a crouched infant with accompanying grave goods. Significantly, the body had been carefully placed on a square piece of birch bark, which may have once been a wrapping or container. Traces of early 'precursor' boundary ditches dating to this period provide tantalising evidence for an avenue, a walkway and a central entrance into the sacred burial area, all reminiscent of a processional way. Three small, unelaborate huts in this area may have provided shelter for the barrow-builders.

The Middle Bronze Age saw the re-organisation of the whole landscape by the creation of an extensive, rectilinear field system of over 80 field plots of various sizes, served by multiple droveways and associated with a classic enclosed farmstead. Despite these significant landscape modifications, it appears that the earlier Barrow Field was still considered to be of importance in the landscape, and was revered. The field system evolved throughout the Middle Bronze Age, becoming more established and formalised toward the end of this period. It encompassed the whole of the Bar Pasture landscape and beyond, only petering out (or perhaps subsequently eroded), to the south and SE, where the no doubt brackish waters of the fen proper encroached repeatedly during numerous Bronze Age marine incursions.

The field system, probably reinforced by raised banks and hedgerows, was supplemented by numerous large sump pits and waterholes. These enabled the fields to be drained but also provided water for livestock. The well-defined droveways connected different parts of the field system and facilitated the seasonal movement of herds to and from the lush grazing land of the fen edge.

The enclosed farmstead with its two large round-houses was the most substantial evidence of sedentary settlement activity during this period of fen-edge exploitation. In addition to the settlement enclosure were at least seven further unenclosed round-houses scattered across the Site, most containing hearths, domestic pottery and evidence for crop processing activities.

During the later Middle Bronze Age, the careful placement of cremation burials within the remains of earlier burial monuments bears witness to the intimate connection of this small community to their ancestors' sacred landscape. Contemporary secular activity is evident in the form of domestic pits containing pottery, clay weights and briquetage, the latter suggesting salt importation from nearby salterns.

By the Late Bronze Age, farming activity and settlement had 'condensed' into marginally higher parts of the landscape. This was almost certainly due to the final marine incursion of the early first millennium BC, which inundated the land to the east of Willow Hall Lane with brackish waters, rendering it unsuitable for settlement. Lower-lying fields were reduced to marginalised wetland and saltmarsh at this time, suitable only for hunting, fishing and fowling.

By the 4th century BC, settlement was all but abandoned, most likely due to the ever-encroaching waters. On the western side of the Site, however, two discrete pockets of Early La Tène Iron Age activity were identified. The first - slightly earlier, relates to pit-digging activity and the construction of a timber shelter on the Site's NW boundary. The second area of activity was far more significant, being represented by a small ditched enclosure containing a circular 'smithy hut', positioned close to the SW tip of the former field system. Here iron smithing and copper-alloy working were carried out over a considerable time. The metalworking complex represents the latest activity that was identified on the Site. Bar Pasture's archaeological chapter is closed by the discovery of a single abraded Roman pottery sherd; an outlier of the recently identified Roman activity on the more elevated land to the west of Willow Hall Lane. As the fen marsh took hold, the ancestral lands of Bar Pasture were abandoned to the elements, not to be reclaimed until the drainage schemes of the post-Medieval period were enacted two thousand years later.

Chapter 1

Introduction

Background to the Project

This monograph presents the results of archaeological investigations carried out at *Aggregate Industries (UK) Ltd's* Bar Pasture Extension to their Pode Hole Quarry, Peterborough, between the years 2006 and 2017 (Figure 1). The quarry extension was granted planning permission in 2005, and incorporated ten phases of working (centred on NGR TF 258 028). The extension works followed on from archaeological investigations across the original quarry during the years 1996-1997 (Cuttler and Ellis 2001) and 1999-2005 (Daniel 2009).

Prior to investigations, the Bar Pasture Extension comprised eight intensively farmed arable fields, bounded by drainage ditches and dykes, with sporadic belts of trees and copses in the vicinity. Barlees Fen, Chicell's Hurst Fen, Gores Fen and Guy's Fen all lie either to the south or east, and a minor C-class road known as Willow Hall Lane forms the western boundary. The A47, connecting the settlements of Eye and Thorney, lies 0.5km to the north. The only residential property

close to the Site is Bar Pasture Farm, at the extreme SW corner. The Bar Pasture landscape is flat, rarely rising much above sea level and is situated in the part of the Cambridgeshire Fens known as the 'North Level'.

The archaeological potential of the Bar Pasture Extension was initially investigated by a detailed programme of field evaluation, including two desk-based assessments (Albone 2002; Gibson 1996), an aerial photographic survey (Palmer 2002), an archaeo-geophysical assessment (Taylor 2002), a fieldwalking exercise (Malone 2003) and a trial trench investigation (*ibid.*). These earlier works allowed for a good understanding of the archaeological character of the Site and its surrounds.

Project Aims

The quarry extension expanded intermittently over the space of eleven years, via a number of 'extraction areas' or quarry phases (Figure 2). The archaeological investigation of each of these took place immediately prior to its quarrying.



Plate 1 The Bar Pasture Extension, looking SE towards the fen edge (Phases 1-5 being worked) (courtesy of Aggregate Industries (UK) Ltd).

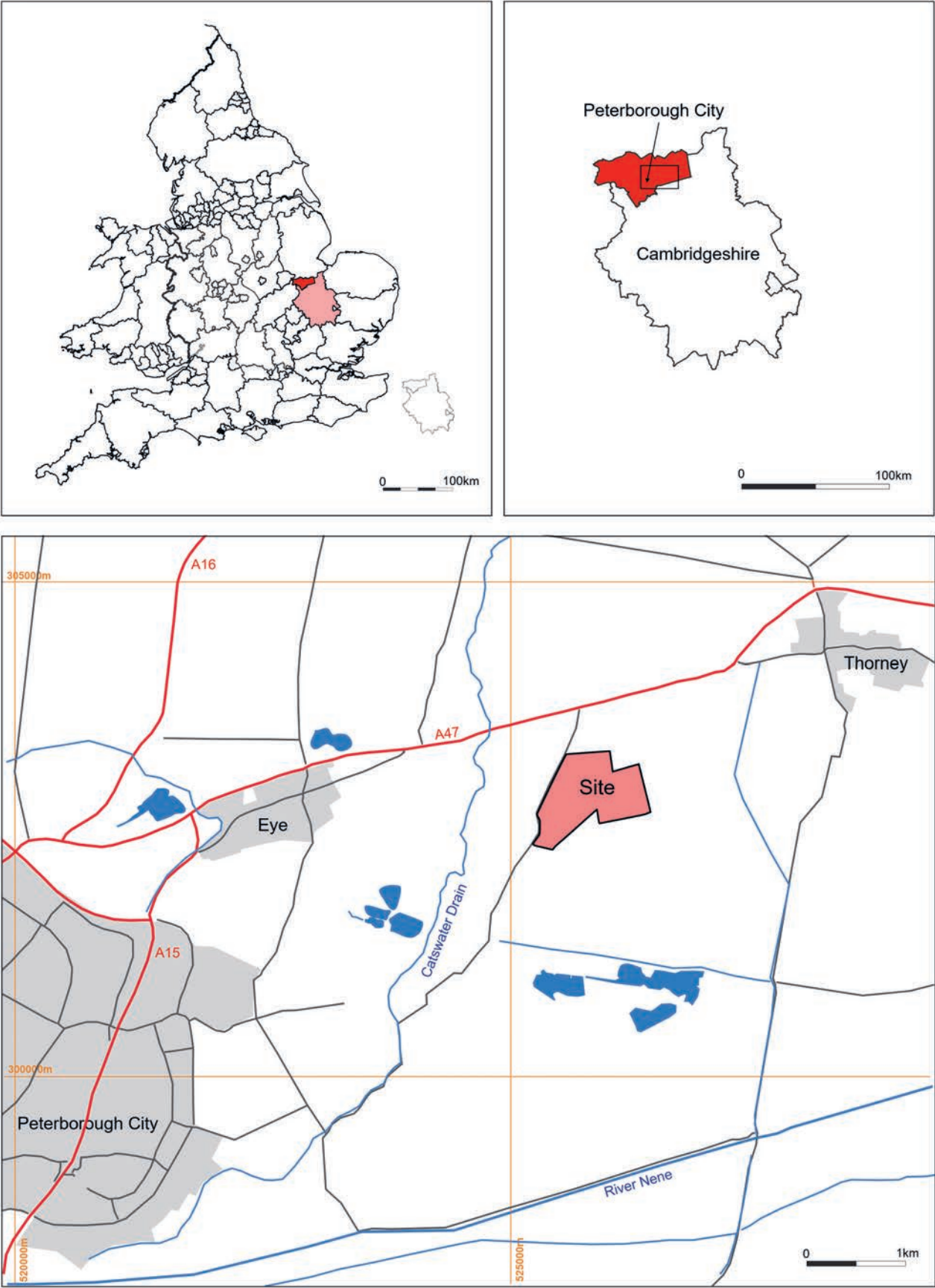


Figure 1 The Bar Pasture Extension, Pode Hole Quarry. Site Location.

A number of key aims were identified at the start of the project and these remained pertinent throughout the progression of the project; although were reviewed throughout the works. These principal research themes are summarised below:

1. Expand the current knowledge of patterns of fen-edge exploitation and settlement at different periods;
2. Explore the transition from the Late Neolithic and Early Bronze Age monument-dominated landscape to the Middle Bronze Age field landscape;
3. Determine the main orientation and spatial pattern of the field system;
4. Elucidate the relationship between the Bar Pasture Extension field system and the field systems previously identified at Pote Hole Farm and the nearby Tower's Fen;
5. Investigate the relationship between the field system and its antecedents.

Methodology

Excavation and recording

Mitigation work in the form of 'Strip, Map and Record' excavations was conducted in advance of the ten quarry phases. Topsoil removal within each phase was carried out under permanent and direct archaeological supervision, with topsoils and often subsoils removed using suitable tracked excavators fitted with wide bladed buckets (Plate 2). Before detailed investigations commenced, each Extraction Area was hand cleaned and digitally planned using Leica GPS. The excavation areas and all spoil were checked and scanned for finds using a metal detector. Targeted features and deposits were then excavated in accordance with the approved *Specification for Archaeological Investigation* (WSI) and the project's developing research aims (Richmond 2006). All archaeological features were investigated by hand unless otherwise agreed with the County Archaeological Advisor. For example, excavation of some of the Site's enormous and deep waterholes was facilitated by the judicious use of machine.

The excavation sampling strategy required a moderately low level of investigation of the long lengths of field ditch (between 2% and 5% by volume), but higher levels on discrete features of importance (up to 100% by volume). All physical relationships between intersecting features were also examined. Most pits containing burning or significant waterlogged remains were fully excavated by hand, whilst the Site's ubiquitous field ditches were largely sampled at terminals, intersections and various mid-points along their length. Apparent interruptions in field system ditches also formed a focus for investigation, in order to



Plate 2 Machine removal of topsoils across the Site.

ascertain whether these were deliberate (as in the case of entrances), or the result of truncation by ploughing.

All ring-ditches were excavated, with a minimum of 50% of the circumference removed by hand. Potential archaeological features within the circuit and exterior radius of each ring-ditch were 100% investigated in order to check for associated burials or other associated funerary features. All potential waterhole pits were at least 25% hand-dug, although if well preserved organics or finds assemblages were recovered, excavation of these features was expanded to a minimum of 50%, and in most cases 100% of their fills. All anaerobic lower fills were 100% hand dug, with samples taken for palaeoenvironmental analysis.

Environmental sampling strategy

Environmental sampling was particularly focused on the deeper anaerobic fills of waterholes and quarry pits, where soil conditions were most conducive to organic preservation (Plate 3). Extensive sampling also took place on any features containing visible charcoal-rich deposits. In addition, pit and ditch fills found to contain rich artefactual or bone assemblages were all sampled, as were any potential cremation features. The aim was to retrieve a site-wide sequence of samples with the potential to elucidate the nature of, and changes in, the local environment and the human exploitation of that environment. By complementing the samples taken from stratified, artefact-bearing deposits with radiocarbon dates, the aim was to place this information within an absolute chronological framework. All sampling was carried out in accordance with guidance received from the project's environmental specialists.

The detailed excavation results from the ten quarry phases, including specialist methodologies and reports, have previously been presented in four successive interim reports that were produced during the lengthy investigations at three-yearly intervals:



- Quarry Phase 1: 13.5 ha. centred on NGR TF 2580 0310 (Richmond *et al.* 2010);
- Quarry Phases 2-5: 13 ha. centred on NGR TF 2545 0270 (Richmond *et al.* 2013);
- Quarry Phases 6-8a: 11 ha. centred on NGR TF 2580 0310 (Francis *et al.* 2016);
- Quarry Phases 8b-10: 17 ha. centred on NGR TF 2640 0309 (Francis *et al.* 2019).

Plate 3 Environmental sampling of a Bronze Age waterhole.

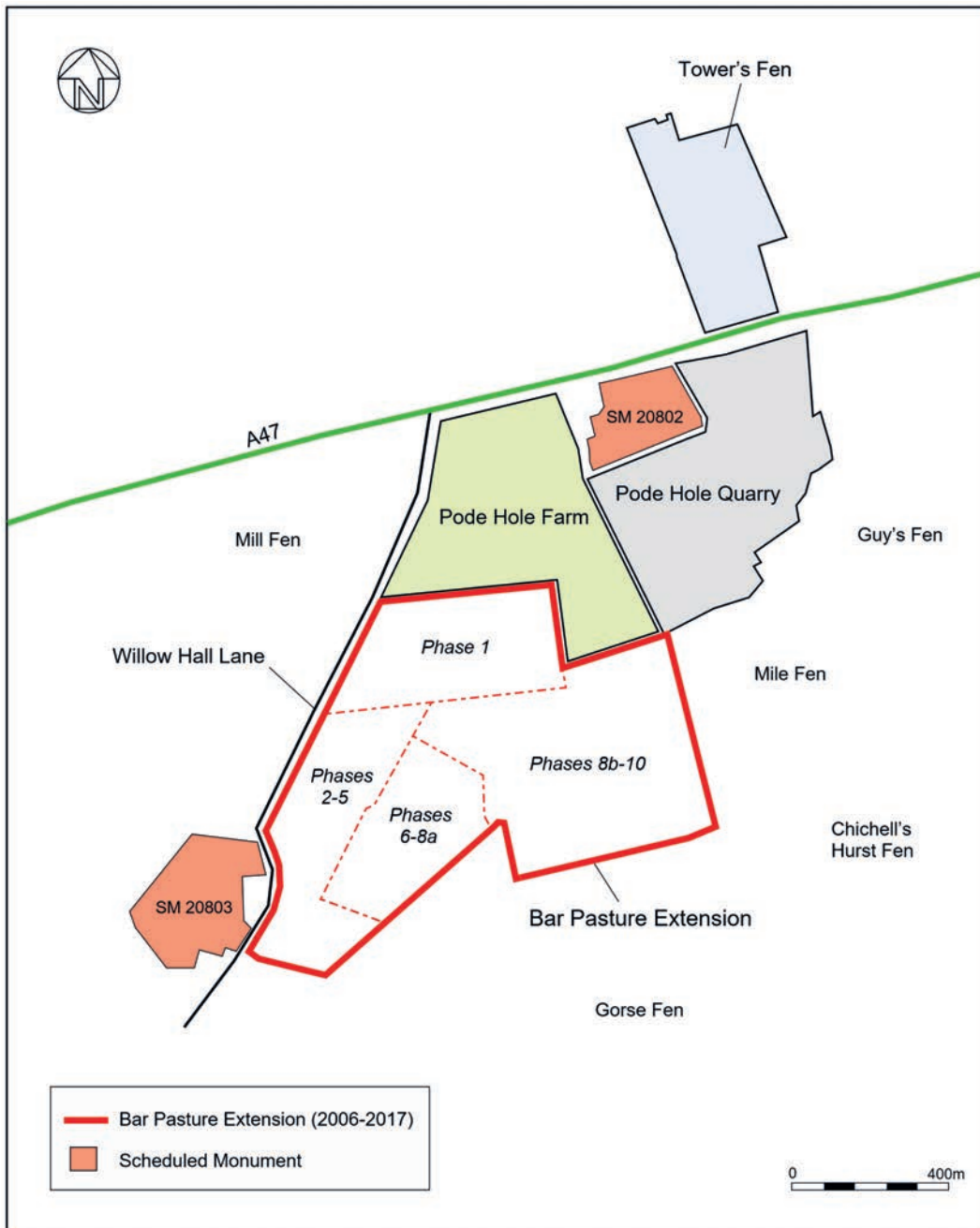


Figure 2 The quarry extension area detailing quarry phases.

Report Structure

This monograph presents the most significant findings of the 10-year Bar Pasture Extension excavations. The Site's archaeological remains from all ten quarry phases have been considered collectively and are reported on chronologically. This volume makes minimal references to the individual extraction areas or quarry phases (Figure 2). These can largely be discerned by the prefix of their respective context numbers – for example, [5000] relates to a feature excavated in Quarry Phase 5; [8000] to a Quarry Phase 8 feature, etc. To avoid any confusion, all archaeology is described in terms of chronological *Periods*.

The most significant fieldwork results are presented chronologically under Chapter 3. Chapters 4, 5 and 6 present specialist descriptions and analyses of the artefactual evidence and environmental and human remains. Chapter 7 draws all of this evidence together and considers the use and development of the Site throughout successive periods, as demonstrated by its archaeological features, material culture and environmental deposits. The results are considered within their wider archaeological, geographical and environmental contexts.