"ASPECTS OF THE IRON AGE COINAGES OF NORTHERN EAST ANGLIA WITH ESPECIAL REFERENCE TO HOARDS".

by

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VOLUME I
(Part 2)

CHAPTER 5

THE DISTRIBUTION OF COIN HOARDS

NOTE: *In order not to disrupt the flow of the text, the relevant maps (Maps 4-13) may be found at the end of this chapter. Hoard numbers/ references are given after the name of the hoard and these refer back to Tables 6 and 7 in Chapter 3.*

THE DISTRIBUTION OF ALL HOARDS IN THE STUDY AREA. (Map 4)

There are several observations which arise from this map.

Riverine distribution.

Many of the hoards are located near or relatively near to rivers. Although the map is not at a detailed scale and the exact locations may not be riverine, most hoards were deposited relatively near to "major" rivers in the study area – that is within a kilometre or two of them or closer. Even some of the hoards which do not *appear* to be near to rivers such as Hoards 6 and 27 (see Map 3 in Chapter 3) are in fact very near to more minor rivers which were not plotted on the base map, and therefore show the same trend. What Map 4 appears to show is that most hoards are buried relatively near settlements, and that most Icenian settlements are situated relatively close to rivers, an observation which should not really surprise us given the need for water.

However, given the fact that watery votive deposits are well-known in British prehistory, we may also wish to consider a votive aspect to their distribution. The case for this may be strengthened by looking at the distribution of "all" IA

material in Norfolk (see Map 3, Hutcheson 2004) which appears to more-or-less cover the whole county excepting the Broads and fenlands.

There also appears to be a relationship between rivers and the hoard concentrations and the possible tribal boundary, discussed further below.

Hoard zone.

There appears to be a "Hoard Zone" which is mainly central and western. For example there are relatively few hoards to the east of a north-south line from approximately Cromer-Norwich-Ipswich. There are also areas which do not appear to have any hoards – notably the south-east and south-west parts of the study area. I have four possible explanations for these apparent gaps, all of which may apply.

Firstly, at least part of the south-west of the study area was covered by poorly drained fenland during the LIA, and we might not expect to find settlements and activity in such an area.

Secondly, the gaps may represent genuine gaps in the distribution of hoards in the study area. It appears that there are more hoards in the territory of the Iceni than in most other British IA tribes' territories (for example see Figure 1 in Hobbs 1996; Hutcheson 2004). This may be because they either hoarded more, or they were unable to recover their hoards (or both). These "gap" areas could fall outside the main Icenian territory, therefore we might not expect so many

hoards. From my knowledge of singleton finds of Icenian coins, and site finds, they are generally not found so much in these areas (although there is a notable concentration of Icenian coins which were found at the very south of the study area around Baylham, Barham and Coddenham – which appears to be an IA site(s) of some description). It could be that the "core" territory of the Iceni in the LIA is defined by this hoard zone.

Thirdly, East Anglia has a high percentage of arable, particularly on the chalk. Ploughed land is ideal for metal detecting, and therefore some of the concentration of hoards may be due to favourable conditions of recovery. However, although this may be a factor, it cannot be the sole explanation, as the "gap areas" also contain arable - for example the south-west "gap area" contains some of the richest arable land in the UK. If the distribution of arable was a determining factor, then one would expect hoards throughout those areas, but we do not see this.

Lastly, archaeologists in Norfolk (notably Tony Gregory) made determined efforts to engage the metal-detecting community in the 1980s, and the distribution may partly reflect his and others efforts. The number of hoards from Norfolk is 35, from Suffolk 7, and from Cambridgeshire 11 (one is completely unprovenanced). However, it should be remembered that parts of the latter two counties fall outside my study area.

On balance, the best explanation is that these areas seem to be "genuine" gaps with fewer hoards in these areas. At present, the likeliest explanations for these

gaps are because of the distribution of fenland in the LIA and also because of the boundaries of the territory of the Iceni. The "hoard zone" therefore appears to be a real one.

Tribal boundaries.

The difficulties of defining a "tribal" boundary (or "kingdom") through the distribution of coins has been discussed by Sellwood (1984), but this is one of the few areas in Britain where there is a sufficiently high number of hoards which might allow an IA state to be defined. Hoards containing only Icenian coins are found within a line which runs approximately from Great Yarmouth-Diss-Bury-St.Edmunds-Cambridge-March-The Wash. Some hoards (for example Norton Subcourse, Scole and the March concentration) are very near to this line but most fall within it. Icenian coins from sites are known outside this area, however, although they are often found mixed with other tribal coinages. It would be instructive to compare this Icenian coin hoard distribution with site finds and singletons, to see how closely they tally. It seems reasonable to consider that the core or heartland (at least) of the Icenian territory is represented by the distribution of Icenian coin hoards, and that the aforementioned line could be considered to encompass much of the LIA territory of the Iceni.

It may be that the River Waveney forms part of a southern boundary to the territory, as all hoards fall to the north of it. The boundary in the west cannot be defined so clearly by a river, although parts of the River Nene might form

the boundary. It is interesting that much of the catchment of the Ouse falls within the proposed line, but that the higher ground in the east falls outside the line.

It is interesting to note that of all the proposed definitions of the area of the Iceni during the IA, it was that defined by Hawkes in his classic paper (Hawkes 1959) which most closely matches the area I have defined above. In fact Hawkes' "Region 1" appears to be identical to it. Map 17 in Chapter 8 shows my proposed tribal boundary.

Concentrations of hoards.

There appear to be four main areas where hoards seem to concentrate:

- An area around March.

Hoards around here include the Stonea I-IV hoards (nos. 7, 11, 22, 23); March (2); Field Baulk (28) and West Fen (24) (seven in total – all *Phase E*).

- An area around Thetford-Mildenhall.

Hoards around here include those at Thetford (44); near Thetford (8); Fison Way, Thetford (25); Santon Downham (5); Brettenham (12); Brettenham-Bridgeham (20); and Bardwell (9) (seven in total – two temple hoards, two Phase E, one Phase A, one Phase D, one Phase C – *multi-phase*).

- An area around Snettisham.

Hoards around here include the Snettisham I-III hoards (nos. 15, 32, 33); Dersingham Bypass (40); Hunstanton I-II (nos. 41 and 45); Heacham (42); Fring I and II (nos. 36 and 38); and Ingoldisthorpe (35) (ten in total – one Phase A, one Phase B, one Phase C, four Phase D, and two Phase E). The new Sedgeford hoard (Phase B) also comes from this area. (*Multi-phase* but most in *Phase D)*.

- A looser concentration of hoards around Norwich.

Hoards around here include those at Thorpe (1); Easton (3), Weston Longville (4), Honingham (16), Caistor St. Edmunds (31); Wicklewood/Crownthorpe (26); Swanton Morley (52); and Forncett St. Peter (54) (eight in total – two temple hoards and six *Phase E*).

It is interesting to speculate whether these centres had any connection with the different groupings of coins identified in Chapter 4, although there is no evidence within the hoards to show that any one sort of coin type was more prevalent in one area than another.

These hoard concentrations may have a relationship to river systems. The Norwich concentration seems to be based on the Rivers Yare and Wensum (flowing east). The March concentration is around the River Nene (flowing north). The Thetford-Mildenhall concentration is around the River Little Ouse

(flowing west). The exception is the Snettisham concentration which does not have a riverine connection in the same way.

Tribal centres and their dates.

The areas of all four hoard concentrations have significant IA sites within them:

- Norwich, or more specifically Caistor St. Edmund, was the location of *Venta Icenorum,* the "market place of the Iceni", and presumably a settlement of some importance in the LIA. As well as the IA coins which are known from directly from the temple sites, there are also many other IA coins from here (Gregory 1991b), suggesting a settlement of some importance during the LIA. Davies (2001, 7) also refers to many LIA artefacts spread across the site of the Roman town having been recovered by metal detector users, including La Tene style brooches and terrets.

- Thetford is known to have had a very significant LIA site at Fison's Way (Gregory 1991a) as well as an IA hillfort at Castle Hill. There are numerous other finds dating to the IA known from the town including coins, weaving combs, and pottery.

- Stonea "island" is known to have been important from the late Bronze Age to the Roman period (Jackson and Potter 1996, 70) but there is

also evidence from finds of a very significant settlement at Stonea Grange during the LIA, particularly in the later part of the first century BC and early first century AD (Chadburn 1996, 274-5; Jackson and Potter 1996). As well as this, there is an IA "hillfort" - Stonea Camp - at the southern end of the "island" (Malim 1990; Malim 1992). The IA coin finds from Stonea Grange (85% of which are Icenian) date to a variety of periods (Phases 4 to 9 perhaps with a flourit of the late first century BC) although the hoards all appear to be late i.e. Phase E (Chadburn 1996).

- Snettisham is well-known for its IA "treasure" (Brailsford 1952: Clarke 1955; Sealey 1979) but more recent finds have hinted at the existence of site in use for a far longer period (Stead 1991; Stead 1998; Chadburn forthcoming b) and there is now known to have been a large enclosure around "treasure field" and the surrounding land. However, a formal settlement or temple is as yet unknown.

The "Snettisham gold zone".

The concentration of ten coin hoards around Snettisham is noteworthy. Unlike most of the other concentrations, coin hoards here are *usually* of gold or contain gold coins. Nine of these ten hoards were entirely of gold or contained at least some gold coins (Fring I is the exception which is all silver). A new hoard from Sedgeford is also gold. This is in marked contrast to other areas. For example, the seven hoards around Stonea did not contain a *single* gold

coin, although gold coins are known from this area as rare site finds (Chadburn 1996). The same is true of the eight hoards in the Norwich concentration where *all* of the coins are of silver. Of the seven hoards in the Thetford concentration, only one of the hoards contained gold coins – and they not Icenian.

The extreme contrast of the contents of these concentrations is highly significant, particularly when one takes into account the huge quantities of gold in the numerous torcs from Snettisham.

Perhaps we can postulate that at least some Icenian gold coins were minted in this area, although – with the exception of the scrap metal and the sheer numbers of gold artefacts and coins from Snettisham which suggests metal working – there is no direct evidence for this. However, others have suggested that there is a gold workshop manufacturing the gold torcs nearby, and now that a similar pattern is emerging in terms of the number of gold coins, we might consider a gold mint as a possibility too.

An opposing theory to that of a mint is that the concentration of gold may mean that this area is a *consumer* of gold rather than a *producer* of gold artefacts such as torcs and coins, and that this is an area where gold artefacts are brought to. Of course, it could be both, i.e. an area where gold is brought to for storage before it is manufactured into another artefact. Whatever the reason, the quantity of gold IA artefacts and coins from this area is beyond dispute, and is unparalleled from elsewhere in the British IA.

The silver coin hoards are found mostly outside this "gold zone", as can be seen on Map 9. Map 13 shows the hoards which contain gold coins compared with those which contained silver within the study area.

The Fen and Broadland edge distribution.

Some hoards are located near or relatively near to the fen edge or broadland edge. Although the map is not at a detailed scale and the exact locations may not be "watery", a good proportion of all the hoards were deposited relatively near to the fen/broadland edge in the study area – that is within a kilometre or two of them or closer. The reasons for this are not yet clear, but this may echo the riverine distribution discussed above.

Watery contexts are often considered to be sacred places in prehistory and many objects and hoards are found in such (Bradley 1990; Stead et al 1986, 170-177). This fen edge and riverine distribution may echo this, although as we have seen, it may reflect settlement locations too.

Avoidance of higher ground for hoarding.

By contrast very few hoards are found on land over 50m. Again, the reasons for this are not clear, but it may be to do with the distribution of settlements where there seems to be a preference to be near water.

Avoidance of coastal locations for hoarding.

Very few hoards are truly coastal, with the notable exceptions of West Runton (49) and Weybourne (14), although the Snettisham concentration is relatively near the sea. Again, this may reflect settlement patterns as few settlements and forts of this period are right by the coast. However, Gallo-Belgic coins in Britain do tend to be found nearer the coast (Rodwell 1981).

DISTRIBUTION OF PHASE A HOARDS IN THE STUDY AREA. (Map 5).

Four hoards only of this date are known: Snettisham I (15), Bardwell (9), Haddiscoe (13), and Ingoldisthorpe (35). Of these, only the Snettisham I and Ingoldisthorpe hoards are well recorded, and like much early Gallo-Belgic gold, are located relatively near the coast. The other two contain potin coins.

DISTRIBUTION OF PHASE B HOARDS IN THE STUDY AREA. (Map 6).

Only three hoards of this phase are known: Weybourne (14), Fring II (38) and Buxton-with-Lammas (39). All three contain Gallo-Belgic E staters and again the distribution is broadly coastal.

(Another new Phase B hoard of gold Gallo-Belgic E coins from Sedgeford near Fring also fits in with this pattern).

DISTRIBUTION OF PHASE C HOARDS IN THE STUDY AREA. (Map 7).

Two hoards only of this date are known, and one is not closely located (shown as an open circle). These are: near Thetford (8) and Heacham (42). The Heacham hoard is part of the "gold zone" discussed above. The Thetford hoard is of imported Trin/Cat gold.

DISTRIBUTION OF PHASE D HOARDS IN THE STUDY AREA. (Map 8).

There are ten hoards of this date, but only nine are plotted as one is unprovenanced (hoard number 50). Open circles again denote poorly located hoards.

For the first time, a concentration of hoards can be seen in a single phase – and it is centred on Snettisham in the heart of the "gold zone". This appears to suggest that this area was very active during this phase (c.20 BC – AD 10) compared with the rest of the study area.

DISTRIBUTION OF PHASE E HOARDS IN THE STUDY AREA. (Map 9).

There are thirty hoards known from this phase, although only 29 are plotted on the map (hoard no. 53 is not well provenanced and is not plotted) . The map appears to show that there is a loose concentration of hoards in this area around Norwich; another around Thetford and the fen edge; and a third concentration around Stonea. These are similar to the concentrations noted above for all coin

hoards and shown on Map 4. However, there is not really a marked concentration around Snettisham, although there is still activity in the general area.

What this appears to show is that there are three main areas active during this period – Norwich, Thetford/fen edge and Stonea Island. It may be noteworthy that at this period we have the emergence of three groupings of coinages (discussed in Chapter 4). It would be worth investigating further whether the three groups of coinages may relate to the three main areas of activity.

DISTRIBUTION OF TEMPLE HOARDS IN THE STUDY AREA. (Map 10).

Five IA "temple sites" are known or presumed from where hoards have been recovered. Some of these are known from typical Romano-British temples with a concentric square plan, which are presumed to have an earlier IA phase. Others are of apparently religious sites in the IA. These five are Brettenham/Bridgeham (20); Fison's Way, Thetford (25); Wicklewood/Crownthorpe (26); Caistor St. Edmund (31) and Great Walsingham (34). There is little to state about this distribution except that some of the temple sites appear to be relatively near to rivers, and near to the Thetford and Norwich areas which we have previously noted as being of importance. I have not included the Snettisham finds as "temple finds" although I accept that there may be a votive element to their deposition.

DISTRIBUTION OF NON-ICENIAN HOARDS IN THE STUDY AREA. (Map 11).

Eleven hoards have no Icenian coins in them at all, although seven of these are early and probably date to the period before the Iceni started minting for themselves (for example they are potin hoards or Gallo-Belgic hoards). These are plotted on Map 11.

Of the four which are left, two are poorly located (see the open circles on the map) and not well recorded. Interestingly they both contained relatively early gold Trin/Cat. coins. The other two are located in the south of the study area and contained late gold coins of Cunobeline. One of these hoards is certainly outside what appears the main territory of the Iceni (the Babergh District hoard, no. 37).

What this appears to show is that the Iceni did not use many coins of other IA states once they had started to mint their own coins. This is in stark contrast to their use of Roman *denarii* which they used and hoarded a great deal. The *denarii* which are hoarded with Icenian coins date to all periods up to AD 61 including Republican coins, implying the Iceni had easy access to such coins for some time. There was a clear preference to hoarding Roman coinage over other IA coinages.

THE DISTRIBUTION OF ICENIAN HOARDS OUTSIDE THE STUDY AREA. (Map 12).

There are eight coin hoards outside the study area which contain Icenian coins as shown in Table 6 in Chapter 3. Four are found in the territories of the Corieltauvi and Trinovantes/Catuvellauni, which are immediately next to the Iceni and this need not surprise us too much. These are the hoards from "near Partney" (vii), Huntingdon (viii), Northampton (iv) and Harlow (iii). Two of these are temple hoards but the two from near Huntingdon and Northampton were apparently "normal" coin hoards. Neither was declared however, and there are only sketchy details of both, so it is difficult to say more about them.

More surprising are the four hoards found to the south of the Thames in the territories of the Atrebates/Regni (it is difficult to separate the Atrebates and Regni from coin evidence). These are the hoards from Battle (ii) , Portsmouth (i), Wanborough (vi) and Hayling Island (v). Two are "temple hoards" and the Portsmouth Hoard may also be from the Hayling Island temple site (Bean 2000). Are these coins evidence of links between the Iceni and the Atrebates/Regni? It is interesting to note that until the Boudican War both of these states were apparently pro-Roman and both had client kings, unlike some of their neighbours. It would be entirely possible that if they were both pro-Roman, they may have had political and social alliances - for example, marriage alliances. (It is interesting to note that Boudica may not have been Icenian by birth, as discussed in Chapter 2. If she was not, she almost certainly was a high-ranking or royal woman from another part of Britain, and was likely to have come from an area which wished to ally itself to the Iceni or

which already had links or alliances. This could be one such area). The hoards may reflect such political and social alliances.

As well as the four hoards containing Icenian coins, links between the Iceni and the Atrebates/Regni are also hinted at in the typlogical links between the Bury A coins types and the "Gallo-Belgic Xd" gold quarter staters which have so far only been found from Selsey, which are likely to have been the prototypes for the Bury A coins. However, the hoards from Battle and Portsmouth are not well recorded and it would be foolish to push the evidence too far with respect any possible links. It is curious, however, that Icenian coins are not found hoarded in the territories of other tribes such as the Dobunni, Durotriges or Cantiaci, which perhaps does strengthen the possible association between the Atrebates/Regni and the Iceni. The table below emphasises this.

Table 33: British tribes/ kingdoms where Icenian coins are found hoarded.

Tribe/Kingdom	Number of hoards with Icenian coins
Corieltauvi	3
Trin/Cat	1
Atrebates/Regni	4

Four of the eight hoards outside the study area are temple hoards (Harlow, Hayling Island, Wanborough and near Partney) and there is a possibility that the Portsmouth hoard may also be from Hayling Island (Bean 2000). Perhaps the presence of Icenian coins at these places here may be explained by the presence of Icenian travellers themselves making gifts, or by local people who

had somehow acquired Icenian coins (through trade or social alliance?) depositing them at their temples.

Of the remaining hoards outside the study area, it is the hoard from Battle, East Sussex, which really stands out. It is a very long way from the Icenian territory and did not appear to contain any other IA coins. Some commentators have dismissed it on these grounds. However, Bean draws attention to the other Icenian coins from the region and, like him, I am inclined to give the report credence (Bean 2000; Akerman 1839).

THE DISTRIBUTION OF GOLD COINS IN HOARDS IN THE STUDY AREA. (Map 13).

We have already discussed the "Snettisham gold zone" and this map also shows this phenomenon in a striking way. It also shows a group of gold hoards near the boundary of the Iceni at the fen edge – these are of varied date and composition. Otherwise, this map shows the concentrations of silver hoards discussed above.

CONCLUSIONS

Coin hoards containing Icenian coins are found in a relatively localised area. This seems to imply that the coins of the Iceni were not used much outside the territory of the Iceni and were used mostly by the people of that state. This may have implications for the functions of coins and/or perhaps the degree to which they were in contact with neighbouring states. For example, if they were trading a great deal with their neighbours and *using coins to purchase items*,

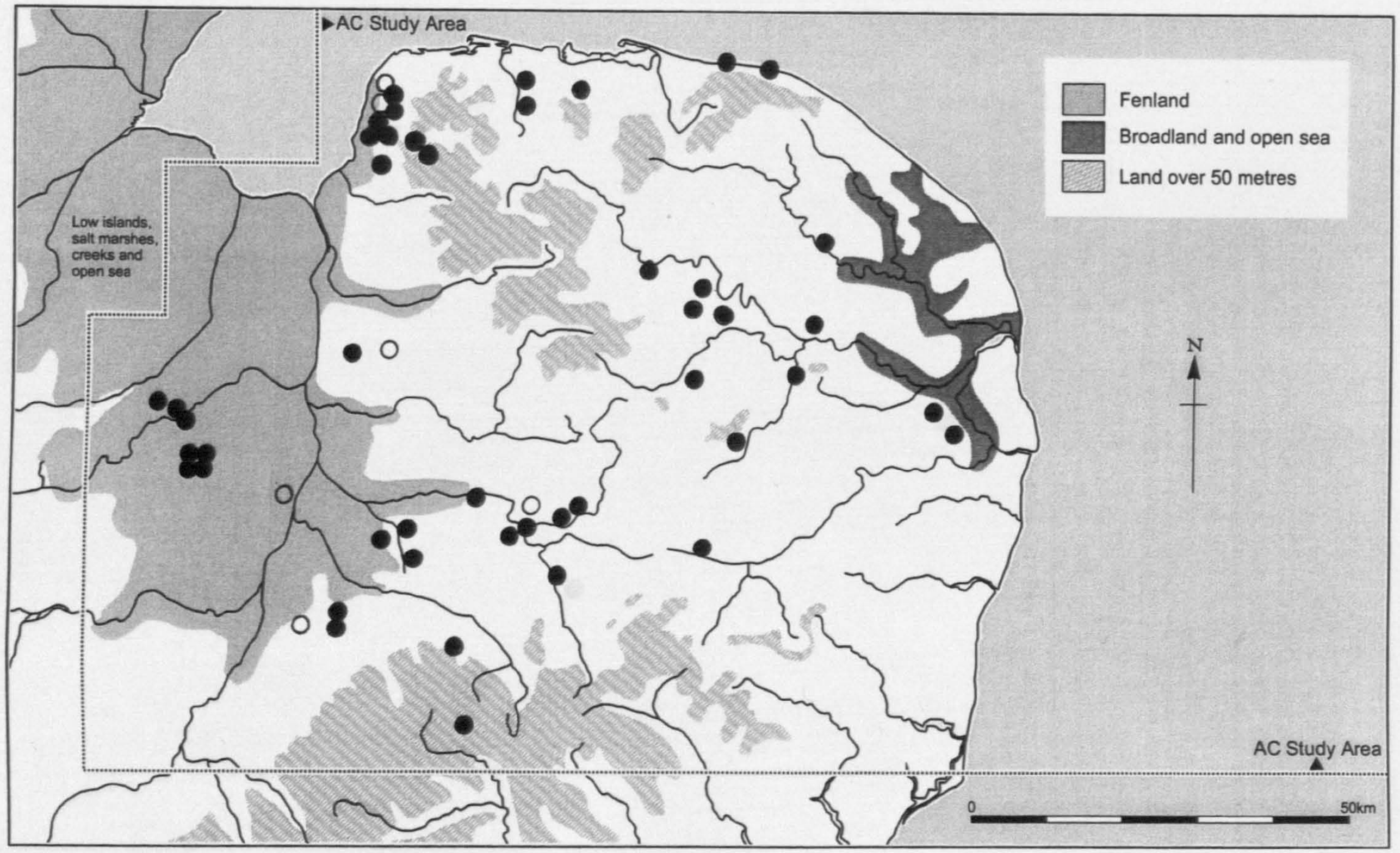
we might expect to find Icenian coins of various denominations on the settlement sites of their neighbours. It would be instructive to look at this by looking at the distribution of site finds. However, there is little evidence from the coin hoards within and outside the study area that coins were used in this way.

Equally, there are relatively few coin hoards which contain other IA coins in the study area. Of the 54 hoards studied, there are seven early hoards which appear to have been deposited before the Iceni really started minting and only four others containing no Icenian coins at all. A further seven hoards contain IA coins from outside the area. What this appears to show is that the Iceni did not really use many coins of other IA states once they had started to mint their own coins. This is in stark contrast to their use of Roman *denarii* which they used and hoarded a great deal. The *denarii* date to all periods to AD 61 including Republican coins, implying the Iceni had easy access to such coins for many years.

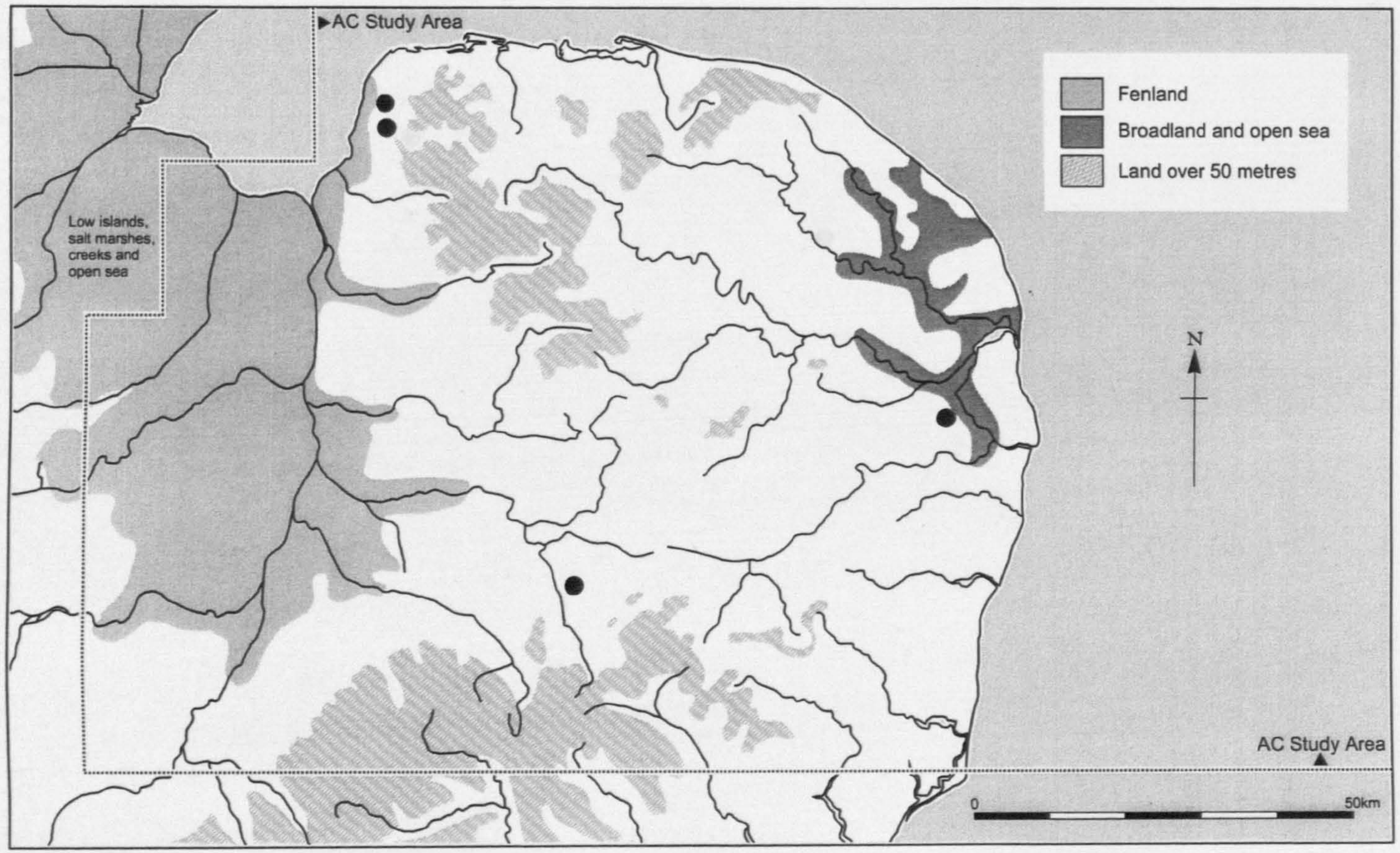
The distribution of Icenian coins in hoards outside the study area may also shed some light on political alliances and relationships. For example, there are no Icenian coins hoarded in the territory of the Dobunni, no Dobunnic coins in the hoards in the study area, nor are there many Dobunnic site finds there. However, Evans suggested that the Anted of the Dobunni and the Anted of the Iceni were one and the same, and Van Arsdell and Braund also considered this a possibility (Evans 1890; Van Arsdell 1987, 268; Braund 1996, 74). The

mutual exclusion of the two coinages and the evidence from the hoards would seem to strongly argue against this.

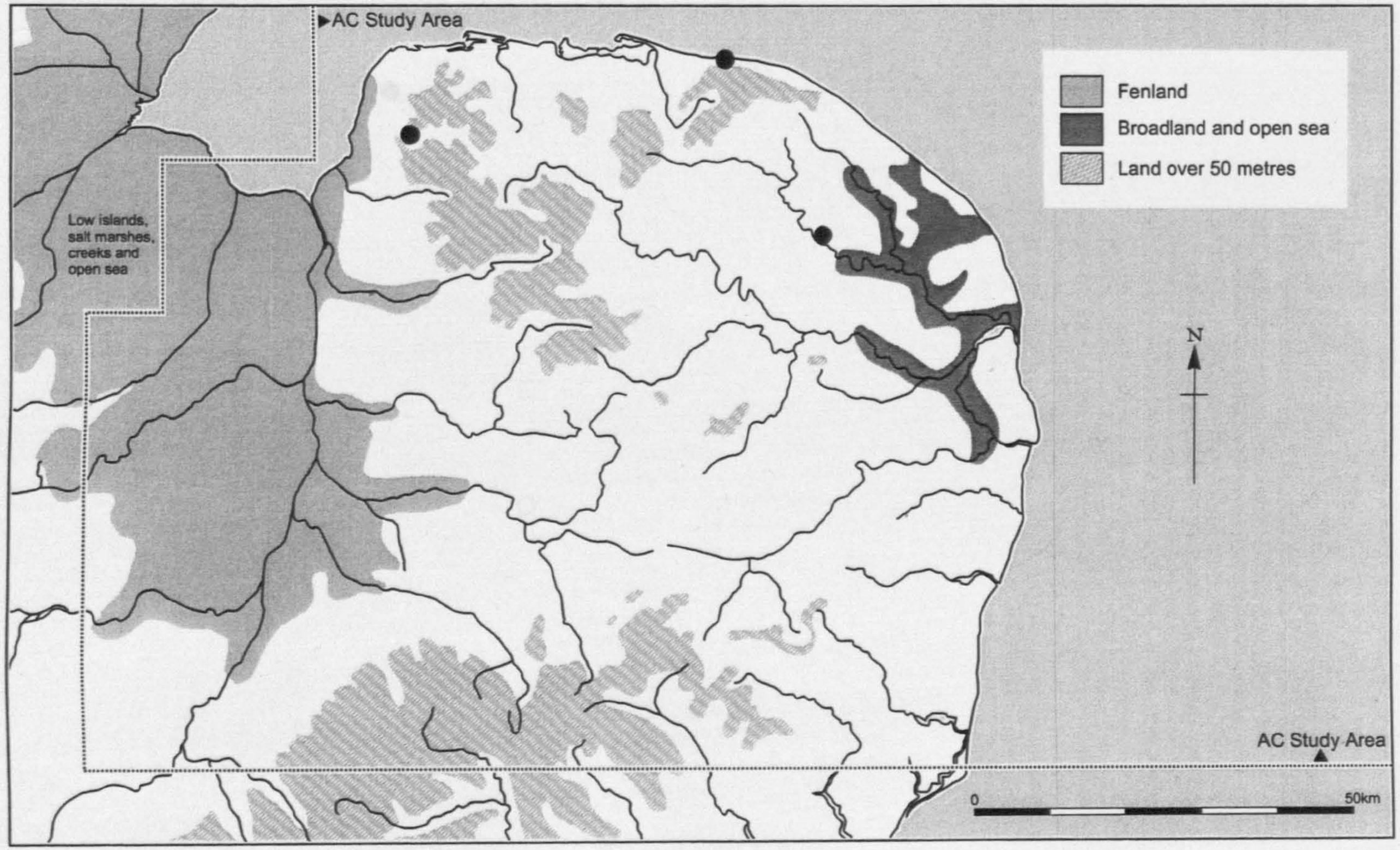
However, the Anted argument is important as – if the two leaders were not the same person - it suggests that there were personal names which were common in the Celtic language and in use at about the same time. (Perhaps Celtic names went in and out of fashion in the way that modern personal names do). Here we also remember the arguments about the Corieltauvian ESVPRASV or ESVPASV and the Icenian ESVPRASTO discussed in Chapter 6. There is more evidence that the Corieltauvi were in closer contact with the Iceni than the Dobunni were. However, if there was a single leader named Esvprasv of the two states, then we would surely expect to find more evidence of this (such as ESVPASV coins hoarded in the Icenian territory). Again, as with Anted, the weight of the evidence is against it, and we must also put the similarity of the two names down to their being close namesakes rather than the same person.



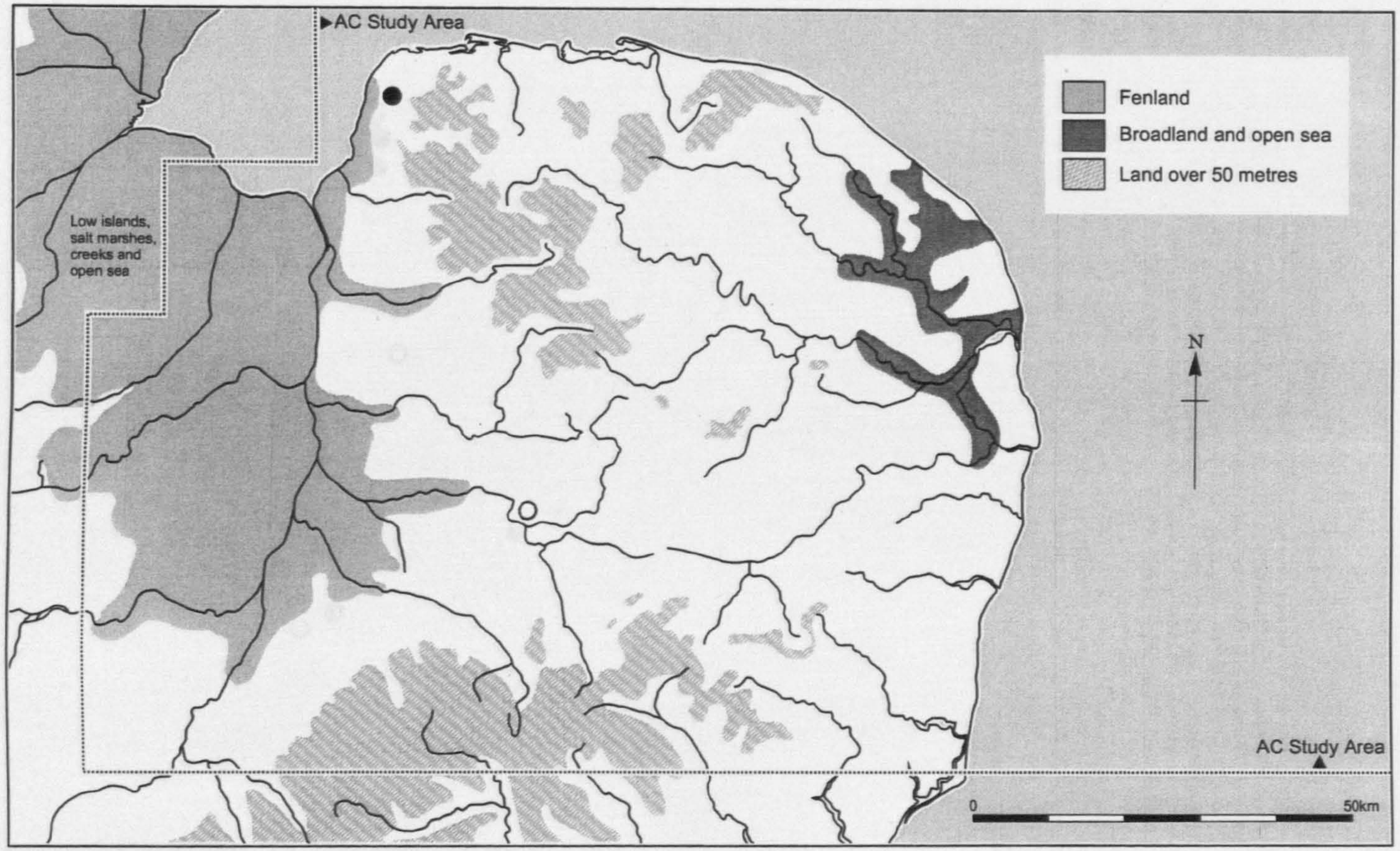
Map 4. The distribution of all hoards in the study area. (Open circles denote hoards which are not well-located).



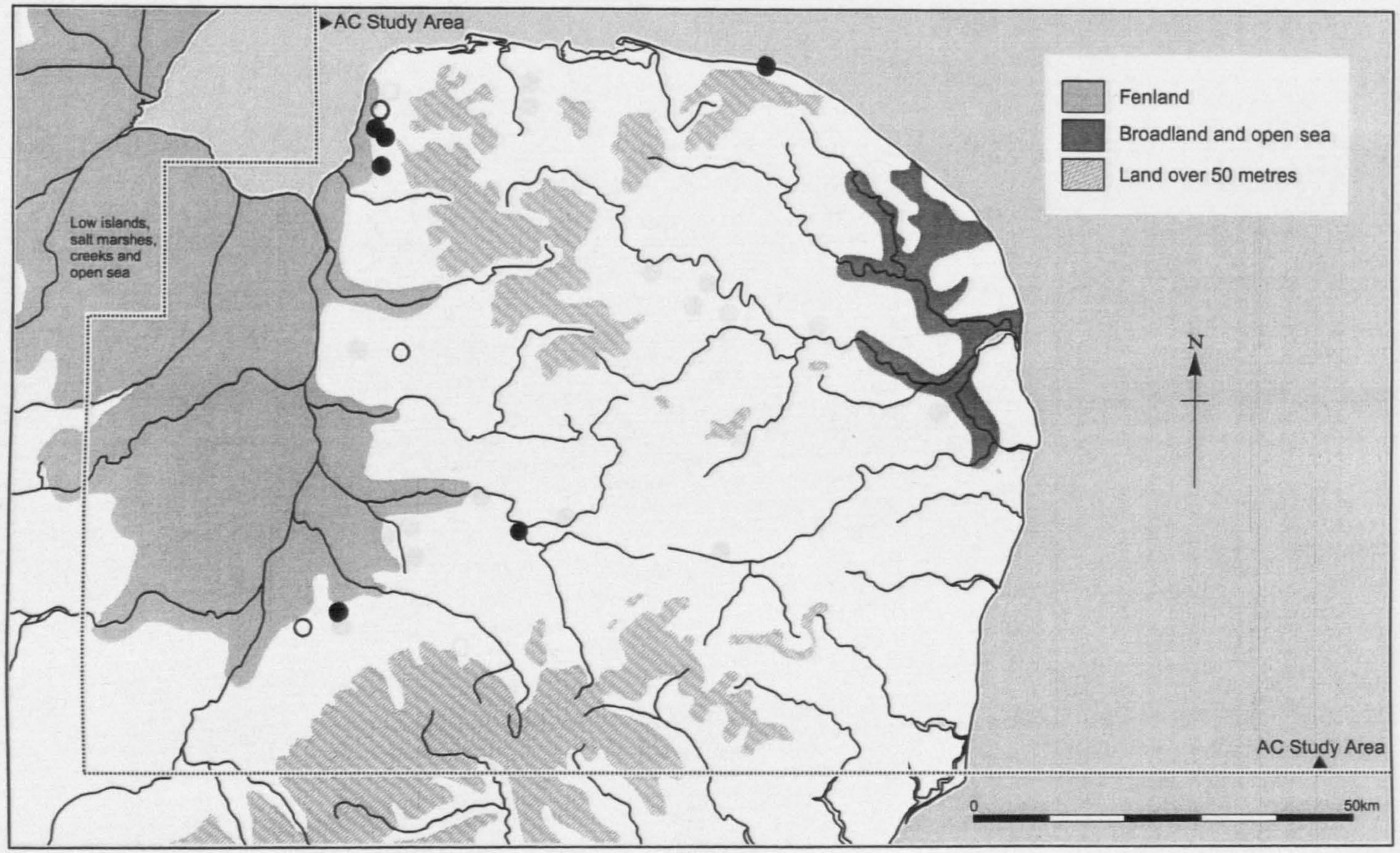
Map 5. The distribution of Phase A hoards.



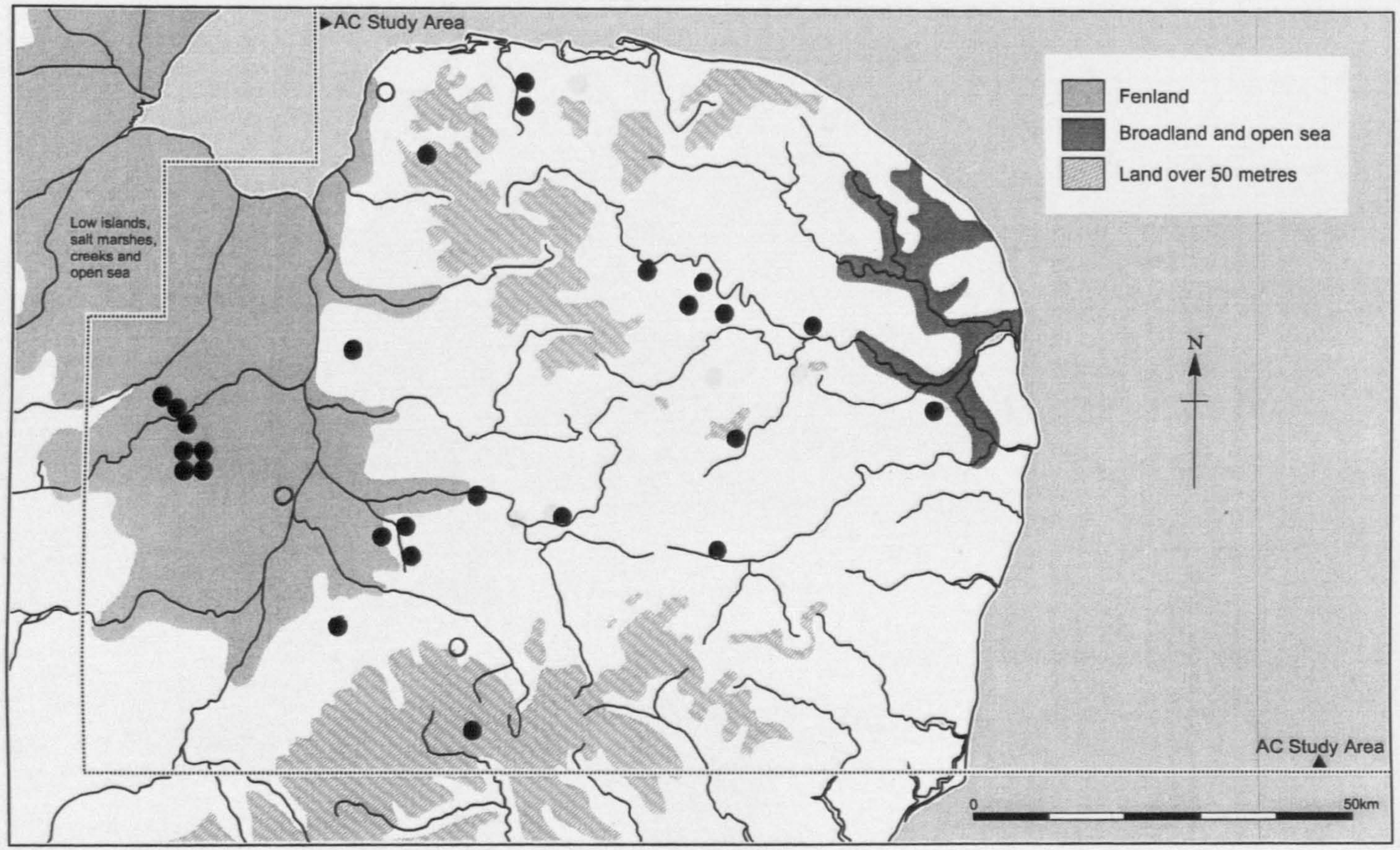
Map 6. The distribution of Phase B hoards.



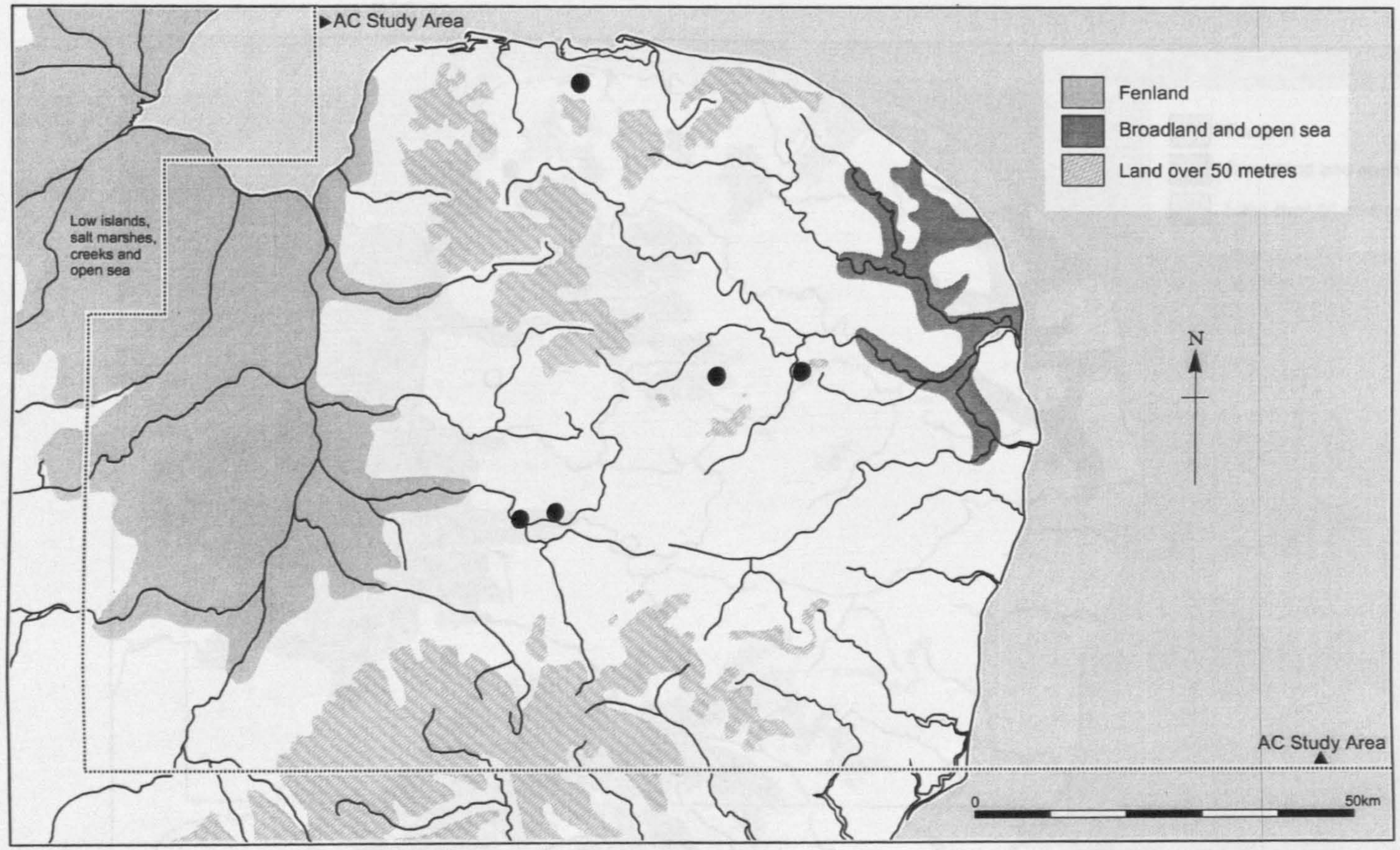
Map 7. The distribution of Phase C hoards. (Open circles denote hoards which are not well-located).



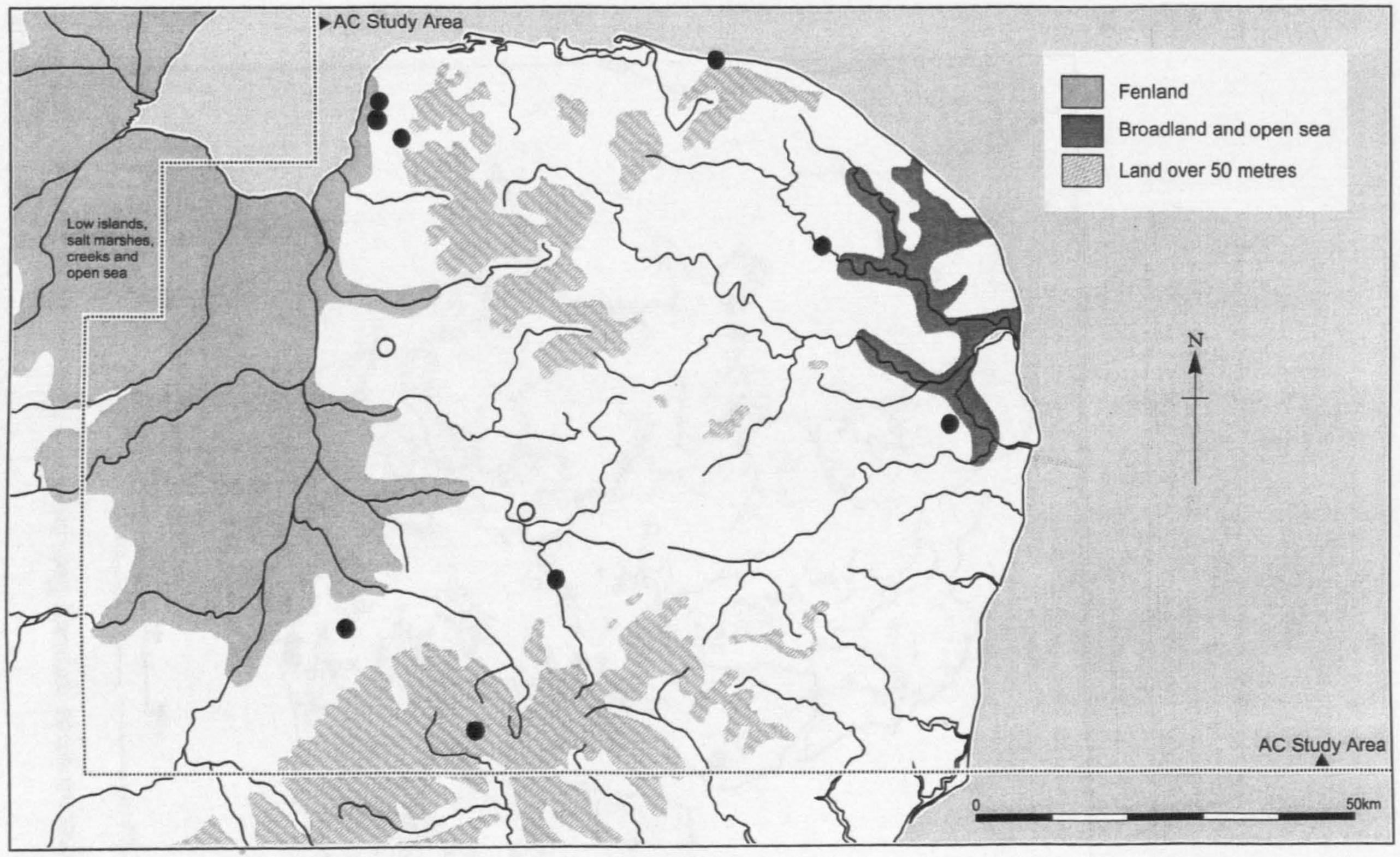
Map 8. The distribution of Phase D hoards. (One unprovenanced hoard (number 50) is not plotted. Open circles denote hoards which are not well-located).



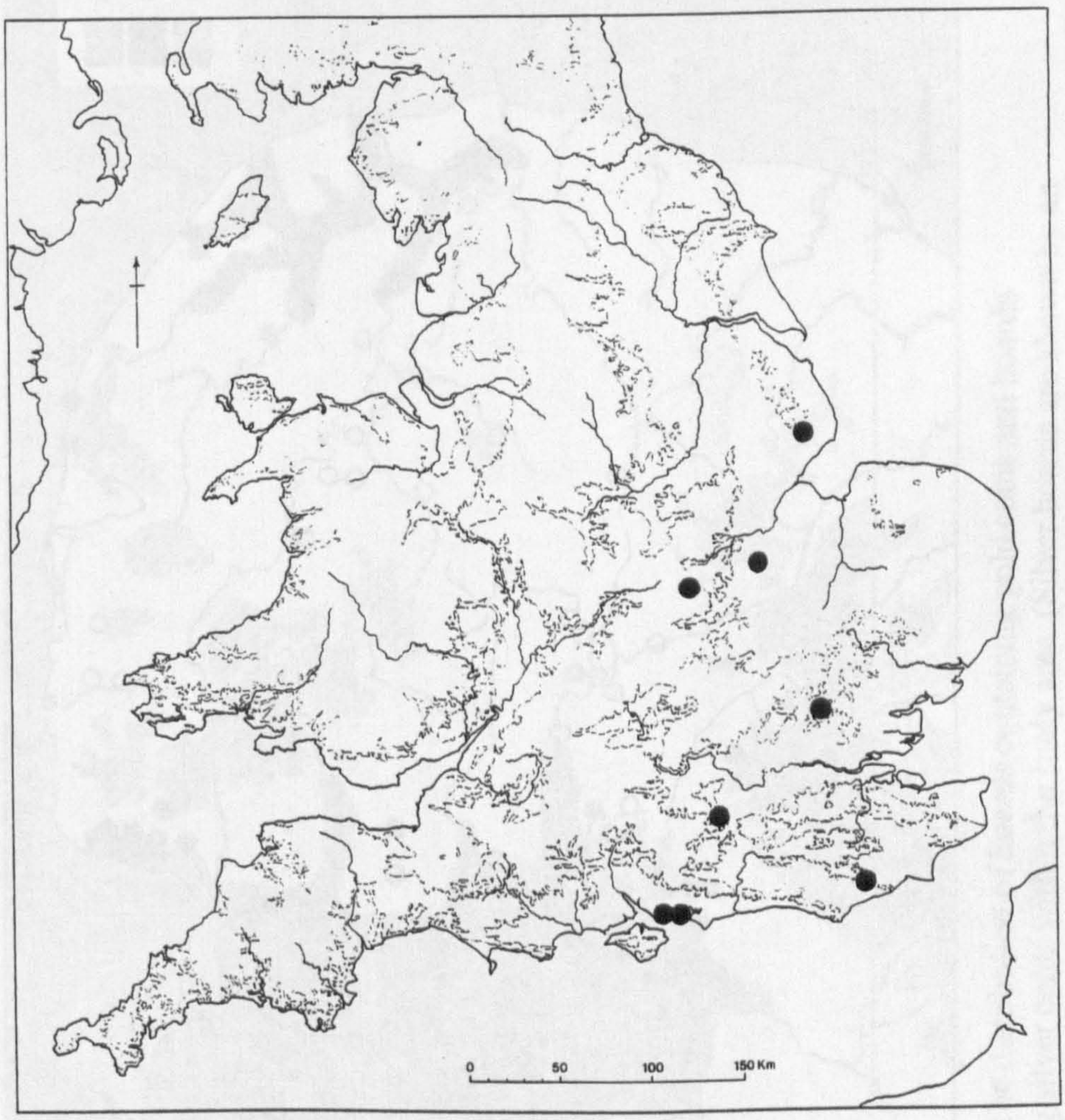
Map 9. The distribution of Phase E hoards. (One unprovenanced hoard (number 53) is not plotted. Open circles denote hoards which are not well-located).



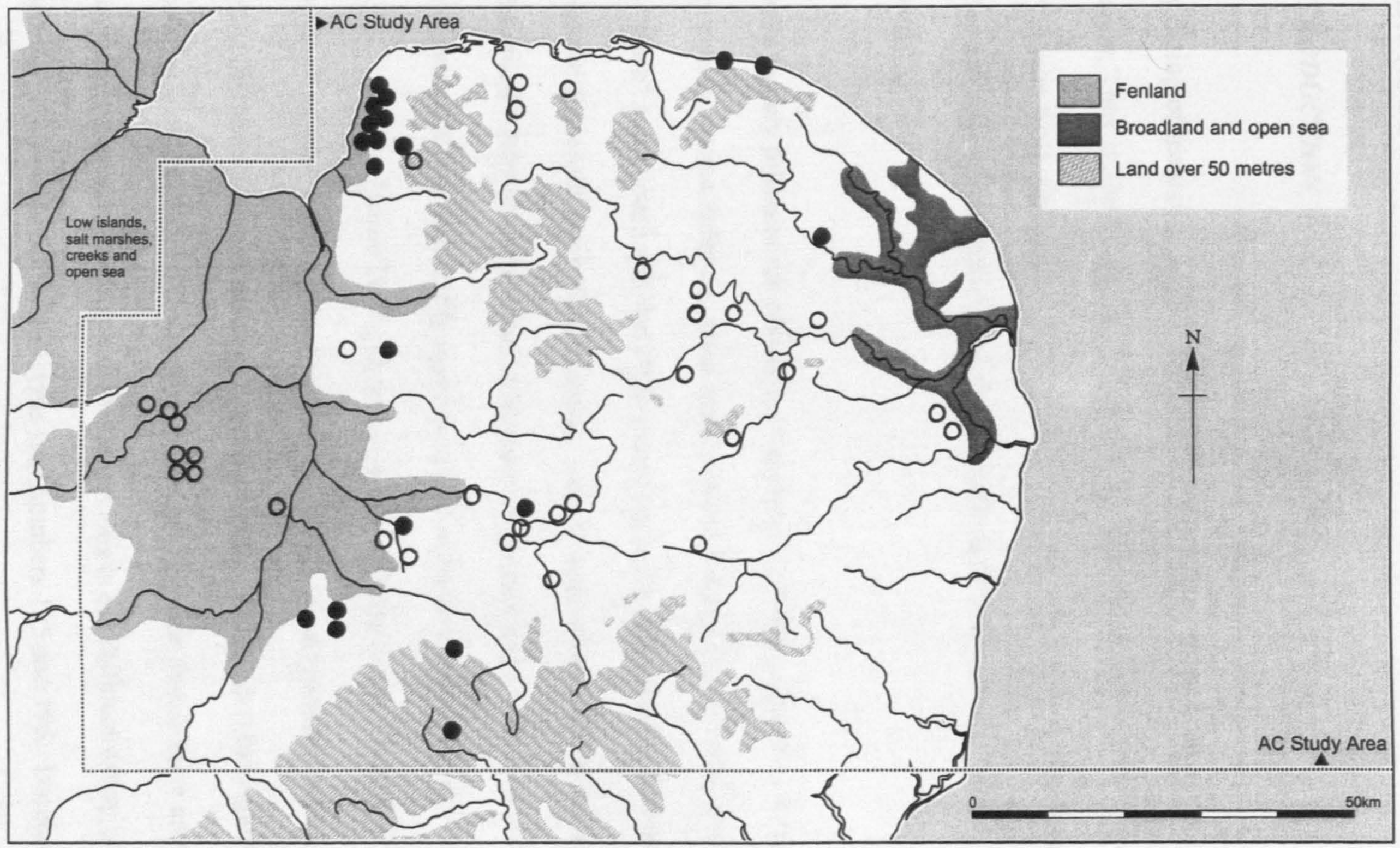
Map 10. The distribution of all temple hoards in the study area.



Map 11. The distribution of non-Icenian coin hoards in the study area. (Open circles denote hoards which are not well-located).



Map 12. The distribution of hoards containing Icenian coins outside the study area.



Map 13. The distribution of hoards containing gold coins and hoards containing silver coins within the study area. (Silver hoards are shown by an open circle. Two hoards are not plotted – numbers 50 and 53)

CHAPTER 6

CHRONOLOGY

INTRODUCTION

My dating of Icenian coinage is presented in the Tables 35-38 at the end of this chapter. They are based on the evidence of die links, typology, coin weights, circulation wear, association with non-Icenian coins (including Roman) and other archaeological artefacts and the proportions of coin types found in hoards.

I have largely followed the phasing of Haselgrove (1987), although I did test my phases against different actual dates as well. However, these did not seem to "work" and I concluded that Haselgrove's phasing is the most robust model we have at present and is fundamentally sound. Other recent scholars (e.g. Creighton 2000) have also tested Haselgrove's phases and found them useful. However, I do not necessarily agree with all Haselgrove's dates for individual coin types (Haselgrove 1987); he was largely following Allen's work (1970) and my intensive work on the dies has led to many more types and sub-types being identified, as well as linkages between them. There are some significant differences in the dates of individual coin types between us and these are shown in Appendix F. Perhaps the most obvious is our different dating of the Normal Face-Horse A and B/C types (my numbers 185 and 195). Haselgrove dates the former to 20 BC-AD 10, and the latter to AD 10-40. I date both types

on very strong typological grounds (only a moustache separates them!) to the same phase.

Previous scholars have given very different dates for individual Icenian coins. Reece (1998) has warned of the use of IA coins as dating evidence:

> "Iron Age coins are no good for dating because they themselves are not dated; Roman coins are. This is a slight over-statement but very slight."

The truth of this observation is highlighted when one considers the dates proposed by various authorities for the Normal Face-Horse B/C type (No. 195). My date is the earliest one - 20 BC-AD 10, then Haselgrove dates it to AD 10-40, Allen dates it to AD 30-60 and finally Van Arsdell dates in to AD 61 – a maximum difference of over 80 years! Similarly varied examples include Freckenham 4 (No. 90) which Van Arsdell dates to 45-40 BC, I date to 20 BC-AD 10, and Allen dates to AD 0-25/30. Luckily, these are some of the worst examples, and usually there is a better accord of the proposed dates for Icenian coins. In particular, my dating of the gold issues is very close to Haselgrove's with the exception of the Freckenham 4 (no. 90) type, where he follows Allen's phasing for this coin and dates it earliest in the Freckenham series. (I consider this the last Freckenham type on strong typological grounds and metallurgical grounds – see Table 48 in Chapter 7). Appendix F gives a concordance of my dates and coin types with those of others for comparison. It is clear that we should not attempt to use IA coins to date archaeological contexts precisely. The broad phases we give are likely to be as accurate as we

can get until someone invents a technique to give absolute dates to the production of the metal blank or other part of the minting process.

The start and end dates of minting are critical as they provide a framework into which the coinage fits. They are discussed below, but in order to do so, we need to consider the coins of Prasto (No. 200) in detail first.

THE COINS OF PRASTO

These coins are highly important given that they may relate to a historical figure. They are therefore worthy of detailed discussion, partly in the context of historical evidence presented in Chapter 2, and partly because they have the potential to assist in providing a chronology for the Icenian series.

Prasto coins: background and previous interpretations

Prasto coins were first recovered from the Joist Fen hoard in 1960, and were discussed by Allen (1978b) and Mossop (1979), the latter interpreting the legend as SVB RI PRASTO ESCIO FECIT ("Under King Prasto Esico made me"). Three new Prasto coins were recovered by metal detectorists in 1995 and 1999, and on two of them, as Dr Jonathan Williams of the British Museum pointed out (Williams 2000), the legend SVB ESVPRASTO and ESICO FECIT can be clearly read. Williams also pointed out that some coins of the Corieltauvi, a tribal grouping to the north of the Iceni, bear the inscription IISVPRASV, ESVPRASV or - more usually - ESVPASV (Van Arsdell types

920 and 924), all of which are remarkably similar to ESVPRASTO. Williams concluded that the ruler on the Prasto coins and Boudica's husband were *not* one and the same, and that considerable doubt should be placed on the association with King Prasutagus (Hammond 1999, Williams 2000).

Prasto coins: discussion of the inscriptions

However, there is room to doubt Williams' interpretation (Chadburn 2006). As discussed earlier in Chapter 4, ESVPRASTO may be a Celtic compound name partly derived from the Gaulish divine name ESUS or a form cognate with this. ESU- or ESUS has been suggested as meaning "Lord" or "Master" or "Honour", so it is possible that ESV is a title which means "Master" or "Honour" or "Lord" which might give a more detailed translation of the legend as "Under Lord Prasto".

The similarity of the name with the legends on certain Corieltauvian coins is interesting. Perhaps the ESVPRASTO of the Iceni is the same person as the IISVPRASV or ESVPASV of the Corieltauvi, but perhaps not – the names are not identical. The coins are very dissimilar to look at, with those of the Corieltauvi being highly stylised and Celtic in design, and the horse showing clear parallels with other horses on Corieltauvian coins. Additionally, the Corieltauvian ESVPASV coins appear to be earlier than the Prasto coins (Haselgrove (1987) dated them to his phase 8 whereas I place the Prasto coins in Phase 9). These are not the only Icenian coins which bear similar or identical names to those on other tribal coinages. For example, ANTED is

found on both Icenian and Dobunnic coinages, apparently dating from the same phase, and the coins of EISV (Dobunnic) and AESV (Icenian) also sound similar and date to the same phase (cf Haselgrove 1987 for dates of the Dobunnic coins). Whether these were the same rulers or not is impossible to say, but – as discussed in chapter 2 - it does show that the similarity of names in different areas is not an isolated phenomenon. The balance of evidence suggests that ESVPASV and ESVPRASTO were different rulers.

Prasto coins: iconography

The Prasto coins themselves are found well within the territory of the Iceni, appear stylistically late, show clear Roman influence, and are quite unlike the rest of the Icenian coinage with the exception of a few other late types which also show Roman influence. Unlike almost other Icenian coins, they are finely engraved in bas relief, particularly the bust. The technique of bas relief is known from other British Iron Age coins, but is used almost exclusively where Iron Age coins show classical imagery (as shown in Creighton 2000, chapter 4).

The Prasto coins are the only Icenian coins which show a name associated with portrait - a Roman fashion also adopted by some British "Romanised" tribes and as shown graphically on the coins of Verica, Cunobelin, Tasciovanus, Andoco and Tincomarus (images in Hobbs 1996; Creighton 2000, 178-9). The Prasto coins appear to be modelled on Julio-Claudian heads on Roman coins,

again a common phenomenon around the Roman world when many friendly kings copied Julio-Claudian portraits (Creighton 2000, 116-7).

Possible prototypes for the Prasto coins.

There are a number of candidates for the prototypes for the Prasto coins. The coins are almost certainly modelled on Roman prototypes, and the main candidates are Augustus, Tiberius, Caligula, Claudius and Nero.

Plate 41 shows a number of Roman coins with Prasto coins for comparison. Prototype candidates include coins of Augustus (e.g. *denarius* RIC 4b), coins of Tiberius (e.g. *sestertius* RIC 240), coins of Caligula (e.g. *sestertius* RIC 32), coins of Claudius (e.g. *as* RIC 111) and coins of Nero (e.g. *denarius* RIC 77). The coins of Caligula and Nero mentioned above are shown on the Plate along with dies I-III of Prasto, as these two emperors seem the most likely candidates on typological grounds. It is noteworthy that there are hardly any left-facing busts of Tiberius, and that there are a number of coins of Caligula which are very close (for example RIC 37, 38, 54, 33). An *as* of Segobriga (an Iron Age/ Celtic client kingdom) minted in Spain under Caligula is also an interesting comparison (RPC 476), as it has similarities to the Prasto coins.

Creighton (following Burnett) suggested that as many Roman portraits of this period are very similar, it is difficult to differentiate them. He considered that they should not be taken to represent a particular emperor but instead that they are images of power (Creighton 2000, 177). Nevertheless, a close examination

of the issues of different emperors can reveal distinct differences, and it is possible in some cases to identify a prototype.

Allen (1978b) believed the prototype was a young Nero, but it looks to me as though the Roman prototype was an earlier Julio-Claudian bust - the neck is elongated in the manner of many earlier Julio-Claudian coin types. For example, my die I is similar to the Minerva type *asses* of Claudius and also to Claudius (RIC 95), but is arguably most similar to certain coins of Caligula such as RIC 38 with which it bears a striking similarity.

If an Iron Age die-cutter was *copying* a Roman coin, then the bust would end up reversed on the final Iron Age coin. This may have happened with the coins of Prasto. If we therefore look for Roman prototypes with a bust right, then there a number of other candidates such as Augustus (RIC 2a; RIC 8); Tiberius (a *denarius,* RIC 4); Caligula (a *denarius,* RIC 2); Claudius (a *denarius,* RIC 41) and Nero (a *denarius,* RIC 79; a *denarius,* RIC 24; an *aureus,* RIC 8).

The most likely candidates for a prototype on typological grounds are coins of Caligula and Nero – the other candidates have differences which rule them out. The Prasto coins certainly depict a youngish man, and certain coins of these two emperors could fit the bill. I consider the likeliest candidate to be Caligula. If this is the case then ESVPRASTO was almost certainly a pro-Roman ruler ruling before AD 43, in common with a number of other pro-Roman kings and rulers in Britain in the first half of the first century, and as evidenced by their coins (Creighton 2000, chapters 3 and 4).

Caligula, Nero or Prasutagus?

Braund has argued that in some cases, the coins of British client kings actually depicted an Emperor himself rather than just showing a Romanized portrait. Examples would include certain coins of Cunobeline and Verica which may show the Emperor Tiberius (Braud 1996, 69). It is certainly possible that the Prasto coins do not show Prasutagus himself but depict a Roman Emperor, perhaps Caligula. The use of imperial heads on the coins of pro-Roman indigenous rulers is known elsewhere in the Roman world, surely showing political allegiances, and appears to be a phenomenon voluntarily undertaken by the client king (*ibid*). If the Prasto coins are meant depict Caligula, then they may show the date which he became King of the Iceni i.e. between AD 37-41, as he may have wanted to show allegiance with the then Emperor.

Against this interpretation is the fact the obverse of the Prasto coins show a twisted torc above the bust, a indigenous artefact. The torc may be a symbol of power and authority to the Iceni, perhaps as suggested by Dio's account of Boudica. It certainly is an Iron Age artefact and not a Roman one, although they were known in the Roman world, often from spoils of war. This might then suggest that portrait depicts Prasutagus himself as a highly Romanised individual, in keeping with his status as a client king and a Roman citizen, but nevertheless maintaining his identity as head of an Iron Age kingdom with its own native identity.

On balance, the portrait probably depicts King Prasutagus, largely on the evidence of the torc.

The date of the Prasto coins

I have placed them on numismatic grounds into my Phase 9 i.e. AD 30-45, which would also fit if the prototype were a coin of Caligula. Hoard evidence (see chapter 3) suggests that the Iceni were allowed to use their existing coinage alongside Roman coinage after the Conquest, so the Prasto types were probably circulating after the Conquest but minted beforehand. Additionally, if we accept the argument that the client kings in Britain did not mint in gold and silver after the Conquest (Chadburn 1997), then this would also place the coin before c. AD 43. All this could still be consistent with the historical figure King Prasutagus, who died after a "life of long and renowned prosperity" c.AD 60/1. It should be pointed out that many numismatists date the coins later – Allen dates them very exactly to AD 60/1, Haselgrove to AD 30-60 and Van Arsdell to AD 50-60. Creighton (1994, 332) considers that most Icenian coins were manufactured before the Conquest with the exception of the Prasto coins. I date them to Phase 9 – AD 30-45.

It is interesting to ask why the historical figure Prasutagus/ Prasto did not mint bronze coins after the Conquest if the Romans allowed him to do so. The answer must lie in the function of coinage within Icenian society – bronze coins were not previously minted by the Iceni, presumably because it was not worth their while to do so; their coins were apparently not needed to make

small value purchases. Although he was allowed to do so, there was simply no need for such "small change". Thus the silver Prasto coins were probably amongst the last Icenian coins to be minted.

Prasto coin dies

Three obverse dies are known and at least two reverse dies. The die reconstructions are shown in Chapter 4. There are 15 known Prasto coins and the Table 34 below gives the results of my die study of the obverses. The coin numbers follow on from Mossop (1979) and Allen (1978b) who published the first nine coins below. I have checked their die linking and agree completely with their published results (although it is worth noting that Mossop's tickets which he kept with his coins, and which I also have recorded, are somewhat more muddled and confusing. It is better to look at Mossop's published work).

Table 34: Obverse dies of Prasto with individual coin references.

MOSSOP/ALLEN COIN NUMBER	OTHER COIN REFERENCE	CHADBURN OBVERSE DIE NUMBER
1	CCI 611558	I
2	CCI 611557	I
3	CCI 740223/ Hobbs 4547	I
4	CCI 611556	II
5	CCI 611555	II
6	CCI 780102/ Hobbs 4577	II
7	CCI 780103	II
8	CCI 780100/ Hobbs 4578	II
9	CCI 780101	II
Chadburn 10.	CCI 930764/ Hobbs 4580	II
Chadburn 11.	CCI 982390	II
Chadburn 12.	CCI 000261	III
Chadburn 13.	CCI 000262	II
Chadburn 14.	CCI 990518	II
Chadburn 15.	CCI 001147	I

Obverse Die I – there are four known coins with this die. A distinguishing feature is that it features a slightly bigger C shaped ear than the others. All these four coins are in a poor condition – it is possible that they were the product of the same batch of coins or the same mint and the quality control was poor. This is the same as Allen/Mossop's die A (Allen 1978b; Mossop 1979)

Obverse Die II – this is the most common, and is used on 10 coins. Distinguishing features include that the ear is made up of two circles, there is a pellet triangle in front of the nose and a die flaw at the back of the head and below it. It is possible that this die was recut. This is the same as Allen/Mossop's die B (Allen 1978b; Mossop 1979).

Obverse Die III – the rarest, used on one coin. It features a small ear, and a long neck.

Prasto coins: conclusions

The numismatic evidence shows a pro-Roman ruler "Esvprasto" copying a Romanised bust, using Latin on his coins and perhaps modelling them on those of Caligula (AD 37-41). His coins were circulating within the territory of the Iceni and were probably minted during Phase 9 (AD 30-45). He appears to have minted no other coins.

The historical evidence indicates that Prasutagus, client king of the Iceni, died after a long and prosperous life, and that his death precipitated the Boudican War of AD 61 (following the dating of the Boudican War by Carroll, 1979).

I consider that it is likely that the Esvprasto of the coins and the King Prasutagus of history are one and the same (Chadburn 2006), and that Esvprasto is probably not the same ruler as the Esvpasv of the Corieltauvi who was earlier.

WHEN DID THE MINTING OF ICENIAN COINS START?

It is generally considered that the Norfolk Wolf A coins are the earliest of the coins in the study area with a regional distribution, which can therefore be ascribed to the Iceni. They are Gallo-Belgic derivatives, and in common with

British H and I in the north-east, they are considered to be derived from Gallo-Belgic C coins. Like British H and I, they weigh about 6.1gm and contain about 40% gold. However, they also show features such as a decorated exergual line which appears to be derived from Gallo-Belgic E coins – British I coins also show this (Hobbs 1996, 14). Their date is likely to relate to the dating of the later Gallo-Belgic E coins rather than the Gallo-Belgic C coins, the latter of which have recently been redated to the late second century BC to early first century BC (Haselgrove 1999, 134-6).

Traditionally, Gallo-Belgic E coins have been dated to the Gallic Wars c. 57-51 BC (Scheers 1977). However, the Gallo-Belgic E coins have also been redated to Haselgrove's Stage 3 (c.125-60 BC) with the comment that such uniface staters are often found in association with temples in Belgic Gaul of La Tene D2 onwards (c.90-30 BC) (Haselgrove 1999, 116-139). In other words, Haselgrove dates them rather earlier than Scheers.

Currently, Norfolk Wolf A coins are usually dated to around the mid first century BC (Hobbs 1996, 31). I have placed them in my Phase 5 (c.60-50 BC), which I consider both fits in with Haselgrove's new dating from Belgic Gaul and with numismatic evidence from Britain. They probably date to the earlier part of that phase, c.60 BC and we can regard this as a likely date for the start of minting by the Iceni.

However, it is possible that both Phases 4 and 5 may prove to start earlier than I have stated, and that the Norfolk Wolf A coins might prove similarly to have

started earlier. However if this is the case, I doubt that they would have been minted before 70 BC.

WHEN DID THE MINTING OF ICENIAN COINAGE CEASE?

The date of the last coins of the Iceni has been the subject of much debate, many scholars considering that various coins were minted after the Roman Conquest although there is no agreement as to which coins are last in the series (Allen 1970; Haselgrove 1987; Van Arsdell 1989). Gregory (1991a) considered it likely that Thetford was a post-Conquest minting site, although the stratigraphic evidence is not conclusive and the broken coin moulds on which he based this interpretation could very well be residual.

I consider it likely on numismatic grounds that Icenian coins were *not* minted after the Conquest c.AD 43. This is partly based on the uniformity of the composition of the late silver hoards (discussed in Chapter 3) which implies to me that there was a lengthy period of time when the coins could circulate, and partly on the condition of the coins in relation to others. For example, Kent and Burnett (1984) examined the 327 coins of the Lakenheath hoard and concluded that "the condition of the latest Icenian coins in the hoard is worse that that of the latest Roman, and suggest that the minting of Icenian silver ceased well before 60, perhaps even in 43". From my examination of a number of hoards, I agree with this observation. Additionally, the iconography of the Prasto coins which I consider among the last of the Icenian coins, also recalls coins of Caligula (AD 37-41) rather than later Roman Emperors.

Perhaps the most obvious evidence is negative. The historical evidence suggests that King Prasutagus the friendly king died around AD 60/1 and that he may have ruled for a long time. Yet coins of Prasto (assuming these can be equated with King Prasutagus) are extremely rare. Surely if he had been minting in any quantity after he came to power – as the earlier rulers Anted, Ece and Ecen were – then there would have been many more of his coins in the late silver hoards? Yet we find virtually none. His coins are very scarce, and rarely found hoarded (the two "hoards" from which they were found – Joist Fen and Fincham – are both unusual and could represent site losses rather than formal hoards). As they are so rare, one has to explain why they do not appear in most late Icenian silver hoards, especially as earlier Icenian rulers were minting in huge quantities.

This either suggests:

Model A: King Prasutagus came to power not long before his death, started to mint, but his coins did not have time to circulate much, hence their extreme rarity in the hoards.

Model B: King Prasutagus came to power some considerable time before his death, but only minted few coins before he stopped (for whatever reason), hence their extreme rarity in the hoards.

Model C: The coins of Prasto have nothing to do with King Prasutagus - as argued by Williams (2000) - and are imports to the area which is why they are rare in hoards.

The difficulty with model A is that one would then presume that there were other client kings before Prasutagus who would be minting coins which would be circulating. If this were the case then one would expect non-uniform hoard compositions (the theoretical basis for this was discussed in Chapter 3). Although it is possible that the coins of Prasto are modelled on Nero not Caligula, and are therefore late, Model A does not fit with the hoard evidence. For it to do so, there would need to be a gap in the minting, with the earlier Icenian issues ceasing and circulating evenly through the circulation pool, then the coins of Prasto being minted much later. Alternatively, there would have to be exceptionally fast rates of circulation in order to even out differences. None of this seems likely, although it must remain a possibility.

The difficulty with Model C is that coins of Prasto have only been found in northern East Anglia, which suggests that they circulated there and can be associated with the Iceni.

Model B is the one which best fits the evidence we have at present, and suggests that the minting of Icenian coins ceased around the Conquest. This conclusion is based on the iconography of his coins and the fact that we would be expecting other coins to have been minted post-Conquest, which would mean that the Icenian silver hoards should not have uniform compositions.

None of this is entirely satisfactory and does involve some special pleading. However, it seems at least a plausible explanation. What follows from this conclusion is that Prasutagus was king before the Conquest, and was a pro-Roman ruler who was allowed to stay in power after it. This would also fit in with the iconography of his coins which may show Caligula himself. It also explains the uniformity of the contents of Icenian coin hoards, and why the composition of the Roman coins in mixed Roman/Icenian hoards is much *less* uniform (this can be seen in my Phase E table in Chapter 3, where the latest dates of *denarii* in the 14 mixed hoards varies significantly), as new Roman types were being continually added to the circulation pool.

To conclude, it seems likely that Icenian coins were not minted after the occupation by the Romans at around the time of the Conquest. The evidence of the hoards, especially the mixed Roman and Icenian hoards, suggests that the Iceni were allowed to continue to *use* their indigenous coinage after the Conquest, and there was no requirement by the authorities for the Iceni to hand in their coins for reworking or recoining. Interestingly, such a requirement may have happened after the Boudican War otherwise one might have expected more Icenian silver to be found on early Roman sites.

CLIENT KINGS AND COINAGE AFTER AD 43.

Although we have three named post-Conquest British client rulers (Cogidubnus/Togidubnus, Cartimandua and Prasutagus), the only candidate for having minted coins is Prasutagus and his coins are extremely rare. It is

instructive to consider why this might be the case, as one might assume that that "friendly kings" would mint coins, particularly as Braund (1996) and Creighton (2000) have made good cases that pre-Conquest British kings such as Verica and Cunobeline were client kings, and they obviously did so. We can dismiss Cartimandua on the grounds that the Brigantes did not appear to mint coins – there would be no reason for her do so if there was no indigenous coinage tradition in her area. But Cogidubnus and Prasutagus are a different matter as both ruled over areas where there was a tradition of minting coins. But there appear to be no coins of the former (Bean 2000, 205) and the coins of Prasto – if we can equate them with King Prasutagus as I believe we can – are extremely rare (Chadburn 2006). Barrett goes so far as to indicate that this is a curious feature of Cogidubnus' reign as the right to mint was a jealously maintained privilege of client kings (Barrett 1981, 125).

Some explanation for this is necessary, but it does seem possible that there is a connection between the cessation of indigenous minting in an area and the *formal occupation* of an area by the Romans. Perhaps – apparently in common with the Jewish client kingdoms – British client kings may have been prevented from minting in silver and gold by some form of treaty (Ben-David 1973). Or perhaps there was another more prosaic reason, such as the fact that there were such large quantities of *denarii* coming into their kingdoms that they did not feel the need to continue minting. Whatever the reason, it does seem possible on the slender evidence we have to date, that *before* the Conquest of AD 43, pro-Roman rulers in Britain minted their own coins but that *after* they did not appear to.

This is in contrast to the evidence from Belgic Gaul where it appears that Belgic gold and silver continued to be minted after the Gallic Wars, many continuing to bear indigenous rather than Romanized images (Haselgrove 1999, 149). However, during the Augustan period when new Roman mints started in Gaul, indigenous coinages quickly became the exception when large amounts of Roman coinage started to circulate (*ibid,* 163).

THE EARLIER AND LATER CLIENT KINGDOMS OF THE ICENI.

It is very likely that the Iceni were a client kingdom before the Conquest of AD 43 (see evidence set out in Table 64 in Chapter 8). Given this, the terms Earlier and Later Client Kingdoms may be useful. It is unclear when the Earlier Client Kingdom started but it could have been as early as 54 BC. I consider that the Conquest of AD 43 is a useful break point, and use the term Later Client Kingdom to describe the period AD 43-61, when the Roman occupation of Britain commenced.

If the Earlier Client Kingdom started as early as 54 BC, then virtually the whole of the Icenian coinage was produced when the Iceni were allies of Rome. If that were the case, one might expect Roman imagery to be present on Icenian coinages in the way they are in other parts of Britain (Creighton 2000), whereas we only see this occurring in Phase 9.

However, in this as in many other aspects of material culture, the Iceni seem to have resisted overt expressions of Romanisation. They clearly had a very strong regional identity which manifests itself in a number of ways – for example, the production of Snettisham-style torcs; the production of Norfolk Wolf coins which are without parallel in British IA coinages; the lack of Romanised imports such as amphorae, and so on. Even their most Romanised coin – that of Prasto – also depicts a torc.

It seems more likely that their desired imports during both phases of the Client Kingdom was bullion in the form of coin, which was melted down and made into indigenous artefacts and coins. Roman coins certainly appear to have been imported in large quantities from 20 BC onwards.

THE DATES OF ICENIAN COINS.

The tables below summarise my conclusions on the dates of individual issues.

Table 35: Iron Age coin phases and Roman Emperors.

DATE	ROME	COIN PHASE	MAIN COIN TYPES
60 BC	59 BC – First Triumvirate. 58-51 BC – Gallic Wars	PHASE 5 c.60-50 BC	Norfolk Wolf A
50 BC 40 BC 30 BC	44 BC – Murder of Caesar. 43 BC – Second Triumvirate.	PHASE 6 c.50-20 BC	Norfolk Wolf B Snettisham Bury
20 BC 10 BC BC/AD	AUGUSTUS 27 BC-AD 14.	PHASE 7 c.20 BC-AD 10	Freckenham Irstead; Early B-H, P-H and F-H; Other B-H; Normal F-H.
AD 10 AD 20	TIBERIAS AD 14-37.	PHASE 8 c.AD 10-40	Anted(i); Ecen; Ece, Saenv, Aesv
AD 30 AD 40	CALIGULA AD 37-41. CLAUDIUS AD 41-54.	PHASE 9 c.AD 30-45	Prasto; Ale Sca; Aedi.
AD 50 AD 60	NERO AD 54-68	Minting of Icenian coins has ceased (during the Later Client Kingdom c.AD 43-61)	

Table 36: Phases and dates for Icenian coins.
(phase dates after Haselgrove 1987 with slight amendments)

PHASE	DATES	ICENIAN TYPES (after Chadburn)
5	c.60-50 BC	Early Uninscribed
6	c.50-20 BC	Middle Uninscribed
7	c.20 BC-AD 10	Late Uninscribed
8	c.AD 10-40	Early Inscribed
9	c.AD 30-45*	Late Inscribed

*NB Icenian coins continued *in use* from c.AD 40-60 but new types were unlikely to have been minted during the Later Client Kingdom (c. AD 43-61).

Table 37: Suggested dates for Icenian coins.

PHASE 5 - 60-50 BC EARLY UNINSCRIBED			
GOLD STATER	GOLD QUARTER	SILVER UNIT	SILVER FRACTION
Norfolk Wolf A	Norfolk Wolf A ¼ stater		

PHASE 6 - 50-20 BC MIDDLE UNINSCRIBED			
GOLD STATER	GOLD QUARTER	SILVER UNIT	SILVER FRACTION
Norfolk Wolf B			
Snettisham A Snettisham B Snettisham C Snettisham D Snettisham E	Snettisham ¼ stater 1 Snettisham ¼ stater 2 Snettisham ¼ stater 3	Bury A Bury B Bury C Bury D	

Table 37 (cont.): Suggested dates for Icenian coins.

PHASE 7 - 20 BC-AD 10 LATE UNINSCRIBED			
GOLD STATER	GOLD QUARTER	SILVER UNIT	SILVER FRACTION
Freckenham 1 Freckenham 2 Freckenham 3	Irstead ¼ stater 1 Irstead ¼ stater 2 Irstead ¼ stater 3	Early B-H Early F-H 1 Early F-H 2a Early F-H 2b Early F-H 3 Early F-H 4a Early F-H 4b Early F-H 5a Early F-H 5b Early F-H 6a Early F-H 6b Early F-H 7 Early P-H A Early P-H B Early P-H var	Early B-H fraction Early P-H fraction 1 Early P-H fraction 2
Freckenham 4		B-H A B-H B	 B-H fraction 1 P-H fraction 1 a-b P-H fraction types 2-7
		B-H C **Normal F-H A and B/C Normal F-H A variant	B-H fraction 2

Table 37 (cont.): Suggested dates for Icenian coins.

PHASE 8 - AD 10-40 EARLY INSCRIBED			
GOLD STATER	GOLD QUARTER	SILVER UNIT	SILVER FRACTION
		Can Dvro	
*Anted(i) stater		Anted(i) a-d Anted(i) var	Anted(i) fraction
*Ecen stater		+Ecen Ecen variant +Ed(n) +Ed(n) variant Triple Symbol a-b	Ecen fraction Ed(n) fraction Triple Symbol fraction
*Ece stater		Ece A a-b ++Ece B a-b ++Ece B (reversed) #Saenv #Aesv	Ece fraction Ece B (reversed)

PHASE 9 - AD 30-45 LATE INSCRIBED			
GOLD STATER	GOLD QUARTER	SILVER UNIT	SILVER FRACTION
		Prasto Ale Sca Aedi	

Table 37 – Key

F-H Face-Horse
B-H Boar-Horse
P-H Pattern-Horse

Obverse die links are shown as follows:

** Normal F-H types
* Anted, Ecen and Ece gold staters
+ Ecen, Ed(n) and Ed(n) variant types
++ Ece B and Ece B (reversed) types
# Saenv and Aesv types

Table 37 – notes.

I have split various coin types from each other within phases, denoting that I feel some coins were minted before others within a phase. For example, I feel the Norfolk Wolf B coins were minted before the Snettisham type staters; these coin types therefore belong to different sub-phases.

Reading horizontally across along these boxes denotes groups of coins which have broad contemporaneity. For example, I suggest that the Snettisham type staters and the Bury silver units were minted at roughly the same time - say within a ten year span – and within the same sub-phase.

Even within one of my sub-phases, there can be a minting sequence of coin types. This is further elaborated elsewhere in this chapter but chiefly applies to Bury and Freckenham types; Bury A and Freckenham 1 types are the earliest and the subsequent numbers and letters denote the likely chronological sequence.

By contrast, Early F-H 1 is certainly the earliest F-H type, but the sequence may end with Early F-H 5b, and the other numbers and letters do not signify a minting sequence, which has yet to be worked out.

In very rare cases, it has been possible to chronologically order coin types because of the die studies undertaken. For example, it seems almost certain that **all** Saenv coins were minted before Aesv coins.

Note that

a) I have kept all die-linked types within the same sub-phase

b) There is a partial chronological overlap between Phases 8 and 9

Table 38: Possible groupings of coinages.
This table is based on typology, die links, coin weights, circulation wear, and my suggested dates).

PHASE 7 – 20 BC-AD 10: ICENIAN LATE GOLD AND SILVER UNINSCRIBED		
GROUPING 1	**GROUPING 2**	**GROUPING 3**
Freckenham 1-3 Irstead 1-3 Early B-H	Early P-H types	Early F-H types
Freckenham 4 B-H A B-H B		
B-H C		Normal F-H A Normal F-H B/C
PHASE 8 – AD 10-40: ICENIAN EARLIER INSCRIBED		
Can Dvro		
Anted(i) types	Ece types Saenv Aesv	Ecen types Ed(n) types Triple Symbol
PHASE 9 – AD 30-45: ICENIAN LATER INSCRIBED		
Ale Sca?	Aedi?	Prasto?

CONCLUSIONS

Regional minting appeared to have started c.60 BC and finished c.45 AD or around the time of the Conquest, a period of around one hundred years. The numismatic evidence suggests that the Iceni can be defined as a political entity during this period, and no doubt were a defined tribe for some considerable time before that. They continued as a political entity as a *civitas* during the Roman period.

Icenian coinage fits well into the chronological framework proposed by Haselgrove for IA coinages in southern Britain (Haselgrove, 1987), although individual coins have been given different dates. However, Haselgrove's framework provides the best model we have for standardising the study of British IA coinage, which is one of the main recommendations of the 2001 archaeological research agenda for this period (James and Millett, 2001). If Haselgrove's chronology could be considered for all regional British coinages, then we would be considerably better off in our study of the LIA in Britain. Neither Van Arsdell (1989) nor Hobbs (1996) who have provided the most comprehensive surveys of LIA British coinage since Haselgrove's 1987 work have provided a sound chronological framework, and too few have considered Haselgrove's work subsequently, with the notable exception of Creighton (2000) who used it to good effect. We will never be able to move towards the standard practices used for Roman coinage in examining the flourit of archaeological sites, if we do not have a basic chronological framework to work with and this should be a priority for LIA coin studies in Britain.

CHAPTER 7

COIN MANUFACTURE, MINTING AND METROLOGY

METALLURGY

Analyses of Icenian coins

The Iceni minted in gold and silver alloys, the vast majority of their coins being silver-rich alloy. Apparently none were made of copper-rich alloy, although relatively large numbers of plated coins and copper alloy cores are known. Plated coins are further discussed below. Table 39 presents the results of all Icenian metallurgical analyses undertaken to date from a variety of sources, and Table 40 presents the means of metal content by coin type.

Most analyses which follow were undertaken by Peter Northover (University of Oxford) and Mike Cowell (British Museum) as part of their own research projects and not on my behalf – what follows is my synthesis of their results. The exception to this is the analyses of the later Icenian silver coins from Stonea Grange and Field Baulk. These were selected by me for analysis – Cowell and I published our results on these coins in 1996 as part of the research by the British Museum into Stonea Grange.

Table 39: Metallurgical analyses of Icenian coins.

Key to abbreviations

N1992	Northover 1992
C1992	Cowell 1992
C1996	Cowell 1996 (in Jackson and Potter 1996, most analyses in this reference are then summarised in Hobbs 1996)
H1996	Hobbs 1996 (analyses were all undertaken by Cowell)
Corr	Corroded coin; analysis may be faulty
Fr	Fraction
Int	Interior of coin

Note to Table 39

Those few analyses of coins which did not work because the coins were too badly corroded have not been included nor have I included those for any Icenian coins which could not be identified to at least the type level. Analyses of plated coins are given separately in Table 56. Means and where possible a second mean of only those coins analysed by Cowell have been given for the silver section (the reasons for this are given in detail later in this chapter).

GOLD STATERS (ordered by coin type and percentage of gold)

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
N.Wolf A	909	41.5	41.4	16.9	<0.2	<0.1	0.09	6.13	C1992
N.Wolf A	333	39.9	43.9	15.5	0.3	<0.1	<0.05	5.95	C1992
N.Wolf A	C058	39.4	45.5	14.9	-	tr	0.1	6.08	N1992
N.Wolf A	910	38.4	45.5	16.1	<0.2	<0.1	<0.05	5.45	C1992
		-----	-----	-----				-----	
MEAN		39.8	44.1	15.9				5.90	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
N.Wolf B	334	30.5	47.0	22.1	0.2	<0.1	0.5	5.75	C1992
N.Wolf B	387	26.1	46.1	27.7	<0.2	<0.1	0.1	5.75	C1992
N.Wolf B	RVA	22.9	44.7	32.1	-	0.02	0.05	-	N1992
N.Wolf B	263	20	31	41				5.34	H1996
N.Wolf B	222	17	43	37				5.60	H1996
N.Wolf B	228	17	27	52				5.70	H1996
N.Wolf B	218	16	42	40				5.60	H1996
N.Wolf B	259	15	28	51				5.55	H1996
N.Wolf B	237	14	41	44				5.51	H1996
N.Wolf B	244	14	38	45				5.73	H1996
N.Wolf B	253	13	39	45				5.55	H1996
N.Wolf B	272	13	29	52				4.63	H1996
N.Wolf B	258	13	24	57				5.61	H1996
N.Wolf B	221	12	37	47				5.61	H1996
N.Wolf B	260	11	30	53				5.44	H1996
N.Wolf B	255	10	36	52				5.56	H1996
N.Wolf B	269	10	28	57				5.51	H1996
N.Wolf B	265	7	8	80				4.62	H1996
		---	---	---				---	
MEAN		15.6	34.4	46.4				5.47	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Snett. A	3353	36	39	21				5.60	H1996
Snett. A	3355	35	35	28				5.67	H1996
		---	---	---				---	
MEAN		35.5	37	25.5				5.64	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Snett.B	3359	39	30	27				5.65	H1996
Snett.B	3357	36	33	28				5.59	H1996
		---	---	---				---	
MEAN		37.5	31.5	27.5				5.62	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Snett.C	3361	39	35	24				5.64	H1996
Snett.C	3362	39	31	29				5.59	H1996
		---	---	---				---	
MEAN		39	33	26.5				5.62	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Snett.D	3366	39	33	27				5.56	H1996
Snett.D	3371	38	27	34				5.55	H1996
		---	---	---				---	
MEAN		38.5	30	25.5				5.56	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Snett.E	3375	40	31	27				5.56	H1996
Snett.E	3379	39	35	24				5.61	H1996
Snett.E	3383	37	24	39				5.47	H1996
Snett.E	3377	31	24	43				5.41	H1996
		---	---	---				---	
MEAN		36.8	28.5	33.3				5.51	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Snett. ¼ 1	3421	40	34	24				1.11	H1996
Snett. ¼ 1	3420	39	36	22				1.09	H1996
		---	---	---				---	
MEAN		39.5	35	23				1.10	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Snett. ¼ 2	3422	37	31	32				1.10	H1996
Snett. ¼ 2	3426	37	32	30				1.11	H1996
Snett. ¼ 2	3429	37	37	24				1.11	H1996
Snett. ¼ 2	3431	38	31	28				1.09	H1996
Snett. ¼ 2	3433	29	22	45				0.98	H1996
		---	---	---				---	
MEAN		35.6	30.6	31.8				1.08	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Snett. ¼ 3	3435	40	38	19				1.08	H1996

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Freck. 1	189	38.3	29.3	31.0	1.4	<0.1	0.05	5.57	C1992
Freck. 1	193	37.5	32.3	29.8	0.4	2.1	<0.03	5.47	C1992
Freck. 1	194	36.2	29.5	33.8	0.5	<0.1	0.05	5.42	C1992
Freck. 1	190	34.9	29.9	34.1	1.1	<0.1	0.06	5.37	C1992
Freck. 1	191	34.0	30.8	34.9	0.3	<0.1	0.03	5.39	C1992
		---	---	---				---	
MEAN		36.2	30.4	32.7				5.44	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Freck. 2	197	41.4	19.3	39.1	0.2	<0.1	0.03	5.60	C1992
Freck. 2	198	41.0	24.8	33.9	0.3	0.1	<0.03	5.58	C1992
Freck. 2	199	40.6	10.9	47.8	0.3	0.3	0.04	5.64	C1992
Freck. 2	201	40.0	20.8	38.9	<0.2	<0.1	0.03	5.63	C1992
Freck. 2	196	39.5	20.3	40.0	0.2	<0.1	0.05	5.69	C1992
Freck. 2	195	39.1	18.1	42.7	<0.1	<0.1	<0.05	5.69	C1992
Freck. 2	3396	33	24	43				5.43	H1996
		---	---	---				---	
MEAN		39.2	19.7	40.8				5.61	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Freck. 3	3416	48	35	17				4.63	H1996
Freck. 3	3413	43	18	40				5.37	H1996
Freck. 3	207	41.3	20.1	38.2	0.3	0.1	0.03	5.52	C1992
Freck. 3	205	38.9	23.6	37.4	<0.1	<0.1	< 0.1	5.65	C1992
Freck. 3	210	38.9	22.2	38.6	0.3	<0.1	<0.03	5.28	C1992
Freck. 3	213	38.4	22.1	38.5	1.0	0.1	0.04	5.56	C1992
Freck. 3	211	38.3	24.5	36.8	0.4	<0.1	< 0.03	5.28	C1992
Freck. 3	202	38.1	25.0	35.4	1.3	0.1	0.06	5.41	C1992
Freck. 3	212	34.0	21.9	43.2	0.7	0.1	0.03	5.48	C1992
Freck. 3	203	33.2	25.1	40.7	0.9	<0.1	0.04	5.45	C1992
Freck. 3	209	32.0	21.5	44.8	1.5	0.1	0.04	5.50	C1992
Freck. 3	204	31.5	24.8	43.2	0.5	<0.1	< 0.1	5.53	C1992
		---	---	---				---	
MEAN		38.0	23.7	37.8				5.39	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Freck. 4	188	39.1	15.9	45.0	<0.1	<0.1	< 0.03	5.39	C1992
Freck. 4	186	36.8	13.7	46.1	3.3	<0.1	< 0.03	5.47	C1992
Freck. 4	184	36.7	15.3	48.0	0.1	<0.1	0.3	5.29	C1992
Freck. 4	3385	34	22	44				5.32	H1996
		---	---	---				---	
MEAN		36.7	16.7	45.8				5.37	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Anted(i)	280	33.9	16.0	49.7	0.4	<0.1	0.03	5.13	C1992

Key to abbreviations/coin types in gold section

Abbreviation	Chadburn number and coin type
N.Wolf A	20. Norfolk Wolf A
N.Wolf B	30. Norfolk Wolf B
Snett. A	35. Snettisham A
Snett. B	40. Snettisham B
Snett. C	45. Snettisham C
Snett. D	50. Snettisham D
Snett. E	55. Snettisham E
Snett. ¼ 1	60. Snettisham ¼ stater 1
Snett. ¼ 2	65. Snettisham ¼ stater 2
Snett. ¼ 3	70. Snettisham ¼ stater 3
Freck. 1	75. Freckenham 1
Freck. 2	80. Freckenham 2
Freck. 3	85. Freckenham 3
Freck. 4	90. Freckenham 4
Anted(i)	275. Anted(i) stater

Note to gold section

There appears to be an error in Cowell 1992 with the following reference which I have omitted from the above tables. This duplicates the BM accession number of another coin (which is referenced correctly) and the following reference is therefore uncertain:

Freck. 3	192	33.1	31.5	34.6	0.7	<0.1	0.03	5.45	C1992

SILVER (ordered by coin type and percentage of silver)

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
B-H A	C550	0.2	91.9	4.9	2.4	0.09	0.35	-	N1992
B-H A	FB30	< 0.3	43	56	<0.5	-	0.6	1.09	C1996
B-H A	FB28	< 0.3	42	56	1.5	-	<0.4	1.09	C1996
			---	---				---	
MEAN			59.0	39.0				1.09	
COWELL MEAN			42.5	56.0				1.09	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
B-H B	C512	0.5	93.2	5.2	0.1	0.08	0.70	-	N1992
B-H B	FB34	< 0.3	52	48	<0.5	-	<0.4	1.32	C1996
B-H B	FB35	< 0.3	51	49	<0.5	-	<0.4	1.17	C1996
			---	---				---	
MEAN			65.4	34.1				1.25	
COWELL MEAN			51.5	48.5				1.25	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
B-H C	AGC22	0.3	93.7	5	-	-	0.8	-	N1992
B-H C	AGC21	0.2	67.4	27.8	3.4	0.7	0.3	0.97	N1992
B-H C	AGC15	0.2	65	33.3	0.5	0.4	0.4	-	N1992
B-H C	FB18	< 0.3	46	54	< 0.5	-	< 0.4	1.19	C1996
B-H C	FB23	< 0.3	46	48	5.8	-	< 0.4	1.28	C1996
			---	---				---	
MEAN			55.2	33.6				1.15	
COWELL MEAN			46.0	51.0				1.15	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Can Dvro	C522	0.3	62.7	35.6	-	0.1	0.3	-	N1992
Can Dvro	FB36	< 0.3	51	49	<0.5	-	<0.4	1.25	C1996
			---	---				---	
MEAN			56.9	42.3				1.25	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
B-H fract2	C544	0.3	87	8.6	-	0.1	1.7	-	N1992

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
F-H A	FB78	<0.3	55	43	1.6	-	0.7	1.30	C1996
F-H A	FB41	<0.3	51	49	<0.5	-	<0.4	1.29	C1996
F-H A	FB75	<0.3	50	49	1.5	-	0.5	1.16	C1996
F-H A	FB60	<0.3	50	49	1.4	-	<0.4	1.29	C1996
F-H A	FB54	0.4	48	51	1.5	-	<0.4	1.28	C1996
F-H A	AGC17	0.2	45.6	51.8	1.6	0.2	0.5	-	N1992
			----	----				----	
MEAN			49.9	48.8				1.26	
COWELL MEAN			50.8	48.2				1.26	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
F-H B/C	C513	0.6	70	26.4	1.4	1.2	0.4	-	N1992
F-H B/C	AGC19	0.2	59.4	39.4	-	0.5	0.4	1.27	N1992
F-H B/C	FB109	< 0.3	59	41	0.7	-	<0.4	1.24	C1996
F-H B/C	AGC16	0.4	55.7	34.8	5	0.2	0.2	1.30	N1992
F-H B/C	AGC18	0.1	54.2	41.9	2.8	0.1	0.4	1.31	N1992
F-H B/C	FB89	< 0.3	54	45	0.8	-	0.4	1.29	C1996
F-H B/C(int)	C514	0.2	51.3	46.6	1.4	0.2	0.2	-	N1992
F-H B/C	FB106	< 0.3	50	50	<0.5	-	0.4	1.26	C1996
F-H B/C	AGC20	0.3	49.6	47.4	1.6	0.5	0.4	1.34	N1992
F-H B/C	FB66	< 0.3	49	49	1.6	-	0.5	1.25	C1996
F-H B/C	FB88	0.4	48	48	3.8	-	0.4	1.30	C1996
F-H B/C	FB101	< 0.3	47	53	<0.5	-	<0.4	1.23	C1996
F-H B/C	FB113	< 0.3	47	51	1.6	-	<0.4	1.26	C1996
			----	----				----	
MEAN			53.4	44.1				1.28	
COWELL MEAN			50.1	48.1				1.26	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
P-H A	SG20	< 0.3	33	62	4.9	-	0.4	0.98	H1996

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
P-H B	C515	0.4	88.8	9.8	0.5	0.2	0.3	-	N1992
P-H B	FB1	<0.3	48	52	<0.5	-	<0.4	1.22	C1996
			----	----				----	
MEAN			68.4	30.9				1.22	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Anted b	FB226	0.3	46	54	0.4	-	<0.4	1.18	C1996
Anted b	FB213	<0.3	41	59	<0.5	-	<0.4	1.29	C1996
			---	---				---	
COWELL MEAN			43.5	56.5				1.24	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Anted c	FB268	0.3	47	52	0.8	-	<0.4	1.23	C1996
Anted c	FB281	<0.3	42	58	<0.5	-	<0.4	1.27	C1996
			---	---				---	
COWELL MEAN			44.5	55				1.25	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Anted u/c	C517	0.3	71	27.8	-	0.2	0.5	-	N1992
Anted u/c (corr)	C519	0.02	54.7	43	1.4	0.2	0.5	-	N1992
Anted u/c	AGC9	0.3	45.5	53.6	0.03	0.2	0.2	1.20	N1992
Anted u/c	AGC12	0.2	44.9	53	1.2	0.2	0.4	1.23	N1992
Anted u/c	C518	0.1	39.8	58.9	0.9	0.1	0.1	-	N1992
			---	---				---	
MEAN			51.2	47.3				1.22	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Anted fr.	AGC13	0.3	60.1	39	-	0.2	0.1	0.55	N1992

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Ecen	AGC1	0.2	50.7	47.3	0.3	0.2	0.6	1.29	N1992
Ecen	FB493	0.5	49	50	0.6	-	0.4	1.28	C1996
Ecen	FB405	<0.3	48	52	<0.5	-	<0.4	1.23	C1996
Ecen	AGC6	0.3	43.2	56.5	0.1	0.1	0.1	1.27	N1992
			---	---				---	
MEAN			47.7	51.5				1.27	
COWELL MEAN			48.5	51				1.26	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Ed(n)	FB671	<0.3	49	50	0.7	-	0.4	1.25	C1996
Ed(n)	FB670	0.5	47	52	0.6	-	0.6	1.26	C1996
			---	---				---	
COWELL MEAN			48	51				1.26	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Ed(n) var.	AGC2	0.4	49.1	50.3	-	tr	0.1	1.27	N1992

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Symbol a	AGC5	0.3	42.4	55.9	0.7	0.1	0.4	1.04	N1992

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Symbol b	FB584	0.4	47	52	0.7	-	<0.4	1.25	C1996
Symbol b	FB585	0.3	42	58	0.4	-	<0.4	1.30	C1996
Symbol b	AGC4	0.2	40.3	58.2	0.3	0.3	0.5	1.12	N1992
			---	---				---	
MEAN			43.1	56.1				1.22	
COWELL MEAN			44.5	55				1.28	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Ece A b	FB711	< 0.3	51	48	0.7	-	0.5	1.25	C1996
Ece A b	FB701	< 0.3	49	51	<0.5	- <	0.4	1.27	C1996
			---	---				---	
COWELL MEAN			50	49.5				1.26	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Ece A u/c (interior)	C520	0.4	73.4	24.5	0.9	0.1	0.4	-	N1992
Ece A u/c	C521	0.3	49.9	48.6	0.6	0.2	0.4	-	N1992
			---	---					
MEAN			61.7	36.6					

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Ece B b	FB806	<0.3	46	54	<0.5	-	<0.4	1.30	C1996
Ece B b	FB803	<0.3	44	55	0.6	-	<0.4	1.26	C1996
COWELL MEAN			45	54.5				1.28	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Ece B u/c	AGC7	0.3	57.7	41.2	0.3	0.1	0.3	1.25	N1992

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Ece B(rev)	FB833	<0.3	48	52	<0.5	-	<0.4	1.28	C1996
Ece B(rev)	FB827	0.5	47	52	0.5	-	<0.4	1.22	C1996
COWELL MEAN			47.5	52				1.25	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Aesv	C555	0.4	65.9	31.9	0.6	0.5	0.7	-	N1992
Aesv	FB842	0.5	50	49	0.6	-	<0.4	1.28	C1996
Aesv	FB847	<0.3	48	52	<0.5	-	<0.4	1.27	C1996
MEAN			54.6	44.3				1.28	
COWELL MEAN			49	50.5				1.28	

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
Saenv	FB862	<0.3	47	52	0.5	-	0.4	1.24	C1996
Saenv	FB864	0.4	43	56	0.7	-	<0.4	1.25	C1996
Saenv	AGC8	0.2	40	58.8	0.4	0.3	0.2	1.34	N1992
MEAN			43.3	55.6				1.28	
COWELL MEAN			45	54				1.25	

Key to abbreviations/coin types in silver section

Abbreviation	Chadburn number and coin type
B-H A	215. Boar-Horse A
B-H B	220. Boar-Horse B
B-H C	225. Boar-Horse C
Can Dvro	230. Can Dvro
B-H fract2	245. Boar-Horse fraction 2
F-H A	185. Normal Face-Horse A
F-H B/C	195. Normal Face-Horse B/C
P-H A	250. Early Pattern-Horse A
P-H B	255. Early Pattern-Horse B
Anted a	280. Anted(i): sub-type a
Anted b	285. Anted(i): sub-type b
Anted c	290. Anted(i): sub-type c
Anted d	295. Anted(i): sub-type d
Anted u/c	Anted(i): sub-type unclassified
Anted (fr)	305. Anted(i) fraction
Ecen	315. Ecen
Ed(n)	330. Ed(n)
Ed(n) var	335. Ed(n) variant
Symbol a	345. Triple Symbol: sub-type a
Symbol b	350. Triple Symbol: sub-type b
Ece A b	370. Ece A: sub-type b
Ece A u/c	Ece A: sub-type unclassified
Ece B b	380. Ece B: sub-type b
Ece B u/c	Ece B: sub-type unclassified
Ece B (rev)	390. Ece B (reversed)
Saenv	400. Saenv
Aesv	405. Aesv

Table 40: Means of gold, silver and copper in various Icenian coin types (ordered by coin type).

GOLD SERIES			
Chadburn coin type	**% of gold**	**% of silver**	**% of copper**
Norfolk Wolf A	39.8	44.1	15.9
Norfolk Wolf B	15.6	34.4	46.4
Snettisham A	35.3	37.0	24.5
Snettisham B	37.5	31.5	27.5
Snettisham C	39.0	33.0	26.5
Snettisham D	38.5	30.0	25.5
Snettisham E	36.8	28.5	33.3
Snettisham ¼ 1	39.5	35.0	23.0
Snettisham ¼ 2	35.6	30.6	31.8
Snettisham ¼ 3	40	38	19
Freckenham 1	36.2	30.4	32.7
Freckenham 2	39.2	19.7	40.8
Freckenham 3	38.0	23.7	37.8
Freckenham 4	36.7	16.7	45.8
Anted(i)	33.9	16.0	49.7

SILVER SERIES		
Chadburn coin type	**% of silver**	**% of copper**
Boar-Horse A	42.5	56.0
Boar-Horse B	51.5	48.5
Boar-Horse C	46	51
Can Dvro	51	49
Boar-Horse fraction 2	87	8.6
Normal Face-Horse A	50.8	48.2
Normal Face-Horse B/C	50.1	48.1
Early Pattern-Horse A	33	62
Early Pattern-Horse B	48	52
Anted(i) b	43.5	56.5
Anted(i)c	44.5	55
Anted(i) sub-type unclassified	51.2	47.3
Anted fraction	60.1	39
Ecen	48.5	51
Ed(n)	48	51
Ed(n) var	49.1	50.3
Triple Symbol a	42.4	55.9
Triple Symbol b	44.5	55

SILVER SERIES (CONT.)		
Chadburn coin type	**% of silver**	**% of copper**
Ece A b	50	49.5
Ece A unclassified	61.7	36.6
Ece B b	45	54.5
Ece B unclassified	57.7	41.2
Ece B (rev)	47.5	52
Aesv	49	50.5
Saenv	45	54

Note

Abbreviations are as in Table 39. Cowell means are used where possible.
Shading denotes analyses are derived from Northover 1992.

Sources of metal

It is worth reminding ourselves that all metal used in Icenian coins had to be imported from outside their territory.

a) Gold

Northover argues convincingly (1992, 237) that in approximately the seventh and sixth centuries B.C., during the early Iron Age, the use and probably the extraction of gold ceased in the British Isles with a consequent loss of gold-working skills. This is important for it means that all British gold coins use imported gold for their manufacture, and that British goldsmiths had to learn their craft from abroad.

Most work undertaken so far suggests that there were several sources for the gold in British gold coins. Cowell has suggested that the British gold series initially derived most of its precious metal from the Gallo-Belgic series; although all the Icenian gold coins contain less gold than Gallo-Belgic ones (see Cowell 1992, Table 2, 217 and compare with Table 42 below for gold content). Cowell also suggests that there were several main phases in the development of the British gold coinage alloy (Cowell, 1992, 232), discussed further below. Both Cowell (1992, 232) and Northover (1992, 253) agree that at some stage there was a change in source material for British gold coins from culled Gallo-Belgic coins to refined gold, probably of Roman origin. Cowell (*ibid*) suggests that by the end British gold coins were manufactured to an approximate "gold standard" which must mean that they were made from refined gold.

Although Cowell (1992, 232) considered that this general model does not apply so well to the Iceni, as there was seemingly more variability in the Icenian and Corieltauvian series and less evidence for a "gold standard", my re-examination of all analyses including more recent ones, indicates that a "gold standard" of sorts does seem to be introduced. It seems to be the case that the Norfolk Wolf and probably the Snettisham types were made from debased Gallo-Belgic coins, whereas it is probably the case that the Icenian gold types from Freckenham type 2 onwards were made from refined gold, as seen in Table 41. Moreover from this point onwards, each gold issue became successively more debased which would also imply a tighter control over the gold content using refined gold (pers. comm. Cowell) although the picture is

perhaps more complicated than the results suggest in Table 41 (see also below).

Table 41: Gold content in Icenian coin types with date phase.

Chadburn coin type	% of gold	Phase
Norfolk Wolf A	39.8	5
Norfolk Wolf B	15.6	6
Snettisham A	35.3	6
Snettisham B	37.5	6
Snettisham C	39.0	6
Snettisham D	38.5	6
Snettisham E	36.8	6
Snettisham ¼ 1	39.5	6
Snettisham ¼ 2	35.6	6
Snettisham ¼ 3	40	6
Freckenham 1	36.2	6
Introduction of refined gold as source, circa 20 B.C.?		
Freckenham 2	39.2	7
Freckenham 3	38.0	7
Freckenham 4	36.7	7
Anted(i)	33.9	8

It is worth noting, however, that there must have been other sources of gold coming into East Anglia between c. 100-50 B.C. as the Ipswich torcs contain higher levels of gold than Gallo-Belgic A coins (Northover 1992, 275).

b) Torcs

The famous gold torcs of the Iceni must be mentioned, as although they are outside the scope of this study, the gold supply for coins and torcs does seem to be inextricably linked. Northover's analyses of torcs and coins concludes that the two groups of metal are interchangeable and that coins were an

important source of metal for torcs (Northover 1992, 272), including the Norfolk Wolf B types which may have been used to make wire-twisted torcs.

Northover also shows that the Snettisham torcs were not made from alloys based on red golds (which probably came from imported fine gold from Romanised Gaul) but from another source of gold. He considers that the ending of the manufacture of Snettisham torcs and the introduction of the red-gold alloys were roughly contemporary events (Northover 1992, 276). However, my dating of the coinage seems to indicate that these were not contemporary events – refined gold seems to have been introduced c. 20 B.C. whereas the torcs were probably manufactured before c. 70 B.C. (Stead 1991). This time difference may explain why the torcs did not contain this new alloy (unlike some Icenian gold coin types which did use it), despite the fact that there was clearly a shortage of gold during the time the torcs were made (Northover 1992, 269).

A more general gold shortage over time is also apparent when looking at the coins; Icenian gold coins are quite rare and it appears that the Iceni never minted the same quantity of gold coins as some other tribes. The most numerous types seem to be the Norfolk Wolf B types, which perhaps could be a large issue as they are so heavily debased. (Also circulating at this time were quantities of Gallo-Belgic E coins which seem to have been used alongside the native currency, and which are also quite numerous.)

However, after this period, gold coins become quite rare. The Snettisham and Freckenham types are mostly known only from a handful of hoards, and the Anted, Ecen and Ece types are exceedingly rare.

It is possible that this apparent shortage of gold is caused by the Icenian gold supplies being mainly made into torcs. Although we have little evidence for torcs being manufactured after the first century B.C., it is noteworthy that Boudica's "invariable attire" included "around her neck … a large golden necklace" which almost certainly refers to a gold torc (Cassius Dio. *A History of Rome*). It is possible, perhaps even probable, that the Iceni chose to invest their gold in torcs for their elite – royal regalia? The rarity of these items would mean we would be very fortunate to recover them, and it might therefore appear as though there was little or no gold in this part of the world. Instead, the Iceni chose to issue a vast silver coinage from c. 50 B.C onwards.

c) Silver

Silver comes to Britain in the LIA, in the first half of the first century BC (Northover 1992, 255). Prior to that it is virtually unknown, and there is little evidence about its sources as very few Gaulish silver artefacts have been analysed. Northover suggests that Roman silver was the source of the silver in Atrebatic and Trinovantian coinages, but is less certain about the sources of Icenian silver (Northover *ibid*), although the direct or indirect acquisition of Roman silver must surely have been a factor. What we do know is that the

Iceni had access to large quantities of it, given their enormous output of silver coins.

In Chapter 3 a conservative estimate was made that 5 million silver Icenian coins were coined between c. 20BC and 45AD (i.e. during the c.65 years represented by my phases 7, 8 and 9) representing an output of around 77,000 coins per year. Over 3,000 kilograms of silver would have been needed to manufacture these 5 million silver alloy coins, so clearly the Iceni had access to huge quantities of silver (silver was also used in large quantities in the manufacture of torcs).

Given that there seems to be a relationship (possibly even an exchange rate of sorts) between Roman *denarii* and the later Icenian silver units (discussed below), it may be that *denarii* were the principal source of the silver for the Icenian silver units. Further work needs to be done to establish the source of the silver.

d) Copper and copper alloys

Cowell and Northover disagree as to whether copper is added to gold coins in the form of copper or copper alloy. Cowell (1992, 225) considers that a much larger proportion of Icenian coins contain detectable amounts of tin compared with other tribal coinages, which means that the majority of copper added to the alloy was in the form of tin bronze. By contrast, Northover (1992, 247) considers that the base metal addition to these coins is still a mixture of silver

and copper with no bronze or tin added. Clearly further analytical work is needed here.

e) Other evidence

Although not used directly to manufacture coins, it is worth mentioning a Gallo-Roman shipwreck discovered in 1983 in the "Sept Iles" off the Armorican coast of France which contained 271 pure lead ingots, some which are inscribed with the names of two British *civitates* - the Brigantes and the Iceni. Most of the ingots were inscribed using stamps impressed into the cooling lead; fourteen ingots were inscribed BRIGANTES or similar, and five ICENES or similar. Unfortunately, very few datable finds were found with the wreck, the exception being some tegulae made of Armorican clay which presumably must date to the Gallo-Roman period.

It might appear from the evidence of the Armorican clay tiles, that the lead was on its way *to* Britain, on the grounds that it would seem unlikely to be importing roofing tiles which could have been made more locally. In this scenario, the ingots were presumably destined for the Brigantes and Iceni.

Alternatively, following the usual pattern of ingots being stamped with their place of production, if the ingots came *from* the Icenian *civitas*, then the Iceni were presumably acting as middlemen, as lead is not found locally (and perhaps the tiles were not being imported but were simply ballast). Boon (1991) favours this latter interpretation and suggests that the find tells us little

about primary metal production in Britain, only of the salvage of manufactured lead. Interestingly both the Brigantian and Icenian ingots had a very similar metallugical composition. Space does not permit further discussion on this fascinating wreck and its cargo, but a fuller description is given in L'Hour (1987).

Discussion of metallurgical results – gold series

a) General

Cowell has shown from an analytical survey of the Gallo-Belgic series that the major types are linked by a common debasement mechanism which seems to involve successive additions of a fixed proportion of silver and copper. Cowell identified a trend line for this debasement which indicated that the proportions of silver to copper were about 2:1 (Cowell 1992, 217).

Cowell has also looked at the debasement of Iron Age British gold coins and has concluded that there were several phases in the general development of the coinage alloy, with earlier gold issues generally being more silver-rich than later issues. There was a dramatic change in the alloy when gold became debased mainly with copper or copper-rich alloys. All the regional types follow this trend except the Durotriges (Cowell 1992, 232-3).

In a final phase the coinage in all regions except the south-west stabilise at a specific fineness or "standard" gold content. This must have been achieved by

starting with refined gold rather than recycled coinage; in most regions the "standard" was about 40%. However, the Iceni and Corieltauvi have a lower gold content (35% and 33% respectively) and also a greater degree of variability, implying less control over the metal content of the coins (Cowell 1992, 232-3). Since Cowell wrote these conclusions, more analyses have been undertaken, and it is likely that some of the later gold Icenian types were more tightly controlled in terms of the fineness.

Northover's work also shows that the supply of gold changed, indicating that the "analysis of [British] gold coins shows a major change in alloy type at some point after the Gallic War. This appears to be related to a major switch in the supply of gold from the natural gold incorporated into Gallo-Belgic coinage to the use of refined gold of Roman origin" (Northover 1992, 253).

Table 41 above shows that this switch from the use of recycled Gallo-Belgic coins to the use of refined gold appears to have come at the beginning of Phase 7 in Icenian coins, possibly around 20 B.C. Before this period, the gold content is quite variable and does not appear to relate particularly to chronology (even excepting the Norfolk Wolf B types which are particularly debased).

However, after this period, we have a typological and chronological sequence of Freckenham 2,3,4 and finally Anted(i), which appears to be also matched by a continuous debasement of the coinage, with each successive issue being baser. This does not appear to be a chance sequence, and presumably could only have been achieved by the introduction of refined and pure gold. Thus,

the introduction of refined gold probably came around the beginning of Phase 7 in Icenian coins. This is an important development, as it allowed the issuing authorities and/or moneyers to control the gold content of the coins. It is surely significant that each issue became successively more base, perhaps indicating a high degree of centralised control over the production of the coinage. It would be fascinating to analyse more of the Anted(i) staters which are now known to exist as well as the very rare Ecen and Ece staters.

The only proviso to this model is that the Freckenham 3 types, which are almost certainly later than the Freckenham 2 types on typological grounds (Freckenham 2 dies are well-engraved whereas the Freckenham 3 types are far cruder) are a very variable group in terms of gold content; the implications of this are discussed further below.

It is the silver content which appears to be the best indicator of the chronology of the uninscribed Icenian gold types (see Tables 43 and 46 below, as opposed to the tables showing the series ordered by copper and gold content). This was also noted by Cowell with more limited data (Cowell 1992, 233). The match between my presumed chronology of Icenian types and the silver content metallurgical results is striking.

b) Norfolk Wolf types

The Norfolk Wolf types appear to be earlier as both types are silver-rich, although type B is very debased in terms of its gold content. The Gallo-Belgic

debasement trend line identified by Cowell (1992) appears to continue into the British gold series, with the Norfolk Wolf types both being close to the trend line, despite being quite different in composition. Northover (1992, 247) also shows that although Norfolk Wolf B coins are very debased – amongst the most debased Icenian gold coins yet recovered – the base metal addition is a mixture of silver and copper, with no admixture of tin or bronze. This is a very variable type in terms of its gold content, and there are also large numbers of very base and plated coins.

c) Snettisham types

The Snettisham types have been analysed and these appear to fall between the Freckenham types and the Norfolk Wolf types in terms of silver content. However, they are still relatively silver-rich and the variability of their gold content also places them earlier in the sequence – this is also matched by the typological evidence.

d) Freckenham types

I have identified four Freckenham types on typological grounds, but these also appear to divide into four metallurgical groups (see Tables 39 and 40). Although these coins are apparently circulating at the same time, there seems to be a chronological sequence suggested by the different designs, which may also be confirmed by the metallugical analyses. Cowell discusses three major sub-types of British N (Freckenham types) following the typlogical division of

the series by Allen. However it is interesting that one can clearly distinguish four, not three, Freckenham groups on Cowell's ternary diagram (Cowell 1992, Figure 7) giving further weight to my division of the Freckenham types.

Cowell has identified a dramatic change in the alloy when British gold became debased mainly with copper or copper-rich alloys (Cowell 1992, 232). This appear to occur in the Icenian series after Freckenham 2. He has also shown that the Freckenham types exhibit a small range in gold content, but a widely varying content in copper and silver (1992, 222). The analyses by Northover (1992) also show this with the exception of the Freckenham 3 type (see Table 39).

Cowell therefore suggests that the Freckenham series was all produced to an approximate standard of fineness not by the debasement of culled finer coins which were made of natural gold, but by alloying refined gold with varying proportions of silver and copper (or bronze). I agree this up to a point, but I would place my Freckenham 1 type as being earlier and having far more in common both typlogically and metallurgically with the Snettisham types, including having a nearly uniface obverse design. But it does look as though the Freckenham 2 types are of a different metallurgical composition to the earlier gold coins, and might use refined gold as their source of gold. This is shown in Table 41 above.

Freckenham 1 (mean 36% gold; 30% silver) has a similar although slightly lower gold content that the apparently later Freckenham 2 (mean 39% gold;

20% silver). However, it has a higher silver content, and overall, and higher precious metal content. As we have seen, this is often an indicator of an earlier date. It is rather crudely cut, like the later Snettisham staters, and has an almost identical metallurgical content to Snettisham quarter stater 2.

As we have seen, the Freckenham 2 types appear to mark a new standard. The dies are well cut, and very different from the preceding Freckenham 1 staters (the die engraving is discussed below). However, the gold content is higher, but from this point onwards, all issues become successively baser *in a chronological sequence.* It is this type which I believe could have been made from refined gold for the first time.

The Freckenham 3 types, which are almost certainly later than the Freckenham 2 types on typological grounds and indeed appear to copy Freckenham 2 designs, are quite variable in gold content. They do not look as though they were minted to a specific standard, and it almost looks as though (if my model is correct) that having introduced refined gold for the Freckenham 2 types, the mint decided to use its last parcel of Gallo-Belgic derived alloy for the Freckenham 3 types. This is not an entirely satisfactory explanation and further work and analyses are needed to clarify the series. Freckenham 3 types (mean 38% gold; 24% silver) have a higher silver content than the apparently later Freckenham 4 types (mean 37% gold; 17% silver; 46% copper). The only analysis we have for an Anted(i) stater is 34% gold; 16% silver, 50% copper, and this bears a strong similarity to Freckenham 4, only the Anted(i) type has less gold and is presumably later. This tends to

confirm that Freckenham 4 is not the "Early Type" stater as suggested by most other scholars (Allen 1970; Haselgrove 1987; Van Arsdell 1989; Hobbs 1996) but is in fact the latest of the Freckenham types (as discussed in Chadburn 1991b).

Table 42: Icenian gold series sorted by mean gold content.

Chadburn coin type	% of gold	% of silver	% of copper
Snettisham ¼ 3	40	38	19
Norfolk Wolf A	39.8	44.1	15.9
Snettisham ¼ 1	39.5	35.0	23.0
Freckenham 2	39.2	19.7	40.8
Snettisham C	39.0	33.0	26.5
Snettisham D	38.5	30.0	25.5
Freckenham 3	38.0	23.7	37.8
Snettisham B	37.5	31.5	27.5
Snettisham E	36.8	28.5	33.3
Freckenham 4	36.7	16.7	45.8
Freckenham 1	36.2	30.4	32.7
Snettisham ¼ 2	35.6	30.6	31.8
Snettisham A	35.3	37.0	24.5
Anted(i)	33.9	16.0	49.7
Norfolk Wolf B	15.6	34.4	46.4

Table 43: Icenian gold series sorted by mean silver content.

Chadburn coin type	% of silver	% of gold	% of copper
Norfolk Wolf A	44.1	39.8	15.9
Snettisham ¼ 3	38	40	19
Snettisham A	37.0	35.3	24.5
Snettisham ¼ 1	35.0	39.5	23.0
Norfolk Wolf B	34.4	15.6	46.4
Snettisham C	33.0	39.0	26.5
Snettisham B	31.5	37.5	27.5
Snettisham ¼ 2	30.6	35.6	31.8
Freckenham 1	30.4	36.2	32.7
Snettisham D	30.0	38.5	25.5
Snettisham E	28.5	36.8	33.3
Freckenham 3	23.7	38.0	37.8
Freckenham 2	19.7	39.2	40.8
Freckenham 4	16.7	36.7	45.8
Anted(i)	16.0	33.9	49.7

Table 44: Icenian gold series sorted by mean copper content (lowest first).

Chadburn coin type	% of copper	% of gold	% of silver
Norfolk Wolf A	15.9	39.8	44.1
Snettisham ¼ 3	19	40	38
Snettisham ¼ 1	23.0	39.5	35.0
Snettisham A	24.5	35.3	37.0
Snettisham D	25.5	38.5	30.0
Snettisham C	26.5	39.0	33.0
Snettisham B	27.5	37.5	31.5
Snettisham ¼ 2	31.8	35.6	30.6
Freckenham 1	32.7	36.2	30.4
Snettisham E	33.3	36.8	28.5
Freckenham 3	37.8	38.0	23.7
Freckenham 2	40.8	39.2	19.7
Freckenham 4	45.8	36.7	16.7
Norfolk Wolf B	46.4	15.6	34.4
Anted(i)	49.7	33.9	16.0

Table 45: Possible groupings of Icenian gold types by mean gold content (groups are defined by a jump of 3% or more in gold content).

Chadburn coin type	% of gold	% of silver	% of copper
Snettisham ¼ 3	40	38	19
Norfolk Wolf A	39.8	44.1	15.9
Snettisham ¼ 1	39.5	35.0	23.0
Freckenham 2	39.2	19.7	40.8
Snettisham C	39.0	33.0	26.5
Snettisham D	38.5	30.0	25.5
Freckenham 3	38.0	23.7	37.8
Snettisham B	37.5	31.5	27.5
Snettisham E	36.8	28.5	33.3
Freckenham 4	36.7	16.7	45.8
Freckenham 1	36.2	30.4	32.7
Snettisham ¼ 2	35.6	30.6	31.8
Snettisham A	35.3	37.0	24.5
Anted(i)	33.9	16.0	49.7
Norfolk Wolf B	15.6	34.4	46.4

Table 46: Possible groupings of Icenian gold types by mean silver content (groups are defined by a jump of 3% or more in silver content) with Chadburn date phase.

Chadburn coin type	% of silver	% of gold	% of copper	Chadburn phase
Norfolk Wolf A	44.1	39.8	15.9	5
Snettisham ¼ 3	38	40	19	6
Snettisham A	37.0	35.3	24.5	6
Snettisham ¼ 1	35.0	39.5	23.0	6
Norfolk Wolf B	34.4	15.6	46.4	6
Snettisham C	33.0	39.0	26.5	6
Snettisham B	31.5	37.5	27.5	6
Snettisham ¼ 2	30.6	35.6	31.8	6
Freckenham 1	30.4	36.2	32.7	6
Snettisham D	30.0	38.5	25.5	6
Snettisham E	28.5	36.8	33.3	6
Freckenham 3	23.7	38.0	37.8	7
Freckenham 2	19.7	39.2	40.8	7
Freckenham 4	16.7	36.7	45.8	7
Anted(i)	16.0	33.9	49.7	8

Table 47: Possible groupings of Icenian gold types based on mean copper content (groups are defined by a jump of 3% or more in copper content).

Chadburn coin type	% of copper	% of gold	% of silver
Norfolk Wolf A	15.9	39.8	44.1
Snettisham ¼ 3	19	40	38
Snettisham ¼ 1	23.0	39.5	35.0
Snettisham A	24.5	35.3	37.0
Snettisham D	25.5	38.5	30.0
Snettisham C	26.5	39.0	33.0
Snettisham B	27.5	37.5	31.5
Snettisham ¼ 2	31.8	35.6	30.6
Freckenham 1	32.7	36.2	30.4
Snettisham E	33.3	36.8	28.5
Freckenham 3	37.8	38.0	23.7
Freckenham 2	40.8	39.2	19.7
Freckenham 4	45.8	36.7	16.7
Norfolk Wolf B	46.4	15.6	34.4
Anted(i)	49.7	33.9	16.0

Table 48: Possible groupings of Icenian gold types based on mean gold and silver values combined, along with the proposed phase (groups are defined by a jump of 3% or more).

Chadburn coin type	% of gold and silver combined	% of copper	Chadburn phase
Norfolk Wolf A	83.9	15.9	5
Snettisham ¼ 3	78	19	6
Snettisham ¼ 1	74.5	23.0	6
Snettisham A	72.3	24.5	6
Snettisham C	72	26.5	6
Snettisham B	69	27.5	6
Snettisham D	68.5	25.5	6
Freckenham 1	66.6	32.7	6
Snettisham ¼ 2	66.2	31.8	6
Snettisham E	65.3	33.3	6
Freckenham 3	61.7	37.8	7
Freckenham 2	58.9	40.8	7
Freckenham 4	53.4	45.8	7
Norfolk Wolf B	50	46.4	6
Anted(i)	49.9	49.7	8

Discussion of metallurgical results – silver series

a) General

The silver series results are perhaps less conclusive than the gold series results, varying as they do between Northover's 1992 analyses, where the silver content is often high and Cowell's work (Cowell 1996), where the silver content is usually around 50%. Northover (pers. comm 2004) has indicated

that in part this is due to some coins becoming silver enriched on the outer parts i.e. not just a surface enrichment. Additionally, Northover's analyses were often on coins found singly. By contrast, all of Cowell's silver analyses were carried out on the coins from the Field Baulk hoard, a deposit which was effectively sealed for around 1900 years. This goes a long way to explaining the large differences which exist between some of Cowell's and Northover's silver analyses, which is particularly marked in the silver Boar-Horse types. For this reason, I have calculated means of all coins and then a second mean of those coins analysed by Cowell, as these appear more consistent for the reasons outlined above. Further more detailed analytical work is now needed on the silver series, and some such work is now underway (Megan Davies pers.comm.)

However, despite these differences, the analyses we have are still extremely useful. For example, it can be seen that from the results in Table 40 that there is a small but statistically significant drop in the silver content between the two major groups of uninscribed silver issues (Boar-Horse and Face-Horse types) and the inscribed silver types (Pattern-Horse types such as Anted and Ecen), and that this is very unlikely to be the result of chance (Cowell 1996, 270). This indicates that there is a small debasement of the series, although whether this itself is the result of chance is still open to debate (Cowell *ibid*).

Table 49: Icenian silver series sorted by mean silver content.

Chadburn coin type	% of silver	% of copper
Boar-Horse fraction 2	87	8.6
Ece A unclassified	61.7	36.6
Anted fraction	60.1	39
Ece B unclassified	57.7	41.2
Boar-Horse B	51.5	48.5
Anted(i) sub-type unclassified	51.2	47.3
Can Dvro	51	49
Normal Face-Horse A	50.8	48.2
Normal Face-Horse B/C	50.1	48.1
Ece A b	50	49.5
Ed(n) var	49.1	50.3
Aesv	49	50.5
Ecen	48.5	51
Early Pattern-Horse B	48	52
Ed(n)	48	51
Ece B (rev)	47.5	52
Boar-Horse C	46	51
Ece B b	45	54.5
Saenv	45	54
Anted(i) c	44.5	55
Triple Symbol b	44.5	55
Anted(i) b	43.5	56.5
Boar-Horse A	42.5	56.0
Triple Symbol a	42.4	55.9
Early Pattern-Horse A	33	62

Note

Abbreviations are as in Table 39. Cowell means are used where possible. Shading denotes analyses are derived from Northover 1992.

Table 50: Icenian silver series sorted by mean copper content (lowest value first).

Chadburn coin type	% of silver	% of copper
Boar-Horse fraction 2	87	8.6
Ece A unclassified	61.7	36.6
Anted fraction	60.1	39
Ece B unclassified	57.7	41.2
Anted(i) sub-type unclassified	51.2	47.3
Normal Face-Horse B/C	50.1	48.1
Normal Face-Horse A	50.8	48.2
Boar-Horse B	51.5	48.5
Can Dvro	51	49
Ece A b	50	49.5
Ed(n) var	49.1	50.3
Aesv	49	50.5
Ecen	48.5	51
Ed(n)	48	51
Boar-Horse C	46	51
Early Pattern-Horse B	48	52
Ece B (rev)	47.5	52
Saenv	45	54
Ece B b	45	54.5
Anted(i) c	44.5	55
Triple Symbol b	44.5	55
Triple Symbol a	42.4	55.9
Boar-Horse A	42.5	56.0
Anted(i) b	43.5	56.5
Early Pattern-Horse A	33	62

Note

Abbreviations are as in Table 39. Cowell means are used where possible. Shading denotes analyses are derived from Northover 1992.

Table 51: Possible groupings of Icenian silver types based on mean silver content (groups are defined by a jump of 3% or more).

Chadburn coin type	% of silver	% of copper
Boar-Horse fraction 2	87	8.6
Ece A unclassified	61.7	36.6
Anted fraction	60.1	39
Ece B unclassified	57.7	41.2
Boar-Horse B	51.5	48.5
Anted(i) sub-type unclassified	51.2	47.3
Can Dvro	51	49
Normal Face-Horse A	50.8	48.2
Normal Face-Horse B/C	50.1	48.1
Ece A b	50	49.5
Ed(n) var	49.1	50.3
Aesv	49	50.5
Ecen	48.5	51
Early Pattern-Horse B	48	52
Ed(n)	48	51
Ece B (rev)	47.5	52
Boar-Horse C	46	51
Ece B b	45	54.5
Saenv	45	54
Anted(i) c	44.5	55
Triple Symbol b	44.5	55
Anted(i) b	43.5	56.5
Boar-Horse A	42.5	56.0
Triple Symbol a	42.4	55.9
Early Pattern-Horse A	33	62

Note

Abbreviations are as in Table 39. Cowell means are used where possible. Shading denotes analyses are derived from Northover 1992.

Table 52: Possible groupings of Icenian silver types based on mean copper content (groups are defined by a jump of 3% or more).

Chadburn coin type	% of silver	% of copper
Boar-Horse fraction 2	87	8.6
Ece A unclassified	61.7	36.6
Anted fraction	60.1	39
Ece B unclassified	57.7	41.2
Anted(i) sub-type unclassified	51.2	47.3
Normal Face-Horse B/C	50.1	48.1
Normal Face-Horse A	50.8	48.2
Boar-Horse B	51.5	48.5
Can Dvro	51	49
Ece A b	50	49.5
Ed(n) var	49.1	50.3
Aesv	49	50.5
Ecen	48.5	51
Ed(n)	48	51
Boar-Horse C	46	51
Early Pattern-Horse B	48	52
Ece B (rev)	47.5	52
Saenv	45	54
Ece B b	45	54.5
Anted(i) c	44.5	55
Triple Symbol b	44.5	55
Triple Symbol a	42.4	55.9
Boar-Horse A	42.5	56.0
Anted(i) b	43.5	56.5
Early Pattern-Horse A	33	62

Note

Abbreviations are as in Table 39. Cowell means are used where possible. Shading denotes analyses are derived from Northover 1992.

THE METROLOGY OF ICENIAN COINS.

Gold Icenian staters follow the usual pattern in Iron Age coins of becoming progressively less heavy as they become more and more debased through time.

The heaviest coins are the earliest, the Norfolk Wolf A types, some of which weigh more than 6.0 gm. Weights get progressively lighter, although the Freckenham 1 types appear slightly lighter than the apparently later Freckenham 2 types. The lightest Icenian staters are the last - the Anted, Ecen and Ece staters.

The silver series is similar in that the heaviest are the Bury types, and the next heaviest, the early Face-Horse types, presumed to be slightly later in date. However, the Early Face-Horse types are a difficult group to understand in terms of their metrology:

Table 53: The weights of Icenian Early Face-Horse coin types

COIN TYPE	WEIGHT (GRAMS)	COMMENT
Early Face-Horse 1	1.30-1.40	Heavy
Early Face-Horse 2a	0.80-0.90	
Early Face-Horse 2b	1.00-1.50	Heavy
Early Face-Horse 3	1.00	
Early Face-Horse 4a	1.26-1.39	Heavy
Early Face-Horse 4b	1.25-1.39	Heavy
Early Face-Horse 5a	0.80-1.00	
Early Face-Horse 5b	0.60-1.17	
Early Face-Horse 6a	0.64-1.10	
Early Face-Horse 6b	0.76-1.00	
Early Face-Horse 7	0.68	

It appears that some coins may be fractions, although they do not appear to be different in size. Alternatively, there may be debasement of the series, but again, this is difficult to argue in all cases, as some types appear early typologically (e.g. type 7). It may be that there is a broad chronological arrangement here, with the series starting with type 1, then 2 and 4, then

finishing with types 6 and 5 (and this latter has close typological links with the later Face-Horse types). But this model does not account for all varieties, and further work is needed on this series.

The more common silver coins are also interesting for a different reason, as many of the units appear to have been minted to approximately the same weight. This standardisation appears to start with the Boar-Horse A coins, and continues to the Aesv and Prasto types.

The mean weights of the largest fully recorded Icenian hoard - Field Baulk, Cambridgeshire - have been calculated. This hoard is most likely to produce an accurate mean for Icenian silver coinage, having been buried under similar conditions, and being the largest hoard sample we have. Chipped and fragmentary coins were not included in the calculations.

Table 54: mean weights for coin types in the Field Baulk hoard.

COIN TYPE	MEAN WEIGHT (GRAMS)	SAMPLE SIZE (Number of coins)
Boar-Horse A	1.09	4
Boar-Horse B	1.23	4
Boar-Horse C	1.19	25
Can Dvro	1.25	1
Normal Face-Horse A	1.26	41
Normal Face-Horse B/C	1.25	128
Early Pattern-Horse B	1.22	1
Anted (all sub-types)	1.22	193
Ecen	1.25	156
Ed(n)	1.26	59
Ed(n) variant	1.25	12
Triple Symbol (a and b)	1.25	29
Ece A (a and b)	1.25	73
Ece B (a and b)	1.24	74
Ece B (reversed)	1.26	22
Saenv	1.25	16
Aesv	1.21*	10

**There are 11 Aesv coins in the Field Baulk hoard, but one is chipped and was not included in this calculation. Plated coins are excluded from the calculation.*

Most of the coin types in the Field Baulk hoard appear to have a mean weight of around 1.25gm. Some types are slightly lower in weight, for example the earlier types such as the early Pattern-Horse coins and the Boar-Horse coins. The Anted coins are also slightly lower in weight than some of the other Pattern-Horse types, and it is noteworthy that these are often more worn. This reverses the usual pattern in Iron Age coins, where the earlier coins are heavier. The differences in mean weights do not appear to be significant at this stage, and were probably caused because of differential wear, with the earlier coins being the most worn. (The difficulties of distinguishing between

circulation wear and die wear have been discussed above in Chapter 4). It therefore appears that the coins may have been minted to a standard weight of approximately 1.25 gm. Van Arsdell (1987) has indicated that the Iceni minted their coins at this weight for over 100 years, although this is almost certainly overstating and oversimplifying the case. Nevertheless, it is striking how many Icenian silver units approximate 1.25gm in weight.

Coins which appear to be earlier because of their metrology (presumably the result of circulation wear) in the Field Baulk hoard include Boar-Horse A, B and C types and the Anted(i) coins. All the rest weigh around 1.25gm with the exception of the Aesv coins at 1.21gm. However, these are die-linked with the Saenv coins and unlikely to be very different in date.

Possible relationship with Roman coinage

Icenian silver coins are quite often found hoarded with Roman *denarii* (e.g. the Chatteris and Scole hoards, Burnett, 1986), and the metallurgical and metrological results highlight some possible relationships between these two types. Allen (1970, 23) was convinced that a formal exchange rate existed between the Celtic and Roman coins, and speculated that it could have been 1 *denarius*: 3 Icenian silver units. Evans writing over a hundred years earlier than Allen (Evans 1864, 363) made the same observation based on the weight of Icenian and Roman coins in his collection. R.A.G. Carson who examined the Roman coins from the Lakenheath hoard considered that the weights of the *denarii* were remarkably consistent in terms of weight, and that it was clearly

the metal content and not the condition of the coins which was important to the hoarder. Moreover most of the Republican *denarii* in the Lakenheath hoard had test cuts on them (Carson in Briscoe et al 1958-9). Van Arsdell (1987) has proposed a standard weight of 1.25gm for the Icenian silver unit, which seems about right from the evidence of the Field Baulk hoard metrology.

From the point of view of weight, such a relationship could work, as the average weight of a Roman *denarius* at this period was c.3.7gm (Walker, 1976) and an Icenain silver unit was c.1.25gm. If this is correct, a ratio of 2.96 Icenian units: 1 *denarius* or around 3:1 may hold good.

However, if the relationship depended on the amount of silver in the coin – which seems more likely - then there would be a ratio of about 6 Icenian silver units: 1 *denarius*, as most Roman *denarii* of this date contain between 92-98% silver, whereas the Iceni units contain about 50% silver. Further work remains to be done to see if a formal relationship can be further defined.

It is likely that as a privilege of their client status, the Iceni were allowed to retain and use their existing coinage alongside Roman coins (although the evidence suggests they did not continue to mint their own coinage – this is discussed further in Chapters 3, 4 and 7). Orna-Ornstein indicated that there is strong evidence that both Icenian and Roman coins circulated freely in East Anglia between AD 43 and at least AD 61 (Orna-Ornstein 1987, 23). This may explain why so much silver coinage appears to exist in this area compared with neighbouring areas such as the Trinovantes, and why the Icenian hoards appear

so uniform in composition, and additionally why so many are found hoarded with Roman coins. (The content of the Roman component of mixed hoards is far less uniform). If this was the case, it would have been useful for there to be an agreed exchange rate between Icenian and Roman coinage.

It is not clear exactly when Icenian silver coinage appears to standardise at around 1.25gm, but the Bury, Early Face-Horse, Early Boar-Horse and Early Pattern-Horse types are not very standardised issues in terms of weight. By contrast the Normal Face-Horse types, Boar-Horse A-C and the inscribed Pattern-Horse types do appear to be aiming to be minted to an exact standard of around 1.25gm. The earliest of these standardised types, i.e. the Normal Face-Horse and Boar-Horse A-C types appear to be introduced some time during Phase 7 (c. 20 BC-AD 10), and it is interesting to speculate as to whether they had a relationship with *denarii* as early as this.

Another alternative to the "exchange rate" theory is that there was a relationship, but that it was based using *denarii* as a source of silver. If most *denarii* were c. 100% silver at this stage, and most Icenian units were 50% silver, then the relationship could simply be as a result of recoining the *denarii*. It would appear that the Iceni chose the relative weights of the two coinages which appear to be 1 *denarius*: 3 units.

The overall evidence suggests there was a known exchange rate, which appears to start in Phase 7 (c. 20 BC-AD 10). Perhaps this is because large quantities of *denarii* were coming into the land of the Iceni and being recoined. If that is the

case, then it is interesting to speculate why such large quantities of *denarii* were coming in. Creighton (2000) sets out a thesis in which large tracts of Britain submitted to Rome and became client kingdoms after the invasions of Caesar. We have seen that the "Cenimagni" may be the "Iceni", and may have entered into a treaty with Rome sometime in the first century BC after the Caesarian invasions. If that is the case, then that alliance might partly explain a large influx of Roman wealth in the form of *denarii*.

MINTING

Northover has suggested that although many basic metalworking skills were present before in Britain before the introduction of coinage, some specialist skills needed to be imported. These included the manufacture and cutting of dies, and another was an understanding of gold and silver alloys (Northover 1992, 239). It is worth noting that gold is effectively unknown in southern Britain between the Late Bronze Age and the first imported gold coinage from Gaul in the second century B.C. The astonishing revival of goldsmithing in the "Snettisham workshop" may have taken place at a similar time to the earliest manufacture of gold coins in Britain. Perhaps no more than twenty years after that came the manufacture of the first gold coins in the region, the Norfolk Wolf A types, although Haselgrove has recently suggested that the Gallo-Belgic gold coin types could have started earlier which might make the manufacture of the torcs earlier (Haselgrove 1999). Similarly, there was little knowledge of working with silver alloys – it was effectively unknown as a

metal in Britain before the first Iron Age silver coins were struck (Northover, *ibid*).

Coin or pellet moulds

Some of the most important evidence for minting comes from coin or pellet moulds. These baked clay objects with regular circular depressions impressed into them, are found throughout those parts of England and the Continent where coins were used in the Iron Age, and often on *oppida* or high-status sites. Not unreasonably, they have long been identified as coin moulds, although they may have been used for making pellets or coin blanks.

Recent scholarly debate has focussed on these artefacts, and some have disputed their identification as coin moulds. This is most clearly stated by Sellwood and Casey (Sellwood, 1980; Casey, 1983) on the ground that the blanks produced from such moulds by experiment, are incorrectly shaped. Sellwood's implicit assumption is that such blanks were not further changed or refined before being struck. He identifies the moulds as an aid to producing bronze alloys, although if that is the case, he does not explain why they were not in use before the late Iron Age. He further indicates that Celtic coin blanks were normally produced by pouring metal onto a flat surface, and that the number of moulds exceeded the number of mint sites. Casey (1983) endorses these arguments.

These arguments are ably refuted by Collis (1985) who argues convincingly that the coin mould theory is still the best interpretation, one of his main arguments being that the pellets produced from moulds were reworked before being struck. Additionally, recent experimental work by Kenyon (pers.comm. Royal Numismatic Society lecture) indicates how difficult it is to produce circular blanks by pouring molten metal on a much cooler flat surface.

In conclusion, the fact that the moulds were obviously used for making small circular metal objects, are not found before the LIA - precisely when coinage is introduced - and are found widely throughout the continent and Britain on LIA sites, some of which are known from the legends on the coins themselves to be mint sites, seems sufficient evidence to consider them as coin moulds, and they are here accepted as such. Precisely what part they played within the minting process is still open to debate.

Four groups of coin mould fragments have been found within the study area. In Norfolk, these include those from Saham Toney (Tite and Freestone, 1983; Brown, 1986), Needham (Frere, 1941) and Thetford (Gregory, 1991a). A further group was found in Suffolk at West Stow (West, 1985). Another mould was found "containing 40-50 gold coins" at Haverhill, Suffolk (SMR 06030), but this falls just outside the study area. Of those moulds found within the study area, all fall within the area thought to be Icenian. A reference to a further coin mould fragment from just outside the study area at Burgh-by-Woodbridge, Suffolk, is erroneous. These moulds are very similar to each other and those found elsewhere at Scotton and Sleaford, Lincs;

Rochester and Canterbury, Kent; Winchester, Hants; and Gatesbury, St. Albans and Braughing, Herts (*cf* photographs in the Celtic Coin Index).

The archaeological contexts for these groups of coin moulds are discussed below:

a) Needham, Norfolk.

One fragment of baked clay, partly fused, containing seven circular depressions was found. Frere (1941) identifies it as pre-Boudican in date; it was found securely stratified in a ditch along with Claudian samian ware, and a brooch dating to c. AD 50, and other Roman and native coarse ware dating to the "Claudian" period. No analytical work has been undertaken on the mould.

b) Saham Toney (Little Cressingham), Norfolk.

Six coin-mould fragments were found, in the vicinity of a stream which runs through the site. Several fragments were subjected to scientific examination by the British Museum in 1983, in an attempt to identify how they were used and the metals cast in them. The results indicated that the moulds were fired from both above and below, and could have survived temperatures in excess of 1150 degrees Centigrade without being destroyed. A few particles of silver were found in a pellet hollow (Cressingham mould C) but trace concentrations of silver and copper were also found from a hollow in the Cressingham A mould, indicating that both mould fragments were almost certainly used in the

production of silver coinage (Tite and Freestone, 1983; Brown, 1986). The mould fragments were not found in a stratified context.

c) Thetford, Norfolk.

109 fragments and other assorted scraps of pellet moulds were recovered from excavations at Thetford (Gregory, 1991a). The remains were very fragmentary, but it was possible to reconstruct the dimensions of the cups; their average diameter was 9mm, and they were 11mm deep. The results of XRF analysis, whilst not conclusive, indicated that the moulds were almost certainly used to produce silver blanks for the manufacture of silver coins.

d) West Stow, Suffolk.

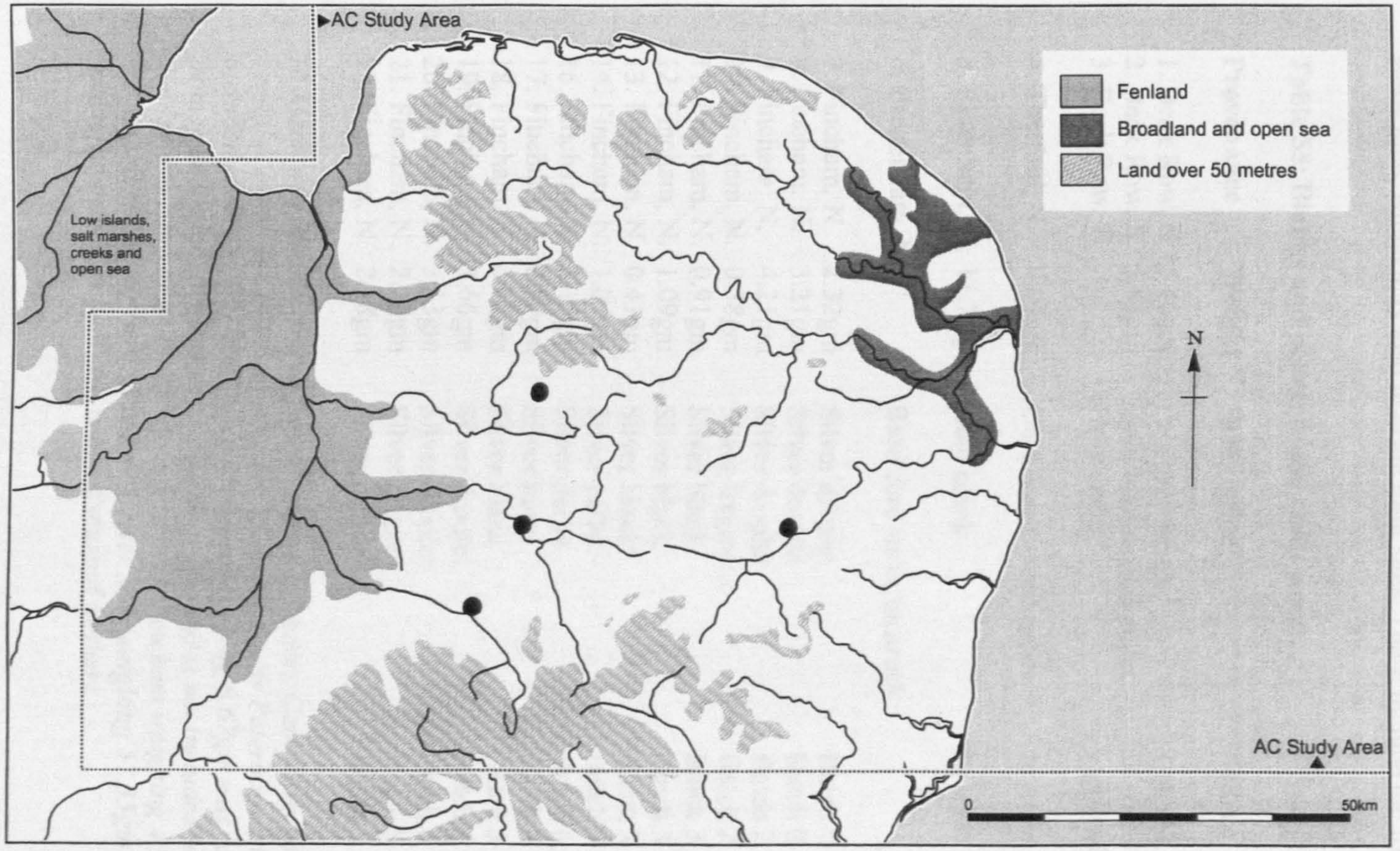
A single fragment of fired clay containing five circular depressions, was recovered. No analytical work has been carried out (West, 1985).

The distributions of these moulds is very interesting, as shown on Map 14. So far, none has been found in the Cambridgeshire part of the study area, and there is a marked concentration in the middle and south of the territory, quite near to where the Icenian boundary appears to be. There is no obvious reason for this distribution, although all the moulds are associated with known LIA sites. One might also expect coin moulds to be present at centres such as *Venta*

Icenorum and possibly those areas identified by coin hoards to be important, such as Stonea Island and Snettisham, but at present, none have been found.

There are a relatively high number of moulds compared with other tribal areas. The fact that they were apparently used for producing silver coinage should not surprise us, given the huge numbers of Icenian silver coins in existence.

It is not unreasonable to suggest that LIA sites where coin moulds have been found are in fact mint sites. The moulds generally appear to have been broken in antiquity, and there is no obvious reason why such rubbish should be taken away from the general vicinity where it was used. Whether the coins were struck at the same site is a different question, but there is no reason why this should not have taken place, suggesting that such sites could have been fully functioning mints. The annealing vessel discovered at Thetford suggests that different parts of the minting process were indeed carried out at the same site (Gregory, 1991a). We do not yet have sufficient archaeological evidence to indicate whether these four possible mint sites were contemporaneous or not. Other possible mint sites are discussed below in relation to pellet and metal working evidence, and it is possible that coin mould fragments will be recovered one day from sites such as Fincham, Stonea island, and Snettisham too.



Map 14. The distribution of pellet moulds in the study area.

Blanks and pellets

Blanks and pellets/droplets have been found on a number of LIA sites in the study area, which may also indicate mint sites. These include the following:

Table 55: Blanks and pellets in the study area.

Provenance	Weight	Description	Source
1. Beck Row, S	5.46gm	Pale gold blank	Lot 344 HRM sale
2. Beck Row, S.	5.44gm	Gold bun-shaped pellet	In trade 1989
3. Beck Row, S.		Gold pellet	ex HRM
4. Thetford, N.	0.94gm	Gold bun-shaped pellet	In trade 1995
5. Fakenham, N.	11.71gm	Gold blank	In trade 1992
6. Brettenham, N.		Base core stater unstruck	
7. Fincham, N	2.32gm	Silver droplet	Batch 1
8. Fincham, N.	3.21gm	Silver droplet	Batch 2
9. Fincham, N,	4.21gm	Silver droplet	Batch 2
10. Fincham, N.	0.58gm	Silver fragment	Batch 2
11. Fincham, N.	0.91gm	Silver blank	Batch 3
12. Fincham, N.	1.09gm	Silver blank	Batch 3
13. Fincham, N.	0.41gm	Silver blank	Batch 3
14. Fincham, N.	1.04gm	Silver pellet	Batch 3
16. Fincham, N.	1.15gm	Silver pellet	Batch 4
17. Fincham, N.	0.89gm	Silver lump	Batch 4
18. Fincham, N.	0.46gm	Silver blank	Batch 5
19. Fincham, N.	3.66gm	Silver droplet	Batch 5
20. Fincham, N.	3.33gm	Silver droplet	Batch 5
21. Fincham, N.	2.22gm	Silver droplet	Batch 5
22. Fincham, N.	2.18gm	Silver droplet	Batch 5

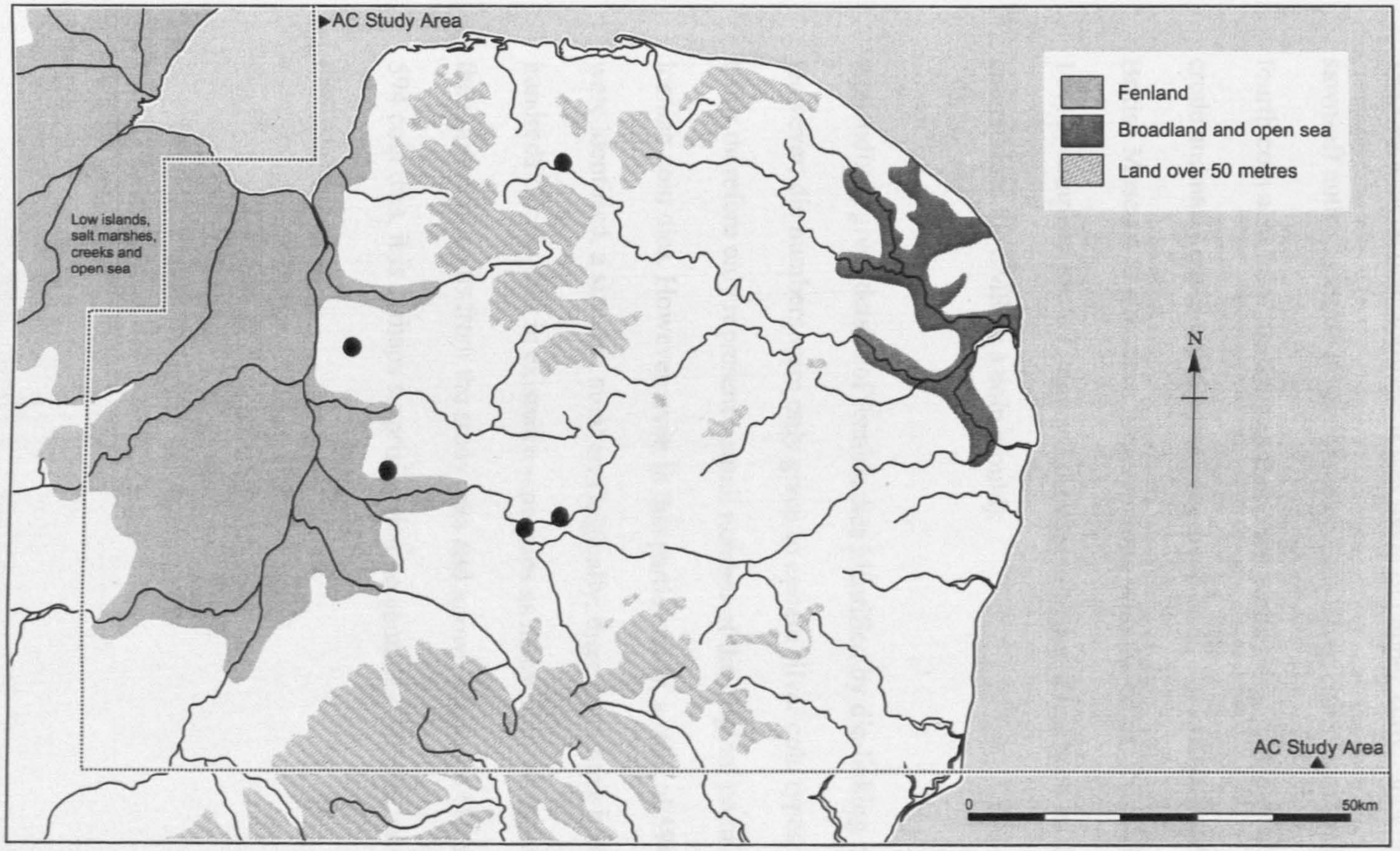
(A blank was also recovered from Bretten or Bretton, Cambridgeshire [pers. comm. J. May], but this is outside the study area near Peterborough and is not included here. A gold "axe" shaped object weighing 8.67gm was recovered from near March, but it is not a core or pellet and is not included here. Similarly, a lump of gold was recovered from Fincham weighing 4.99gm but is not described further here. A lump of silver slag weighing 57.35gm was also recovered from Fincham and is not discussed further).

If one equates pellets and blanks with mint sites, admittedly a highly simplistic assumption, this evidence may suggest four additional mint locations at Beck Row, Suffolk; and Brettenham, Fincham and Fakenham in Norfolk, although there is as yet no firm evidence to support a mint in these locations. However, metal working debris has been found at Fincham. The pellets recovered from these sites are similar to those found elsewhere in Lincolnshire (J. May pers. comm.).

Coin blanks are rare compared to pellets, a fact which may be significant, and is further discussed under minting techniques. It is possible that some of the "defaced coins" found in the Roman hoard at Snettisham are in fact coin blanks. These sorts of artefacts are under-represented in the archaeological records and literature because of the intrinsic difficulty in dating them. They are almost certainly more common than the above list suggests.

The best candidates for mints of these sites listed above are Fincham and Thetford, where blanks, pellets AND other metal-working debris has been found.

Map 15 shows the distribution of blanks and pellets in the study area.



Map 15. The distribution of coin blanks and pellets in the study area.

Icenian coin dies

A possible Iron Age die was recovered from Mundford in Norfolk in early 1983 by a metal detector-user. It was made of copper alloy, "looking like a sawn-off antler". Beside it were three uniface silver coins from the die, and a fourth coin also from the die was found ten yards away. The die had a "very crude and nasty triple-tailed horse" engraved on it; it was dismissed by the British Museum as a modern forgery, along with the coins. (Norfolk SMR No. 11413; complied by A. Gregory 3.5.1983; note that it has been incorrectly entered into the SMR as a coin mould).

Appendix Q gives details of Icenian dies identified by die-linking in this study. However, die numbers were only given to certain silver coin types, and the totals therefore only represent a small number of the original population of Icenian coin dies. However, even in this partial study, a total of 594 coin dies were identified, a sizeable number. Originally, there must have been many hundreds of coin dies in existence – perhaps as many as three thousand. Given the number of coins from the study area and known existence of a minimum of 594 coin dies, it is perhaps surprising that no genuine coin dies have yet been discovered.

Table 56: Total numbers of Icenian coin dies (known from die linking evidence)

ICENIAN COIN DIE TYPE	TOTAL NUMBER OF DIES
Face-Horse Obverse	82
Face-Horse Reverse	82
Boar-Horse Obverse	35
Boar-Horse Reverse	35
Pattern-Horse Obverse	192*
Pattern-Horse Reverse	168**
TOTAL NUMBER OF DIES	**594 (309 obverse, 285 reverse)**

**One PHO number is not yet allocated so the last PHO die number is 193.*
***One PHR number is not yet allocated so the last PHR die number is 169*

Some coin types are die-linked, suggesting that they are probably the product of the same mint. Further details of many of these die links can be found in Appendices M, N, O, P, Q and R. For example, obverse die links are known between the following types, which can therefore be grouped together as being possibly the product of the same mint:

- Anted(i), Ecen and Ece staters (evidence from the Hunstanton Area I hoard)
- Normal Face-Horse A and Normal Face-Horse B/C types
- Anted(i): sub-type a and Anted(i): sub-type b
- Anted(i): sub-type c and Anted(i): sub-type d
  (There are also obverse links between sub-type c and a number of sub-type unclassified coins)
- Ecen, Ed(n) and Ed(n) variant types
  (There are also obverse links between these and Ecen/Ed(n) unclassified types)
- Triple Symbol a and Triple Symbol b types
- Ece B a, Ece Bb and Ece B (reversed) types
- Saenv and Aesv types
  (Saenv types always seem to have been struck first as the obverse die is always fresher than on Aesv types)

The output of these dies has been discussed in Chapter 3 and it is possible that an average of c. 100,000 silver coins/ year were minted between c.20 BC-AD 45.

It would be fruitful to try and estimate the total numbers of coins circulating at any one time within the territory of the Iceni, based on the number of dies found within a dating phase. Unfortunately, we do not yet have the data for all coins to attempt this. Having such coin estimates might tell us more about the function of the coins, and the economy of the Iceni over the passage of time.

However, some partial estimates can be made using Allen's formula set out above and using reverse dies for the calculation. For example, during the last sub-phase of Phase 7, at least one million silver units were issued, and during the last sub-phase of Phase 8, at least 1.6 million silver units were issued. These figures are of course speculative, based as they are upon a number of assumptions. However, they do bring into focus the possible order of numbers of coins which were *issued* at any one time – it would appear that far greater numbers would have been *circulating* at any given period. These are truly huge figures, and have important implications for the way in which we view the Iceni, their economy and the way in which they were using coins.

Table 57 shows these estimates against date phases.

Table 57: Possible numbers of Icenian coins issued during different phases.

COIN TYPE	NUMBER OF IDENTIFIED REVERSE DIES	CHADBURN SUB-PHASE	POSSIBLE NUMBER OF COINS STRUCK
Early F-H 2b	2	7a	20,000
Early P-H B	1	7a	10,000
No estimate given for phase 7a as so many other coin types do not have coin die numbers calculated yet			
Boar-Horse A	2	7b	20,000
Boar-Horse B	6	7b	60,000
Possible total number of silver units issued in 7b			*80,000*
Normal F-H A	18	7c	180,000
Normal F-H B/C	60	7c	600,000
Normal F-H u/c	1	7c	10,000
Normal F-H A variant	1	7c	10,000
Boar-Horse C	25	7c	250,000
Possible total number of silver units issued in 7c			*1,050,000*
Can Dvro	1	8a	10,000
Possible total number of silver units issued in 8a			*10,000*
Anted(i)	62	8b	620,000
Ecen	35	8b	350,000
Ed(n) and var.	13	8b	130,000
Ecen/Ed(n)	7	8b	70,000
Triple Symbol a and b	4	8b	40,000
Ece A a and b	9	8b	90,000
Ece B a and b	24	8b	240,000
Ece B (reversed)	5	8b	50,000
Saenv	2	8b	20,000
Aesv	1	8b	10,000
Possible total number of silver units issued in 8b			*1,620,000*

Die engraving

It is apparent that there are many differences in the quality of die engraving in Icenian coins, particularly in the uninscribed gold series. Some look to be the

work of skilled craftsmen, others are clearly by less-skilled workers. It is worth remembering that die-cutting was a skill which had to be imported to Britain when coinage was introduced, and was new to the region when the first Norfolk Wolf coins were made.

It is possible that the skillfully cut dies were the work of imported specialist craftsmen. The cruder dies may have been the work of Icenian metal workers who were initially less skilled at this type of work and who copied or adapted the other dies. This pattern does seem to be a real one – the earlier coin types within a series often seem to have been cut by skilled die-engravers and the later ones by less-skilled and probably indigenous craftsmen. For example Norfolk Wolf A types all seem to have been minted using well-cut dies e.g. Hobbs 212, 213, whereas Norfolk Wolf B coins are generally less well-engraved e.g. Hobbs 215, 216. It is likely that the die-engravers of the Norfolk Wolf B dies simply copied Norfolk Wolf A coins which is why the wolves are reversed. It is of course possible that the skilled die-engravers were also Icenian, but given that this was a new and demanding skill, it seems more likely that itinerant and non-indigenous die-engravers were brought in by the issuing authorities with each successive new coin type, at least until the skills were learnt. After an initial period where commissioned specialists were brought in to make the dies for a new series, the Icenian mint workers were on their own. Table 58 shows those types which appear to have been minted using the dies of specialist die-engravers, along with those of probable Icenian workmanship.

Table 58: Uninscribed Icenian gold types minted from well-cut dies and poorly-cut dies.

COIN TYPE	WELL-CUT DIES	POORLY CUT DIES
Norfolk Wolf A	YES	
Norfolk Wolf B		YES
Snettisham A	YES	
Snettisham B	YES	
Snettisham C		YES
Snettisham D		YES
Snettisham E		YES
Snettisham ¼ stater 1	YES	
Snettisham ¼ stater 2	YES – BOTH TYPES	
Freckenham 1		YES
Freckenham 2*	YES	
Freckenham 3		YES
Freckenham 4		YES

**Refined gold introduced at this point?*

Further work is needed to look at whether this is a real pattern or not.

However, it is noteworthy that at the time when refined gold may have been introduced, there was a marked typological change, with a use of very well-cut dies in the Freckenham 2 types, perhaps marking this new beginning with a new standard of dies.

Brockages

Brockages seem to be relatively common, with silver examples in both the Face-Horse and Pattern-Horse series known (see Appendices I and J). The Field Baulk hoard contained three definite brockages, and one further possible brockage, a relatively high percentage for Celtic coins, and higher than the Roman republican series (J.P.Goddard, pers. comm.) Field Baulk no.530 was a brockage overstamped with an Ecen die.

All this suggests that some Icenian coin types were being produced in great numbers and possibly with some speed and lack of quality control, particularly the silver Pattern-Horse types. This ties in with the evidence we have in terms of the survival of coin types, as the silver Pattern-Horse types are by far the most numerous. The sheer output of these coin types, issued in my Phase 8 (discussed above in Chapter 4), seems to indicate that the Iceni were using coins in a different way to earlier phases, perhaps in a more fully monetary fashion, and therefore needed in larger quantities.

Die deterioration

There is much evidence within the Icenian series of dies being used almost to destruction. This is very obvious, for example, with the deterioration of late silver types.

Plate 40 shows the deterioration of a reverse die (which I call the "blob-head" die) used for Ecen silver coins from the Field Baulk hoard. The image on the coins became successively more and more damaged as the die broke up.

This also exemplifies why die-linking is very difficult. It would be almost impossible to die link the reverses on coins 421 and 524 in the Field Baulk hoard, if one did not have the examples of the in-between stages of die-deterioration to link them.

Plated coins

There are relatively large numbers of plated Icenian coins in existence. They are found particularly on settlement sites, rather than in hoards, which appear to have selected against such coins. At Stonea Grange, a settlement site, for example, plated coins formed 15% of the total assemblage as opposed to only 0.8% of the total in the Field Baulk hoard (Chadburn 1996, 272). There are also reports by metal detector users that about 25% of the total number of coins detected at Stonea Grange was plated (Chadburn *ibid*).

Plated coins are found in both the silver and gold series, but appear more numerous in the silver series (although perhaps this is due to the comparative rarity of Icenian gold coins). Virtually every "common" Icenian coin type, has a known plated example, and gold plated Freckenham 4 and Ecen staters are also known.

The Norfolk Wolf B coins seem to stand apart from the rest of the Icenian gold series in that they are much debased. The most gold that a Norfolk Wolf B coin contains is only 31% and this can go down to as little as 7%, with the mean gold content being 16% as opposed to Norfolk Wolf A coins which contain a mean gold content of 40%. As well as being very debased, many have plating, or are simply cores. It is common for non-plated Norfolk Wolf B coins to look like copper as opposed to gold. It is possible that at least some of the Norfolk Wolf B coins were unofficially or fraudulently issued.

There are a number of possible explanations for the plating phenomenon. The simplest explanation is that plated coins were contemporary forgeries, designed to deceive. The fact that most Icenian hoards comprise good quality coins, suggests that plated coins were indeed used as contemporary forgeries. Additionally, the fact that such relatively large numbers are found on settlement sites might also suggest this; the coins could well have been discarded upon discovery that they were forgeries. However, there do not appear to be cut marks on many Icenian coins, so it would appear that there was another method of establishing whether a coin was plated.

Another possible suggestion is that the coins were in some way "official". We now know that some dies used for plated coins are "official", in that good-quality coins are also known from this die. For example, plated *and* non-plated, good quality coins are known from the following dies: FHO 24, FHR 9, FHR 25, FHR 70, BHO 31, BHO 30, PHO 2, PHR 3 and there are a number of other plated coins known from other dies which also look "official" but from

which no good quality coins have yet been found. (Further information can be found in Appendix Q). This could suggest either that the plated coins were officially produced, or that – more likely - the official mints were unofficially producing forgeries, a phenomenon which is well-established in the classical world.

Little has been written about contemporary forged Iron Age coins, although Van Arsdell (1992, 147) has discussed this subject. He asserts that Celtic forgeries were struck with counterfeit dies, were generally cruder than official issues, and were not the products of central mints. Whatever the case for the rest of the Iron Age world, this is certainly not the case for the Iceni. Most of the plated examples discovered so far *do* come from good quality "official" dies, and those which are not yet proven, come from dies which look to be "official" and from which one might expect good quality die-linked coins to be found one day. Plated coins were therefore probably the work of "official" mints, perhaps with corrupt moneyers forging these coins to pass off as originals.

The exact method of plating is uncertain. The most common method of silver plating in antiquity is "close plating" involving the application of a continuous layer of silver solder to a copper alloy core, but other methods could have been used. (Musty, 1992). Cowell (1996, 271) considers it probable that the silver plated issues he analysed were created by wrapping silver foil around a core and then fusing it, prior to striking it. The fact that it was worth going to all

this effort suggests an inherent value to individual Icenian coins (either social, monetary or both).

The few analyses of Icenian plated coins are again somewhat difficult to interpret, as they follow the pattern of the analyses of good quality coins, with Northover's (1992) results seeming significantly higher in silver content that Cowell's (1996). However, it is noteworthy that the silver plating analysed by Cowell (1996, 271) seems lower in silver content than the good quality silver Icenian coins.

Although it is sometimes possible to detect a plated coin by looking at the weight, it is more usual for plated coins to appear to fall well within the normal weight range for good quality coins. This can be seen in Table 59, where the weights would be perfectly acceptable for non-plated coins. This seems to indicate a relatively high level of quality control over the production of plated issues.

Table 59: Analyses of Icenian plated coins.

Chadburn Classif.	Source Ref.	Au %	Ag %	Cu %	Sn %	Sb %	Pb %	Wt. (gm)	Source
F-H B/C									
(pl)	FB96	<0.3	38	62	<0.5	-	< 0.4	1.18	C1996
(co)	FB96	<0.3	0	98	2.0	-	< 0.4	"	C1996
Anted(i)									
(pl)	C516	0.3	87	11.7	0.2	0.2	0.4	-	N1992
(co)	C516	0.1	0.1	80.2	0.1	0.02	0.1	-	N1992
Ecen/Ed(n)									
(pl)	FB591	< 0.3	37	61	2.2	-	< 0.4		C1996
(co)	FB591	< 0.3	1	96	3.3	-	< 0.4		C1996
Ed(n) (co)	FB708	< 0.3	2	98	<0.5	-	< 0.4	0.77	C1996
Triple Symbol									
(pl)	FB591	< 0.3	37	61	2.2	-	< 0.4	1.06	C1996
(co)	FB591	< 0.3	1	96	3.3	-	< 0.4	"	C1996

KEY

pl	plating
co	core
N1992	Northover 1992
C1996	Cowell 1996

Minting techniques

Detailed discussions on minting techniques are outside the scope of this study. However, it is useful to indicate some basic points. Icenian coins are all hammered; none appear to be in the as-cast state, unless some early potin coins were minted in the area, but there is no substantial evidence to support this. All British IA coins – whether potin or not – are made from cast flans rather than blanks cut from a sheet as in medieval hammered coins.

On some Icenian coins, especially the Pattern-Horse series such as Ece B, the dies were used almost to destruction, particularly the obverse ones. This phenomenon seems confined to some of the very early coins, such as Early Face-Horse A, and to some of the last silver units such as Ece B, Saenv and Ece A. However, many Icenian silver coins can be found with notable die-flaws, suggesting that those minting were either not concerned about the coin's appearance, or were unable to easily gain access to specialist die-engravers, for whatever reason. Die deterioration can be easily seen on a number of die-linked coins.

Elongated flans are sometimes found on Icenian silver units, and appear to be a result of the striking process (Cowell, pers. comm.) rather than as a result of deliberately formed flans of that shape. Examples can be found in the Field Baulk hoard; Anted types nos. 252, 277, 220, 299; Face-Horse B/C type no. 206; Boar-Horse C type no. 25; Ece A type no. 722.

As discussed more fully above, most common Icenian silver units were manufactured to about 1.25 gm, and their alloy was approximately 50% silver and 50% copper. This suggests a high level of quality control, especially if there were several mints producing various silver units, as may have been the case.

The current evidence suggests that the majority of Icenian coins may have been produced in the following way. Firstly, an alloy was formed to the correct mix (e.g. 50% silver, 50% copper). This may not have been carried out at the

same site where the coin moulds were used. For example, at Thetford, it was felt that the silver alloy was made elsewhere and brought to Thetford, as there was no evidence that any of the numerous crucible fragments contained silver, although the pellet moulds did. The alloy may have been formed into a rod or stick, which could be measured out and cut. In Henry Mossop's collection there were a number of silver-alloy rods, with nicks on at regular intervals, suggesting a place to chop (J. May, pers. comm.). The alloy could have been measured out into the pellet moulds, and the moulds fired, producing a bun-shaped coin pellet. This pellet was then taken and worked into a more coin-shaped blank, through hammering and annealing, before being struck while hot or warm. Perhaps the elongated types above were stuck when they were particularly hot. At Thetford, a vessel which was probably used for annealing was recovered, and it is possible, that coin pellets were further refined in that. (The presence of that annealing vessel suggests that coins were probably struck at Thetford).

Much of the above is speculative, but it does seem to fit the available evidence so far. A number of interesting points arise. Firstly, bullion may not have been processed at a mint site, but on a metalworking site elsewhere. This is interesting, as it raises the question of the degree of control which was placed on the production of coinage, and the processing of bullion. Having said that, the fact that Cowell's analyses (above Table 6.3.9) indicate that the silver alloy was roughly 50% silver and 50% copper for most silver types, does indicate a reasonable level of control. Secondly, the moulds were almost certainly used to produce coin pellets, not blanks. This may explain why there are relatively

more pellets than blanks in existence, as a blank, was not really a production stage in itself. A batch of pellets could have been annealed into blanks, kept hot and then struck almost immediately.

When did minting cease?

This has been discussed in detail in Chapter 4, but it seems possible that the Iceni stopped minting in silver and gold around the time of the Conquest, for whatever reason. The last Icenian coins were probably minted just before the Conquest period c. AD 45, although they were apparently allowed to continue to use their indigenous coinage by the Romans. The fact that so many Roman coins were also imported to Britain at this time, including into the land of the Iceni, also indicates that indigenous minting had probably ceased (Reece, 1987, 2). This can be seen in both archaeological evidence from the sheer numbers of *denarii* in the area, and in classical sources, assuming that the Iceni were among those pro-Roman tribes who allied themselves with Claudius:

> *"An excuse for the* [Boudican] *war lay in the reclaiming of the money which Claudius had given to the leaders of the Britons."*
>
> Cassius Dio: *History of Rome* lxii.2.1 (Trans. Beard and Chard, 1981)

Perhaps the fact the Iceni apparently gave up minting (whereas they still had the right to bear arms as "clients" of Rome) means that Icenian rulers did not ascribe that much importance to their coins as signifiers of personal

importance, but displayed their power and status in other ways? This to some extent fits in with the typological evidence, as very few Icenian coins appear to show portraits of rulers in the fashion of the dynastic coinages of the south-east.

Whatever the case, there is no hard evidence that post-Conquest minting continued, and such archaeological evidence as does exist (such as the existence of moulds in "client kingdom contexts" at Thetford), could very well be residual. The weight of evidence is against it.

TYPOLOGICAL AND STYLISTIC EVIDENCE OF MINTING

There are very few instances of die engraving in the Icenian series, where one can indicate with any degree of confidence that the same die engraver was at work. An exception to this, are certain Freckenham 3 dies, which have a very similar chunky, deeply engraved horse (*cf* Hobbs 3405 and 3407). Almost certainly the product of the same hand, are a number of Early Boar-Horse dies (*cf* Hobbs 3442), indicating that perhaps all these coin types are from the same mint, although the possibility of itinerant die-cutters means that this may not be the case. However, these coin types are at least likely to be broadly contemporaneous.

Stylistically, the Icenian coin series is conservative, especially when one considers that about 60-70% of Icenian coins in existence are the silver Pattern-Horse types, which all have a very similar obverse design. Whether

this means that they were the product of a single mint is difficult to say. However, the Anted(i), Ecen, Ed(n) and Triple Symbol types all have a similarly-designed horses and obverse patterns, which may suggest that they are the product of a single mint. There seems to be a tendency for a number of dies of each of the types to be very well-engraved, and for apparently later dies of the same type to degenerate in style. This is a phenomenon observable in Atrebatic coinage too (S. Bean, pers. comm.), and is visible in the Icenian series on the silver Anted types, where perhaps the earliest die is that inscribed "ANTEDI" (e.g. Field Baulk no. 212) which is well engraved. Later silver Anted(i) types are often cruder in design, although still reasonably well cut (e.g. Field Baulk no. 349). The same phenomenon is apparent on the Ecen types, some of which are carefully engraved (e.g. Field Baulk no. 411), but many of which degenerate to very crude approximations of the earlier dies (e.g. Field Baulk no. 501). The Ed(n) and Ed(n) variant types are never carefully engraved, (e.g. Field Baulk no. 610), and are clearly very degenerate versions of the Ecen types, as Allen (1970) suggested. The fact that there is no gold stater of Ed(n) also suggests it is a degenerate type of Ecen.

The horse on the Ece A types represents a sharp break in design from the open-headed horse types (Anted(i), Ecen Ed(n), Triple Symbol), and it is notable that the obverse pattern design changes too, becoming smaller and more refined (e.g. Field Baulk no. 684). The Ece B and Ece B (reversed) types also have a horse which is different again, although the obverse design is similar to that of Ece A, perhaps suggesting that Ece A and Ece B types are the product of the same mint. We can be almost sure that Ece B, Saenv and Aesv

types are from the same mint, as the designs are identical apart from the legends, and indeed the Aesv and Saenv types share an obverse die.

It is possible that the open-headed horse series (Anted, Ecen Ed(n), Symbol) and the Ece A, Ece B, Saenv and Aesv types are the product of a single mint, rather than two mints, which might be suggested on typological grounds. Firstly, there appears to be a broad chronological relationship here, starting with the Anted and ending with Aesv. Secondly, the gold staters of Anted, Ecen and Ece are all die-linked, and almost certainly the product of the same mint, suggesting that the silver Anted, Ecen and Ece types may also be from a single mint. It also, of course, suggests the broad contemporaneity of all the Anted, Ecen, Ed(n), Symbol, Ece A, and Ece B types.

Little other stylistic evidence is apparent. However, the rather dumpy and realistic horse on the coins of Prasto, is remarkably similar to that on one of the reverse Ale Sca dies, suggesting that they are broadly contemporaneous, and may be products of the same mint.

Table 60: Typological evidence of minting, showing which coin types may be from the same mint or issuing authority.

STATER	QUARTER STATER	SILVER	FRACTION
GROUP 1			
N.Wolf A	N.Wolf A	-	-
N.Wolf B	-	-	-
GROUP 2			
Snettisham	Snettisham	-	-
GROUP 3			
Freckenham 1-4	-	-	-
-	-	Early B-H	Early B-H
-	-	-	P-H 1a, 1b, 2, 3, 6
GROUP 4			
-	Irstead a-c	-	-
GROUP 5			
-	-	Bury A-D	-
GROUP 6			
-	-	Early F-H	Early P-H 1,2
-	-	Normal F-H	P-H 3, 4
GROUP 7			
-	-	B-H A-C	B-H 1, 2
GROUP 8			
-	-	Can Dvro	-
GROUP 9			
-	-	Early P-H A,B	P-H 5

Table 60 (cont.): Typological evidence of minting, showing which coin types may be from the same mint or issuing authority.

STATER	QUARTER STATER	SILVER	FRACTION
GROUP 10			
Anted	-	Anted	Anted
Ecen	-	Ecen	Ecen
-	-	Ed(n)	Ed(n)
-	-	Ed(n) variant	-
-	-	T.Symbol a, b	-
Ece	-	Ece A, B	Ece
-	-	Ece B (rev)	Ece B (rev)
-	-	Saenv	-
-	-	Aesv	-
-	-	-	P-H 7
GROUP 11			
-	-	Prasto	-
-	-	Ale Sca	-
GROUP 12			
-	-	Aedi	-

Table 60 above shows possible groups of coins which appear related on typological grounds, and which may therefore be the product of the same mint, or issued by the same authority. Of course, one of more of these groups could also be the product of the same mint, but there is little typological evidence to suggest further grouping. However, there are some further possible groupings and alternative groupings that one could postulate which are shown in Table 61 below.

Table 61: Typological evidence of minting, showing which coin types may be from the same mint or issuing authority – alternative groupings to Table 60.

STATER	QUARTER STATER	SILVER	SILVER FRACTION
GROUP A (NORFOLK WOLF TYPES)			
N.Wolf A	N.Wolf A	-	-
N.Wolf B	-	-	-
GROUP B (SNETTISHAM TYPES)			
Snettisham	Snettisham	-	-
GROUP C (FRECKENHAM AND BOAR-HORSE TYPES)			
Freckenham 1-4	Irstead a-c	-	-
-	-	Early B-H	Early B-H
-	-	Boar-Horse A-C	Boar-Horse 1,2
-	-	Can Dvro	-
-	-	Ale Sca	-
-	-	Prasto	-
GROUP D (FACE-HORSE TYPES)			
-	-	Bury A-D	-
-	-	Early F-H	-
-	-	Normal F-H	-
GROUP E (PATTERN-HORSE TYPES)			
-	-	Early P-H A,B	Early P-H 1,2
Anted	-	Anted	Anted
Ecen	-	Ecen	Ecen
-	-	Ed(n)	Ed(n)
-	-	Ed(n) variant	-
-	-	Symbol a, b	-
Ece	-	Ece A, B	Ece
-	-	Ece B (rev)	Ece B (rev)
-	-	Saenv	-
-	-	Aesv	-
-	-	Aedi	-
-	-	-	P-H 1-7

Group A is straightforward and comprises the Norfolk Wolf types. Perhaps Group B, the Snettisham types, were also issued somewhat later by the same mint.

Group C includes the Freckenham and Irstead types on the grounds that the Irstead types are the quarter staters for the Freckenham staters. It also includes the Boar-Horse coins because the early types appear related stylistically to the Freckenham types (possibly the same die engraver cut some Early Boar-Horse and Freckenham dies). The Prasto types have been included as they relate to the Ale Sca boar-horse types.

Group D is a simple grouping together of all coins which have the common element of a face on the obverse and a horse on the reverse, and the final Group E is a similar grouping together of all coins with a pattern on the obverse and a horse on the reverse.

It is impossible to say whether these proposed groupings are accurate or not. Our main difficulty lies in linking common elements of the design together. What is the element one should link? It is possible that Group E (Pattern-Horse types) comprises the products of a single mint, but is it not also possible that Freckenham 4 types, with their back-to-back crescents also relate to the later Pattern-Horse series? And should therefore Freckenham 4 types be linked with Group E rather than Group C (Boar-Horse types)? Typological evidence should ideally be tied in with excavated evidence and distribution data to try and establish the products of a mint with more accuracy.

POSSIBLE MINT SITES

There are five strong candidates for mints within the study area. It is also likely that there was metal-smithing workshop based at Snettisham – although whether there was a mint is as yet unclear. Each of these five possible mint sites is now discussed and are shown on Map 16 at the end of the section.

a) Needham

Frere (1941) identified this as a Romano-British "peasant settlement", which contained evidence of early Romanisation (AD 43-61). One ditch (Ditch 3) contained a homogenous deposit of Roman imported wares, indigenous pottery and other artefacts dating to the Claudian period, and it was this context which contained the broken coin mould. No Iron Age coins were recovered, although the excavated areas were small. Samian ware, an iron *stilus*, brooches and indigenous fine-wares such as Butt-Beakers point to a relatively high-status settlement. The mould was recovered from a ditch of "client kingdom" date, and in this respect is similar to the deposits at Thetford. It is probable that coin pellets were manufactured at Needham, although because the site was quarried away, there is no chance of gaining further data from this site.

b) Saham Toney (Little Cressingham)

This site has not been excavated, but subject to a detailed fieldwalking programme. It comprises a LIA settlement, and a Roman fort of Claudian date.

Considerable quantities of metalwork of both Iron Age and Roman date have been recovered, as have large numbers of Iron Age and Roman coins. It appears to have been a LIA settlement of some importance, where coin pellets were manufactured, and possibly coins minted.

c) Thetford

This is the most fully published probable mint site from the study area (Gregory, 1991a), As well as the numerous pellet mould fragments, a further vessel was recovered which may have been used for annealing blanks prior to these blanks being coined, although it is not identified as such in the report. It was felt that the metal for producing the coin pellets was processed elsewhere, as none of the crucible fragments also found at Thetford contained silver. Iron, copper and bronze working also took place on this site. Only four IA coins were recovered from Gregory's Thetford excavations, and no blanks. A gold pellet was recovered from elsewhere at Thetford (Hoard 44).

Enclosure 23, dating to Phase II c.50-60AD, has been interpreted as the mint site. It was situated just outside the large enclosure Ia, itself interpreted as a tribal centre for the client kingdom with a largely ceremonial and religious function. Gregory *(ibid.)* indicated that the importance of the mint site was that it apparently operated during the period of the Icenian client state. The mint was supereceded by an expansion of the ceremonial site, and was demolished to make way for the extraordinary concentric linear ditches which surrounded the last phase of the ceremonial enclosure.

However, Gregory's relatively refined dating of the Thetford complexes can be questioned, and it is possible that the mould fragments are residual. There are therefore two possible interpretations – that the mint did indeed operate during the client kingdom, and was perhaps producing some of the last IA coins in Britain, although it is possible that Roman coins were being copied instead (these copies were discussed by Allen, 1970) – or that the mint was earlier and pre-Conquest. I favour this latter interpretation.

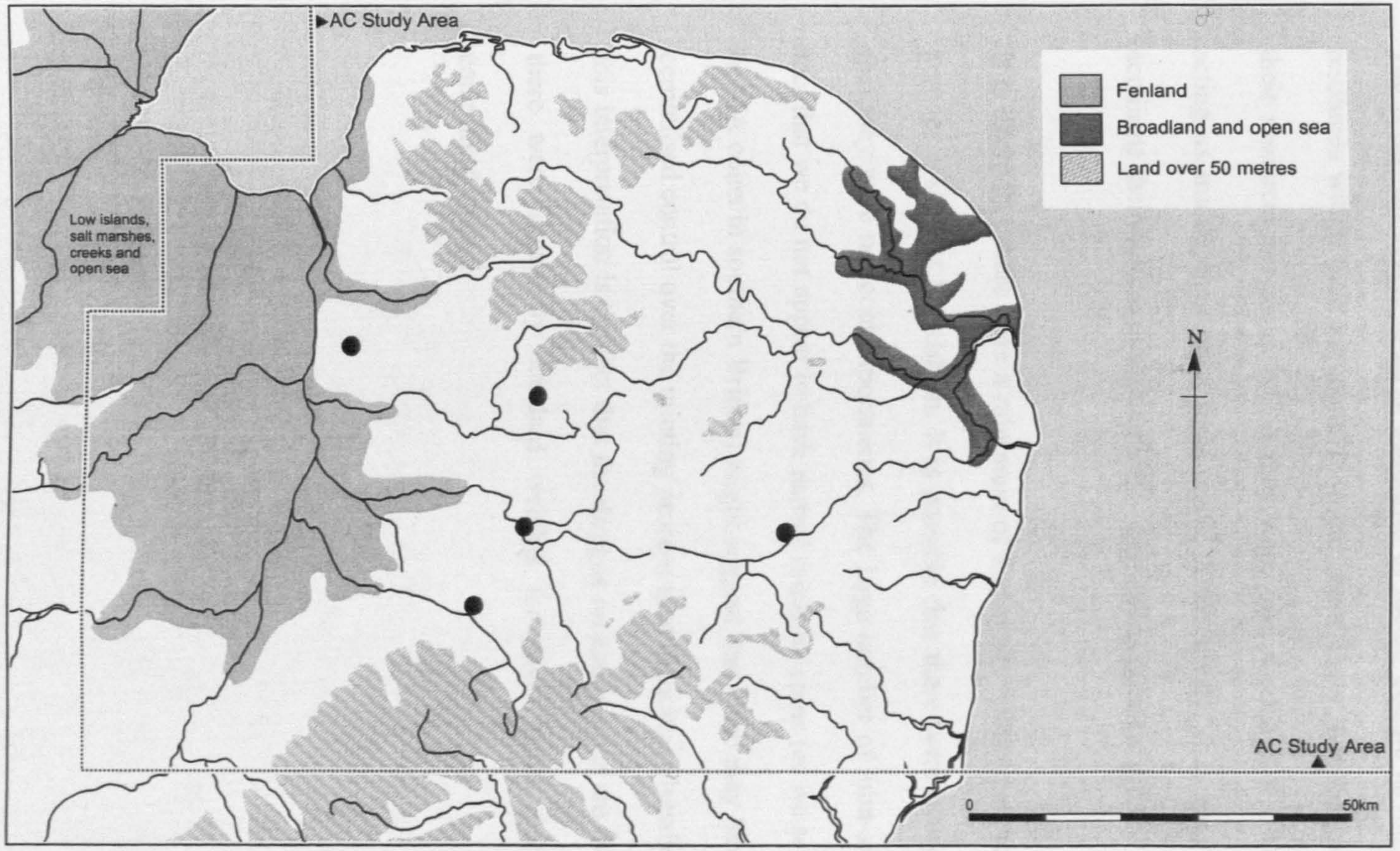
Whatever its exact date, the evidence for a mint here is strongest we have for the study area, as there were so many mould fragments recovered, along with the annealing vessel, making it likely that coins were actually struck here, as well as pellets produced. Additionally, a gold pellet was recovered from this area.

d) West Stow

This broken mould is almost certainly in a residual context, as it was found in the fill of an early Anglo-Saxon sunken-featured building, along with a number of late Roman coins and Roman glass. However, it does appear to be an IA artefact. West Stow comprises the remains of an Anglo-Saxon settlement, which overlies a large IA settlement, and it is considered very likely that the mould fragment dates to the LIA, and originally came from a nearby or underlying IA context.

e) Fincham

This site is known from metal detected finds which have included Roman and Icenian coins, metal working debris, blanks and so on. It is possible that this is an IA/RB settlement site which had a mint or metal workshop of some sort.



Map 16. The location of possible Icenian mint sites.

GENERAL DISCUSSION ON THE MANUFACTURE OF ICENIAN COINS

The Iceni had access to large quantities of metal, despite having no natural resources within their kingdom. It would seem likely that they were trading their resources for metal which they were then working, or that they were acting as middle-men on a trade route. Alternatively, they may have been acquiring their bullion in another way – perhaps as political gifts.

It is likely that there were a minimum of five mints within their territory, and perhaps a sixth at Snettisham. It is possible that there were many more, and that they were not contemporaneous. The large number of mint sites, and the fact that we do not appear to have named mints on coins (as we see elsewhere in LIA coins in southern Britain) might suggest that there may have been less centralised control over the minting process than there was elsewhere. Against this interpretation is the fact that the designs on many coins are the same, and there were apparently standard weights for silver coins, both implying centralised control.

CHAPTER 8

CONCLUSIONS

INTRODUCTION

A study of the numismatic evidence within the study area combined with an analysis of the archaeological and historical contexts allows us to make a number of observations and conclusions, discussed more fully below.

Some of them are very speculative, although all have been reached by studying what evidence there is, however meagre. Many provide models for testing future archaeological data.

OBSERVATIONS AND CONCLUSIONS

The dates of Icenian coin hoards.

It appears that the Iceni hoarded coins from the start of their use of coins, and this continued throughout all coin-using phases including the Later Client Kingdom. The 54 hoards in the study area date to at least five phases of hoarding covering the period c.80 BC – c.AD 61. The start date for hoarding coins may in fact have been earlier, depending on when potin coins and Gallo-Belgic A and C coins were in use. The phase with the largest number of hoards in the study area is Phase E, the final phase.

The reasons for hoarding.

The hoarding of coins and other metalwork appears to be common and was probably due to cultural tradition. LIA artefacts such as coins, torcs and horse equipment are known in very large quantities from East Anglia and more particularly Norfolk (Hutcheson 2004). There is also evidence of hoarding in this area from the LBA and Roman periods, and even later periods. How much of this is peculiar to East Anglia is difficult to say, as for example LBA hoards are known from many locations in Southern Britain (Taylor 1993). However, there is a definite concentration of Roman Plate from East Anglia compared with the rest of Britain (Hobbs pers. comm.) which may echo the tradition of IA hoarding, and there are also a number of spectacular Roman jewellery hoards. It appears that the IA and Roman Iceni hoarded metalwork a great deal (over and above what the rest of southern Britain was doing), and that this is a particular cultural tradition from this area. Why this should be the case is another question and beyond the scope of this study.

Coin hoards were apparently not recovered for multiple reasons including religious/ votive reasons, economic reasons and finally historical reasons. We know that "votive" hoards were deposited at Romano-British temple sites, where presumably there were earlier IA shrines. But the variation in the size of hoards, from two to several thousand, suggests that hoards may have been deposited and not recovered for different reasons. The smaller hoards might represent part of the wealth of an individual, but the larger ones may represent

tribal wealth, or the wealth of an extended family. Hoards are often associated with areas of importance in the LIA – e.g. there are concentrations around known IA settlements such as Thetford and Caistor-by-Norwich.

Icenian coin hoards in the study area are usually carefully selected savings hoards (not emergency). They do not have the appearance of having been put together in a hurry and rarely contain plated coins or fractions. Sometimes the coins have cut marks on them, and the Roman coins in the mixed hoard from Lakenheath were selected for their weight and not appearance. All this suggests that most were savings hoards.

There are some hoards which do not fit this pattern, such as Joist Fen and Fincham. These dispersed hoards may in fact be site finds, or hoards within a site context, perhaps mixed with causal losses. Other hoards which do not fit this pattern are those from temple sites, which contain a higher number of plated coins, larger numbers of the smaller denominations, and a wider date range of IA coins.

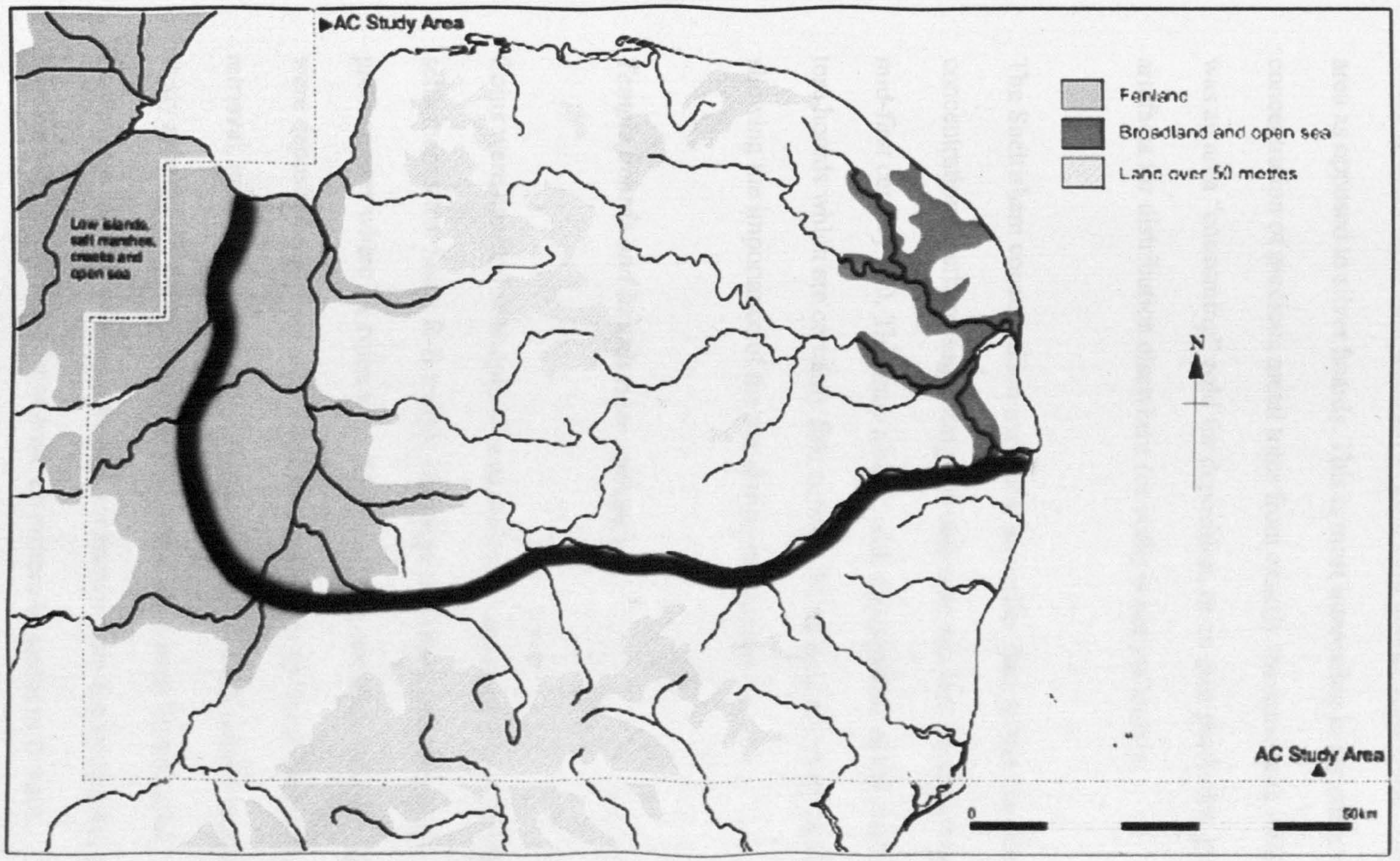
There are large numbers of late IA coin hoards and this probably reflects the inability of the owners to collect their wealth during and after the Boudican War. Phase E Icenian silver coin hoards often contain large numbers of coins, especially silver coins. Although most have the appearance of "savings hoards", the sheer number of them and their association with Roman coins down to Nero, suggests that many could not be recovered as their owners died in the Boudican War or its aftermath.

The distribution of Icenian coin hoards

There appears to be a coin-hoarding zone in the west of the Icenian territory. Map 4 in Chapter 5 shows that most coin hoards favour the middle and west of the study area – there are relatively few in the east.

There are four main concentrations of hoards – northern, southern, eastern and western. The northern concentration is loosely centred on Snettisham, the southern on Thetford, the eastern on Norwich and the western on Stonea. The concentrations are all around sites of known importance in the LIA, and – with the exception of Snettisham - may also relate to rivers and catchment systems.

We may be able to define the tribal/kingdom boundary by looking at the Icenian hoard distribution (shown on Map 17). The River Waveney may be a southern boundary. Most of the Icenian coin site finds – with some notable exceptions – also fall within this core hoarding zone. However, this contrasts with the boundaries suggested by Martin (1988), who also looked at coin distribution – he suggested a more southerly boundary. Further work using the huge amounts of data in the Celtic Coin Index at Oxford may be able to resolve this.



Map 17. The possible Icenian tribal boundary derived from coin hoard evidence.

The gold zone around Snettisham

There is an obvious concentration of gold coin hoards around the Snettisham area as opposed to silver hoards. This is most interesting in the context of the concentration of precious metal torcs from exactly the same area. Whether it was an area "consuming" gold for deposition, or an area producing gold artefacts for distribution elsewhere (or both) is not yet known.

The Snettisham concentration may have an earlier flourit than the other three concentrations, perhaps suggesting that this area was less important by the mid-first century AD. This may also fit with the evidence of the Snettisham torc hoards which are certainly first century BC or possibly even earlier, showing the importance of the site during this period.

Temple hoards and hoards near settlements.

Coins were hoarded at temple sites as well as in and around coin-using settlement sites. Some R-B temple sites appear to have had earlier IA predecessors where IA coins were deposited. It is not clear whether IA coins were deposited at temple sites for votive reasons or to "bank" the coins for retrieval, or both. It is also not yet clear whether all such temple sites in the study area had IA coin deposits as only some have been investigated. However, a number of temple hoards are known from the study area, and this is in keeping with the evidence from elsewhere in southern Britain.

Some coin-using settlement sites had IA coin hoards deposited nearby (for example, Stonea Grange is an IA settlement and a number of IA coins were deposited in and around it, including the at the IA "fort" of Stonea Camp). It seems logical to suggest that most hoards will have been deposited relatively near to IA settlements, especially given their riverine distribution.

The coin hoard distribution and casual coin losses

The coin hoarding zone differs from other known LIA distributions. For example, Hutcheson's extraordinary map showing all IA material across Norfolk (Map 3, Hutcheson 2004) shows that virtually the whole county was used during the IA with the exception of the fens and broads. This is also echoed in her map 15 (*ibid*) which shows single IA silver coins more-or-less continuously distributed across the county, although fewer in number. A similar although sparser pattern is shown in her distribution of single gold coins in her map 13 (*ibid*). (However, her hoard distribution maps are not so useful as they omit many hoards).

By contrast to the distribution of singleton coins, the coin hoards shown in my distribution maps have a markedly more riverine distribution, and concentrate more in the centre and west.

Non coin-using settlement sites

There are a number of LIA settlements which do not appear to have used any coins at all. These include the "Thorham" types enclosures such as Thorham, Norfolk (phase I); Warham Burrows, Norfolk; Wighton Copy's Green, Norfolk; Barnham, Suffolk and a number of other similar sites. Many of these were constructed in the earlier part of the first century AD and apparently abandoned or destroyed around the 60s and 70s. Other settlement sites by contrast – often undefended or unenclosed – appear to have used numerous coins. We do not yet understand the reason for this difference, but it appears to be a "real" one.

The numbers of coins minted.

The Iceni appear to have minted an average of c. 100,000 silver coins per year during a 65 year period - Phases 7, 8 and 9 (c. 20 BC – AD 45), and these are conservative estimates. This has profound implications for our understanding of the political and social structures of the LIA in this area. During Phase 7 (c. 20 BC-AD 10) at least 1 million silver units were issued and during Phase 8 (c.AD 10-40), at least 1.6 million.

The amount of raw materials and social organisation needed to produce these coins would have been immense. For example, the amount of silver needed to produce the one million units would have been 625kg. If these were derived from *denarii* (at c.100% silver), then around 168,900 *denarii* would have been

needed during the thirty year period of Phase 7 alone (c. 20 BC-AD 10). The calculation for this is shown below. Similar quantities of copper were also needed, along with large quantities of timber for fuel.

Calculation:

1 Icenian unit weighs 1.25gm (50% silver)

Therefore 1 million units would weigh 1,250 kg, of which half (625kg) would be silver.

A *denarius* weighs approx. 3.7gm, therefore 625 kg would produce approx. 168,900 *denarii* (a *denarius* of this date is approximately 100% silver).

Mint sites in the study area.

There were a number of mints within the Icenian kingdom – we can almost certainly identify five at Thetford, Fincham, Saham Toney, Needham and West Stow – but there are likely to have been others too. All of these five are likely to have been silver mints, to judge from the analysis of the residues in the coin moulds. We do not know if they were contemporaneous.

The use of gold.

The Iceni minted relatively few gold coins. It is likely that they either chose to use their gold supplies in different ways, perhaps by manufacturing torcs which have not survived or been recovered, or that they did not have access to large quantities of gold. The gold torcs of Norfolk are well known, but most of these were almost certainly manufactured before the Iceni started to mint for themselves. By far the most numerous of Icenian gold coins are the earliest –

the Norfolk Wolves. These are not found in many hoards, but there are quite large numbers of singletons. However, these are a very debased series containing relatively little gold.

If the Iceni did have access to reasonable quantities of gold from the mid first century BC onwards, then it is a mystery as to why they did not mint more gold coins, or what other golden artefacts they manufactured instead, as neither appear to have been found in large quantities in the archaeological record. (It is of course possible that the gold was reused and recycled). The amount of golden Icenian coins is far smaller than those of other tribes.

Given this, it is tempting to suggest that their supply of gold was limited from the first century BC onwards. Even the quantities of gold needed to make the Snettisham torcs are not huge - Stead (1991) indicated that 30kg of precious metals were found in the Snettisham hoard deposits, but contrasted this with the estimated 70,000 kg of stolen bullion of the Tectosages. It is also worth contrasting this with the estimated 625kg of silver needed to produce the Icenian silver coins of Phase 7 alone, the estimated 825kg of gold in the pre-Conquest Dobunnic coins (Van Arsdell 1994), and the estimated 5,000kg of gold needed to mint the coins of Cunobelin (Allen 1975).

The Norfolk Wolf and Snettisham gold coins appear to have been made from recycled Gallo-Belgic coins, debased by the addition of other alloys. However, there appears to be a new source of gold from Freckenham 2 onwards – probably refined gold from the Roman World.

We can conclude that, surprisingly, in a region famous for its archaeological record of LIA golden artefacts, it appears that the Iceni did not possess or use much gold, either through deliberate choice or through a paucity of supplies of gold. The other alternative is that they had access to similar amounts of gold to other tribes, but that for some reason, it does not now appear in the archaeological record. This could be for a number of reasons:

- The gold is concentrated into relatively few artefacts or hoards (e.g. torcs or coin hoards) which have yet to be recovered.

- Golden IA artefacts (e.g. coins and torcs) were recycled and no longer exist. (If this is a correct suggestion, then perhaps the Boudican War was a period when Icenian gold was confiscated; alternately, this recycling could have happened without reference to external events).

It is possible that there was an Icenian gold mint in the Snettisham area. There is no direct evidence for this, although it is considered that there is a gold workshop in this area manufacturing torcs. These skills may have continued with the minting of gold coins such as the Norfolk Wolves. The concentration of gold hoards in the area is also suggestive.

Plated coins.

Some Icenian moneyers made plated coins from official dies. This is likely to mean that corrupt moneyers in the official mints were producing counterfeit coins – a phenomenon well-known from the Classical World.

Contemporaneous Icenian coins and possible pagi.

There is numismatic evidence for three groups of Icenian coinages circulating contemporaneously, which may represent three pagi, septs or sub-groups of the Iceni. This phenomenon is most marked in the "dynastic period" (Phases 8 and 9) just before the Roman Conquest, when inscribed coins were used. However, these three groups of coinages are not the same as the three streams of coinages proposed by Allen (1970). He postulated that there were at least 3 Icenian *pagi* or sub-tribes, based partly on his observation of three main streams of coinage - Pattern-Horse, Boar-Horse and Face-Horse, which he believed represented the coins of different *pagi*.

From the hoard evidence, it has long been clear that there were several coin types were circulating simultaneously (Allen 1970), which appear to have come from different mints. This observation is borne out by my phasing of the Icenian coinage. For example, the silver Early Face-Horse, Pattern-Horse and Boar-Horse types all first appear within Phase 7. Likewise it is clear that the three Pattern-Horse types Anted(i), Ecen and Ece are also distinct and appear at about the same time – Phase 8. As we have seen, it seems apparent that the

moneyers wanted to draw a clear distinction between "Ecen" and "Ece". Both appear in denominational sets of gold stater, silver unit and silver fraction, which strongly suggests that this was a deliberate difference, reinforced time and again on different coins. Whether Ecen and Ece are one and the same person (I think it unlikely that they represent the tribal name as discussed in Chapter 2) is perhaps less important – these two streams of coinage are *distinct* and were meant to be viewed as such.

Following on from this, I attempted to place die-linked types or stylistically related coins together (for example, there are typological links between the early Boar-Horse silver types and the Freckenham types). I also looked for stylistic links between coins of different phases. The result is summarised in Table 62 below, and although inevitably subjective and perhaps wrong in its detail, it shows the contemporaneity of *three broad streams of coinages*, which is the main point I wish it to emphasize. Incidentally, it only appears to work from Phase 7 onwards, and some sub-phases – which are themselves very speculative – do not appear to have three streams of coinages at the same time (although it is tempting to place Freckenham 1-3 and Irstead 1-3 into different *pagi* which would make it work rather better – indeed this is an alternative which could be considered). The model works best in Phase 8; Phase 9 is highly speculative.

Table 62: Possible coinages relating to different Icenian *pagi* (*This table is based on typology, die links, coin weights, circulation wear, and my suggested dates).*

PHASE 7 – 20 BC-AD 10: ICENIAN LATE GOLD AND SILVER UNINSCRIBED		
PAGUS 1	**PAGUS 2**	**PAGUS 3**
Freckenham 1-3 Irstead 1-3 Early B-H	Early P-H types	Early F-H types
Freckenham 4 B-H A B-H B		
B-H C		Normal F-H A Normal F-H B/C
PHASE 8 – AD 10-40: ICENIAN EARLIER INSCRIBED		
Can Dvro		
Anted(i) types	Ece types Saenv Aesv	Ecen types Ed(n) types Triple Symbol
PHASE 9 – AD 30-45: ICENIAN LATER INSCRIBED		
Ale Sca?	Aedi?	Prasto?

How do we explain these three streams of coinages?

There appear to be two broad explanations, (although a variant of this would be that each explanation might apply at different times):

Model 1: The Iceni were a single political entity, and the streams of coinages represent the outputs of different mints under a single centralized power. The names are those of moneyers (cf Frankish mints).

Supporting this is the fact that Prasutagus is described as King of the Iceni (*Annals* xiv 30), and other mentions of the Iceni in Tacitus describe them as a powerful tribe (*Annals*, xii 30).

Additionally, the coin moulds and coins which have so far been found, do not appear to show there were three obvious territories. Indeed, if anything, the distribution of coin moulds appears to be southern and near the tribal boundary.

Model 2: The Iceni were a group of related tribes or sub-tribes (pagi), perhaps federated under a main tribal leader. The different streams represent the coinages of different pagi.

Supporting this are the references in classical texts from Caesar onwards which appear to mention the Iceni with other peoples or tribes. Thus Caesar talks

about the Cassi, Bibroci, *Cenimagni*, Segontiacti and Ancalites pointing out Cassivellaunus's stronghold nearby (presumably at St.Alban's/Verulamium). The very name "Cenimagni" may perhaps imply the "Greater Ceni/Iceni", perhaps implying lesser tribes associated with it. Tacitus also talks about "Icenian chiefs" (*Annals*, XIV, 30) which may imply leaders of *pagi*; and also he too mentions neighbouring tribes (Annals, xii 30) in relation to the revolt itself of AD 47/8.

Secondly, Prasutagus, the client king, is said to have lived a long life (Annals XIV 30), perhaps ruling from the Roman Conquest onwards. If that was the case, then he certainly retained power after the revolt of AD 47/8, perhaps implying that the Iceni themselves were not considered the ringleaders. Indeed Tacitus tells us that "Led by them [the Iceni], the *neighbouring tribes* now chose a battlefield....." for the revolt. Perhaps these neighbouring tribes were *pagi* of the Iceni?

Thirdly, other "Celtic" societies are known to have organised themselves along such lines, with *pagi* or septs forming a greater tribe, kingdom or clan.

Finally, it appears very difficult to explain away the appearance of three typologically related but distinct, contemporary streams of coins, (particularly once they become inscribed the names of probable leaders such as Antedi, Ecen and Ece), in any other way.

I therefore favour the second model (at least for Phases 7 onwards), and believe the Iceni were formed of a group of related tribes, septs or *pagi*, who together formed the "kingdom" of the Iceni. However, unlike Allen (1970), I do not think that the split of Boar-Horse, Face-Horse and Pattern-Horse relates in a simplistic way to three different *pagi*, rather the split seems to be along the following lines:

- Boar-Horse/Anted (Pagus 1)
- Pattern-Horse/Ece (Pagus 2)
- Face-Horse/Ecen (Pagus 3)

The territories of the three pagi

During Phase E these may have been southern, western and eastern, centred respectively on Thetford; Norwich and Stonea. Map 9 in Chapter 5 appears to show is that there were three main areas which were active during Hoard Phase E – Norwich, Thetford/fen edge and Stonea. It is noteworthy that at this period we have the emergence of three groupings of coinages (discussed in Chapter 6). The hoard evidence does suggest three broad concentrations and perhaps these represent the core areas of each *pagus*. Clearly, a great deal of numismatic and archaeological work remains to be done to test the *pagi* model, and to see if any clearer archaeological patterns can be discovered.

Other archaeological evidence for three *pagi* is extremely thin. Neither the coins nor the distribution of coin moulds provide us with clear evidence of

three obvious territories. Additionally, there are more than three major Iron Age settlements within the settlement area which could have formed foci for such *pagi* (for example Venta (Caistor); Thetford; Bury St. Edmunds; Stonea; Cambridge).

But should we really expect to see such clear-cut archaeological distribution patterns? Firstly, it is possible and indeed likely, that political power might have shifted about between *pagi*, and allegiances changed. Thus, one might not expect particularly clear-cut patterns on the ground.

Secondly, if one accepts my view that minting ceased c.AD 43 when the Iceni became a formal client kingdom, one might expect indigenous coin types to have circulated more freely and mixed more thoroughly throughout the whole territory during the period c.AD 40-60 than if new coin types were continually being issued by different *pagi*. Thus the coin types of all *pagi* might appear in similar proportions in hoards of similar dates. In fact, this is precisely what we do see with the later silver hoards. (And indeed this is another argument – again assuming that minting ceased c. AD 43 - for dating the later silver hoards to around the Boudican War, as there would have been sufficient time for the coins to have mixed and appear in similar proportions in the hoards).

Allen (1970) felt that his *pagi* might be distributed as follows:

- Face-Horse - north and north-west of the territory
- Boar-Horse – around Norwich
- Pattern-Horse – around the Breckland area (Bury St. Edmunds)

If we agree my model that the Pattern-Horse/Ece/Aedi coins are from the same *pagi*, then evidence supporting Allen's *pagi* territories might include the fact that the Ece A type is based on a coin of Cunobelin; the Aedi coin is also similar to Cunobelin types, and this area/*pagus* is closest to the Trinovantes.

However, there are other alternatives, as hinted at by a distribution of coin site losses:

- Pagus 1 (Boar-Horse/Anted) – around Norwich (as in Allen's model)
- Pagus 2 (Pattern-Horse/Ece) – around north-west, based at Snettisham??
- Pagus 3 (Face-Horse/Ecen) – around Thetford and Bury

The *pagi* model could be tested by coin distribution maps - if we assume that coins were minted in and circulated mainly within the territory of a single *pagus*. Site finds representing casual coin losses would be particularly useful here. At least one centralised settlement or *oppidum* might be expected within each territory or *pagus*.

Political cohesion amongst the pagi.

This cohesion is suggested by the highly conservative designs on these coins, such as is shown on the Anted, Ecen Ece coins which all show horses on the reverse and have identical designs on the obverse. It is also suggested by the "silver standard" of c. 1.25gm which was brought in during the later part of Phase 7 (20 BC-AD 10), and which appeared to remain the standard thereafter.

Some of the Anted, Ece, and Ecen coins are likely to have been the product of a single mint, most obviously the gold staters which are die linked. If these are coins of different *pagi*, this suggests a high degree of co-operation and cohesion.

The possible leaders of the pagi.

We may be able to name three leaders of the *pagi* who were ruling simultaneously: Antedi-, Ecen- and Ece-. (There appears to be nine named rulers of the Iceni between c. AD 10-45). It is perhaps worth spelling out the coin evidence for these three *pagi* in Phase 8, as it seems particularly clear that in this phase there were three "houses", "dynasties" and/or mints operating simultaneously. Table 63 below shows this.

Table 63: Contemporary coinages of the Iceni in Phase 8 (Icenian Earlier Inscribed) – AD 10-40.

PAGUS 1	*PAGUS 2*	*PAGUS 3*
ANTEDI "DYNASTY"	**ECE "DYNASTY"**	**ECEN "DYNASTY"**
Can Dvro?		
*Anted(i) stater	*Ece stater	*Ecen stater
Anted(i)	Ece A	+Ecen
Anted(i) variant	++Ece B	Ecen fraction
Anted(i) fraction	Ece fraction	+Ed(n)
	++Ece B (rev)	+Ed(n) variant
	Ece B (rev) fraction	Ed(n) fraction
	#Saenv	Triple Symbol
	#Aesv	Triple Symbol fraction

KEY

*)
\+) Obverse die links
++)
\#)

The proportions of these rulers/dynasties are similar to each other within Icenian silver hoards, and moreover, their proportions within an "average" hoard remain more-or-less constant. For example, Anted(i) types typically make up around 20-22% of the total hoard, Ecen/Ed(n)/Triple Symbol types make up 26-29% of the total hoard, and the Ece types (excluding Saenv and Aesv) make up 15-19% of the total hoard.

It is also noteworthy that between c. AD 10-45 (phases 8 and 9), we have the names of no less that nine rulers of the Iceni. It is almost certain that at least some of these were reigning simultaneously, although we have very little way of refining the chronology to suggest a sequence. The rulers are CAN DVRO, ECEN, ANTEDI, ECE, SAENV, AESV, ALE(FF) SCA(VO), AEDI and

ESVPRASTO. The number of names alone suggests that some sub-division of the tribe into septs or *pagi* is likely.

The relationship between Icenian and Roman coins

There appears to be a relationship between the two coinages, either by weight or by silver content. If by silver content, the relationship would be 6 Icenian units: 1 *denarius.* The relationship between the two coinages may be as a result of melting down Roman coins to manufacture Icenian units, and there would have been a fixed formula e.g. c. 10 *denarii* would make c. 60 units. It is interesting in this regard to note that IA silver coin moulds often have 50-60 holes.

The authors of the Lakenheath hoard were convinced that the Roman coins were selected purely on weight (therefore silver content). This again, suggests that the Iceni knew what these Roman coins were worth, or should be worth.

The value of Icenian units.

It is difficult to suggest the intrinsic worth of an Icenian silver unit, or indeed any other Icenian coin, but I have attempted this. I have used two methods to calculate the worth of an Icenian silver unit from Phase 7 onwards. These are based on the fact that the Icenian units may have had a relationship with Roman *denarii*, and there are better records for the Roman world than there are for LIA Britain.

In today's money, an Icenian unit could have been worth around:

- £1 (Calculation 1 using the weight relationship to denarii)
- 50p (Calculation 1 using the silver content relationship to denarii)
- £50 (Calculation 2 using the weight relationship to denarii)
- £25 (Calculation 2 using the silver content relationship to denarii)

Both methods are highly speculative (which is surely why the results are so different) but the exercise is an interesting one.

Calculation 1:

Millett (1990, 58) states that a mid-first century AD *denarius* is worth 0.2908gm of gold.

One Troy ounce of gold = US $ 564 (Source: Daily Telegraph 15.06.06)

US $564 = £307.90 (Source: Daily Telegraph 15.06.06)

Therefore one Troy ounce of gold = £307.90

One Troy ounce = 480 grains = 31.103gm.

Therefore 31.103gm = £307.90 (at prices of 15.06.06)

Therefore 1gm = £9.90

Therefore 0.2908gm = 1 *denarius* = £2.88 at June 2006 prices

If 3 Icenian units = 1 *denarius* (using relationship by weight), then
1 Icenian unit = £0.96 (96p)

If 6 Icenian units = 1 *denarius* (using relationship by silver content), then
1 Icenian unit = £0.48 (48p)

Calculation 2:

Millett (1990, 58) states that a Roman soldier on basic auxiliary pay would earn c. 100 *denarii* per annum (and that this is probably an underestimate).

A modern soldier on basic pay in the British Army would today earn c. £15K per annum (Source: British Army Careers website, 15.06.06)

(New entrants earn £11,774 per annum; a private earns £13,866-£16,852 per annum. Source: British Army Careers website, 15.06.06).

Therefore 100 denarii is the equivalent of £15K.

Therefore 1 denarius = £150 but this is on the high side (because the auxiliary pay is underestimated).

Therefore 1 Icenian unit was worth £50 (by weight) or £25 (by silver content) although these estimates are likely to be on the high side.

Using Calculation 1, the 872 coins in the Field Baulk hoard were worth £837.12 (by weight) or £418.46 (by silver content). Using Calculation 2, the 872 coins in the Field Baulk hoard were worth £43,600 (by weight) or £21,800 (by silver content).

As these calculations differ so widely, it is unlikely that we will be able to say anything very sensible about the intrinsic worth of Icenian units. It is possible that their real worth lay between these two extremes – but this does not get us much further. A guesstimate might be that an Icenian unit was worth around £5, but this is based purely on subjective judgement. If that was the case then the Field Baulk hoard would be worth £4,360.

The function of Icenian coins.

There do not appear to have been any Icenian copper-alloy coins. If any are identified in future, it is unlikely that they will prove to be numerous. This means that most Icenian coins were of gold and silver alloys. The lack of smaller denominations meant that much trade must have been still carried out using barter.

Silver and gold coins may have functioned partly as an exchange mechanism for high-priced goods or services; a method of storing wealth; and for gift exchange and offerings. The fact that so many were minted, however, suggests that the Iceni found them very useful.

The destruction of Icenian coins.

It appears that Icenian silver units were withdrawn after the Boudican War, after which *denarii* alone were used. This seems to be the case otherwise we might expect many more to be recovered from Roman sites and from early Roman hoards. Perhaps this also happened with Icenian gold, as suggested above.

Access to bullion.

The Iceni appeared to have had access to large quantities of *denarii* from around 20BC onwards. This may show political and/or social alliances with the Mediterranean World and Rome. It is possible that *denarii* were presented to the Iceni as *subsidies* (gifts) by Rome in return for allegiance, apparently starting with the reign of Augustus (27BC – AD 14).

Braund (1996) suggested that the Romans bestowed gifts or "subsidies" upon client rulers as a means of control, and cited Van Arsdell's (1994) analysis of the Dobunni as evidence that some client kings were able to issue substantial new issues of coinages as a result. Corio of the Dobunni was seemingly able to do this at the beginning of the reign of Augustus (Braund 1996, 80; Van Arsdell 1994, 40). Interestingly, this is at a similar time to the standardisation of Icenian silver – perhaps the result of the introduction of large quantities of *denarii.* Also at this time there is evidence that a number of British dynasties were copying Roman images on indigenous coinages (Creighton 2000, Fig 4.3). All this appears as an increasing amount of evidence that political contact with the Rome flourished under Augustus (Haselgrove 1987, Fig 5.5; Creighton 2000, Fig 4.3). Haselgrove (1987) considers that the copying related to treaties established between Augustus and British kings, and Braund suggests us that Augustus considered that diplomacy was as important as military victory. Indeed his preferred course of action was diplomacy (Braund 1996), as Suetonius makes clear:

> *Except in a few instances [Augustus] restored the kingdoms of which he gained possession by the right of conquest to those from whom he had taken them or joined them with other foreign nations. He also united the kings with whom he was in alliance by mutual ties, and was very ready to propose or favour intermarriages or friendships among them. He never failed to treat them all with consideration as integral parts of the empire, regularly appointing a guardian for such as were too young to rule or whose minds were affected, until they grew up or recovered; he brought up the children of many of them and educated them with his own.* Suetonius. Augustus, 48.

It may well be the case that the Iceni surrendered to Caesar and continued their pro-Roman stance during the reign of Augustus. Augustus is known to have received British kings, and it is possible – perhaps even likely – that the then (unnamed) King of the Iceni was one of them. It is possible that *denarii* were given in large quantities to the Iceni under the orders of Augustus.

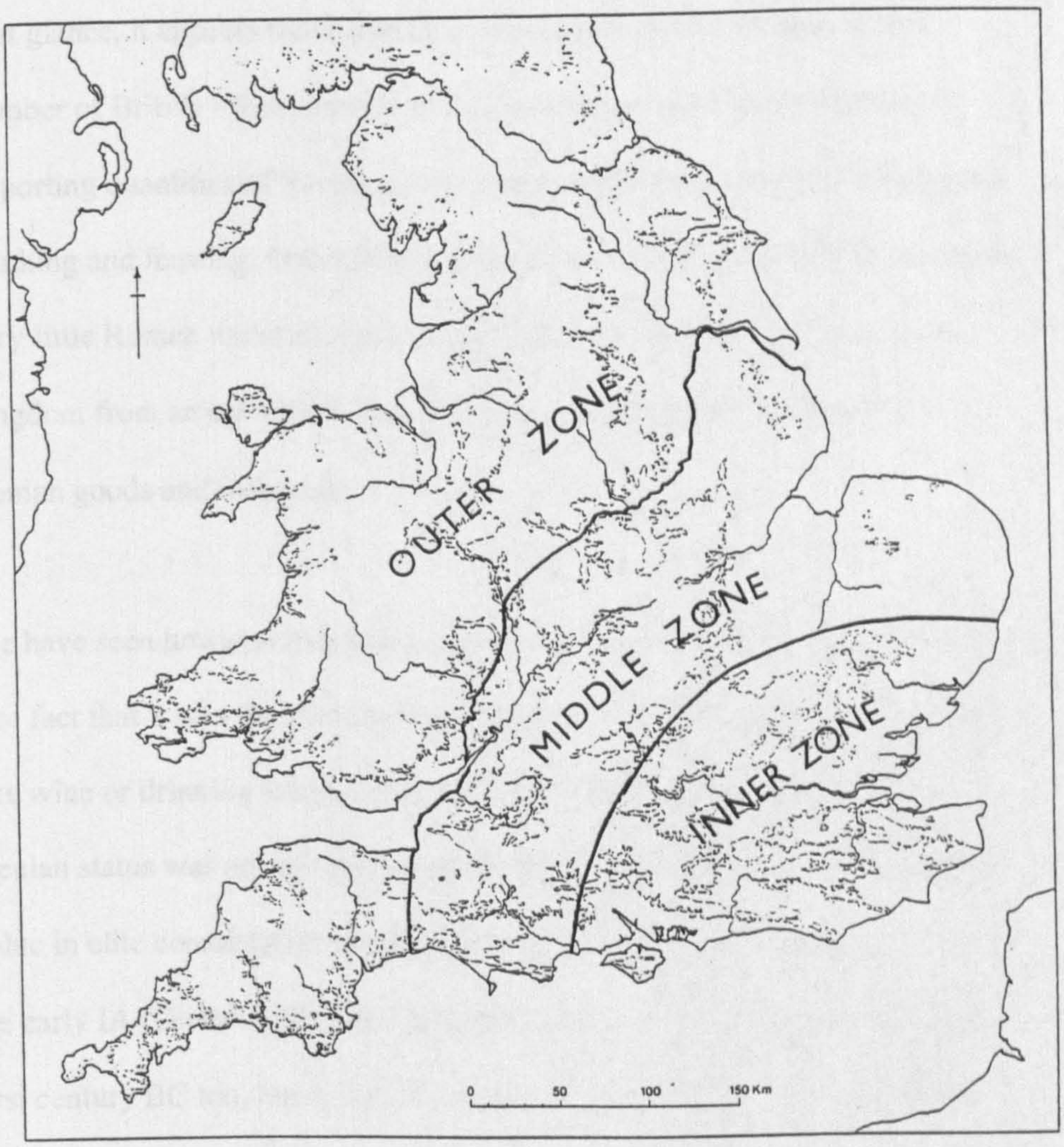
If this is the case, we might perhaps expect to see more evidence of Roman imports in the study area, such as amphorae, as with the Trinovantes. However, there appear to be other tribes in Britain which were also Client Kingdoms where we do not see large quantities of imports either, such as the Dobunni. Perhaps the evidence of some types of Roman imports in an area simply reflects the proximity to the Continent or ease of access to Roman or Romanised markets? Perhaps a lack of imports reflects more accurately the desire of indigenous people to remain culturally separate despite political

allegiance to Rome? What now does appear to be the case is that whatever merits the core-periphery model has (and it still does appear to have a broad validity in relation to some aspects of LIA material culture), it appears to be an over-simplification which masks more subtle variations in the process of Romanisation.

Map 18 shows major socio-economic zones in southern Britain in the LIA, with the Inner Zone being apparently the most Romanised. But one would not guess by looking at it that the Iceni were perhaps among the earliest of Rome's allies in Britain. The likelihood that the Iceni re-coined large quantities of Roman *denarii* and reworked Roman gold has masked the fact that they, too, were receiving Roman imports, but of a different sort. However useful the map is in describing some LIA material culture, it does not appear to completely reflect the politics of the time.

It is worth noting that no examples of Roman *denarii* have been recovered as yet from IA contexts in Britain (Reece 1987, 13-15), and there is no firm archaeological evidence that Roman *denarii* entered Britain before the Conquest of AD 43. However, although this may appear to be a major stumbling block in this discussion, we need to consider that relatively few Iron Age coins have been found in securely dated IA contexts. Additionally, the metallurgical analyses point to the fact that *denarii* were used as a source of silver coins, and finally, if most or all were recoined, we would not expect to find *denarii* in IA contexts as they would have been destroyed.

Map 18: Major socio-economic zones in Southern Britain in the LIA (base map after Cunliffe 1981)



Studies of recent colonial encounters have shown that European goods were not uniformly attractive to indigenous societies, and that peoples were usually very selective both in the goods they accepted, and in the goods they gave to colonials. Sometimes they simply refused to interact at all (Dietler, 1996). At first glance, it appears that a similar picture exists in LIA Britain, with a number of British tribes (usually those physically nearer to the Continent) importing quantities of Roman goods, especially those connected with eating, drinking and feasting. Other tribes, such as the Iceni, appear to have imported very little Roman material at all. Despite the fact that they may be a client kingdom from an early date, their material culture appears largely free of Roman goods and influence.

We have seen however that there *were* Roman imports, in the form of bullion. The fact that it was *this* that the Iceni apparently wanted, rather than something like wine or drinking vessels, may tell us something about their culture. Icenian status was apparently enhanced, not through the exotic and symbolic value in elite consumption rituals such as feasting, as in the Hallstatt region in the early IA (Dietler 1996), and perhaps in parts of south-east England in the first century BC too, but by the increased production of *socially significant artefacts* such as torcs and coins which were probably symbols of power, status and authority. The deliberate disposal of such objects may also have conferred status upon the donor.

The political alliance with Rome.

The Iceni may have been pro-Roman from 54 BC until AD 61 – a period of 115 years, despite the uprising of AD 47/8. A client king or queen could have been installed at any time during this period.

We have seen there is evidence that the Cenimagni/Iceni made embassies to Caesar in 54 BC. If this was the case, then friendly relations on an informal or formal basis appear to have been established at that point. Table 64 below summarises the evidence for client kingship in the Iceni. Prasutagus was probably a client king before the AD 43, and it is likely that other earlier rulers were also pro-Roman and perhaps client kings too. Prasutagus was therefore unlikely to have been the first client king, but he was certainly the last.

Table 64: Possible evidence of Client Kingship in the Iceni and selected evidence from elsewhere.

DATE	EVENT AND SOURCE
54 BC	Cenimagni (Iceni?) surrendered to Caesar (Source: *Caesar*)
27 BC – AD 20	Some British kings (including Iceni?) made dedications on the Capitol, probably during the reign of Augustus (27 BC-AD 14), but possibly under the later reign of Tiberius - but before 20AD. All were client kings. (Source: *Strabo*)
c. 20 BC	Many British rulers copy Roman designs on their coins (Haselgrove 1987, Creighton 2000)
c. 20 BC	Corio of the Dobunni issues a large gold coinage – evidence of Roman gifts? (Source: *Van Arsdell 1994*)
c. 20 BC	Iceni start to standardise their silver units. There may be a relationship between these standardised issues and Roman *denarii (Chapter 7)*
c. 20 BC -AD 61	The Iceni apparently have access to large quantities of *denarii (Chapter 7)*
AD 37-41	King Prasutagus of the Iceni apparently copies coins of Caligula or even depicts Caligula on his coinage (*Chapter 4*). Is this evidence of a treaty with Caligula?
AD 43	11 British Kings (including Iceni?) surrender to Claudius (evidence from his *Triumphal Arch*).
AD 47/8	The Iceni were already allies of Rome (Source: *Tacitus, Annals*)
AD 43- AD 52	Certain districts were given to King Cogidubnus (Source: *Tacitus, Agricola;* Ref: Millett 1990, 43)
AD 61	Prasutagus, client king of the Iceni, dies. (Source: *Tacitus, Annals*)

At around 20 BC, the Iceni appear to have changed their relations with the Roman World. It is at about this time that refined gold of probable Roman origin is found in Icenian gold coins for the first time (earlier ones had used Gallo-Belgic coins as their source of gold). Also c. 20 BC the "silver standard" of 1.25gm was introduced. At about this time, *denarii* seem to have been introduced in very large numbers (some of which were recoined). Finally, at about this time, a higher degree of centralised control over the minting process appears.

This is interesting as at c. 20 BC elsewhere in Southern Britain, some LIA coins show similar signs of a changed relationship with the Roman World. For example, many start to show Romanised designs on their coins, whereas other tribes appear to mint large new gold issues.

All this could be evidence of new relationships with the Roman World – perhaps evidence that some areas became client kingdoms, including that of the Iceni.

Links with other client kingdoms.

The Iceni probably had links with other client kingdoms which may be partly shown by the numismatic evidence. We have seen that there are Icenian coins in a number of hoards in the territory of the Trinovantes and in the Atrebates/Regni. By contrast, they are not found in certain other tribal territories. This suggests they had friendly relations with these two tribes, both of whom are known to have had client kings. Certain coins also show similarities – both these areas have supplied prototypes for Icenian coins (e.g. the Icenian Bury A type and Ece A types are derived from coins from these areas).

However, the Iceni also had clear links with other tribes such as the Corieltauvi, whose political allegiance to Rome is not known.

ESVPRASTO and King Prasutagus

The coins of Prasto (ESVPRASTO) are likely to be those of the historically attested King Prasutagus. The arguments for this conclusion are fully discussed in Chapter 6. To summarise, it is unlikely that two pro-Roman IA kings with similar names reigned over broadly the same area at apparently the same time. If ESVPRASTO is not King Prasutagus, then he is certainly another pro-Roman ruler of the Iceni.

The cessation of Icenian minting.

The cessation of Icenian minting is fully discussed in Chapter 6. It is not thought likely that Boudica minted coins, nor would she have needed to. The attribution of the Face-Horse coins to her reign is considered incorrect. This is fully discussed in Chapter 4.

Icenian coins were probably not minted after c.AD 43. Among the last Icenian coins to be minted were those of Prasto who may have become King not long before AD 43.

This conclusion has been reached partly on the numismatic evidence of the contents of the hoards. Another factor is that the coins of Prasto appear to have been modelled on the coins of Caligula. If they were modelled instead on the coins of Nero, then clearly this has implications for my dating scheme, especially the later phases. It would also mean he was minting after AD 43. However, the overwhelming numismatic evidence still suggests that the vast bulk of Icenian coinage was minted before AD 43.

It is likely that the Prasto coins were among the last coins minted by the Iceni, around the latter part of phase 9 (AD 30-45). Prasutagus was probably the "High King" of the Iceni and its *Pagi,* was king before AD 43, and was a pro-Roman ruler who was allowed to stay in power after it.

British client kings and queens and minting.

Neither Cogidubnus/Togidubnus nor Prasutagus appear to have minted coins after AD 43, despite the fact that probable British client kings certainly minted coins before then. Cartimandua does not either - but we would not expect her to as there is no indigenous tradition of minting in her area. Many other British tribal coinages also ended c. AD 43, and some of them were almost certainly client kingdoms too. We do not understand why this should be the case, although in some parts of the Roman Empire, it does appear that client kings and queens were prevented from minting in gold and silver. It must be a possibility that the cessation of indigenous minting – even in friendly kingdoms - was as a result of a Roman dictat.

If this is the case, it strongly contrasts with Belgic Gaul, where gold, silver and bronze indigenous coinages continued to be minted after the Gallic Wars (Haselgrove 1999).

Roman citizenship in the Iceni.

The Prasto coins are so close to Roman portraits that they might *depict* a Roman Emperor, perhaps Caligula (Gaius Caesar). This phenomenon is known elsewhere in the Roman world and in Britain; some coins of Verica and Cunobeline appear to show the Emperor Tiberius (Braund 1996, 69). This might plausibly mean Prasutagus had a treaty with Caligula. On balance, I think they depict a Romanised Prasutagus (but modelled on a Roman Emperor,

probably Caligula) wielding his symbol of authority – a twisted torc – above him.

It was established practice for those on whom Roman citizenship had been conferred, to take the family name of the emperor under whom the grant was made (Barrett 1981, 126). For example, Cogidubnus became Tiberius Claudius Cogidubnus, probably during the reign of the Claudius, and plausibly at the time he became client king. Similarly, we might expect that Prasutagus was a full Roman citizen (Braund 1996), and perhaps – had this not happened when he was younger - this was granted when he became a client king, possibly during the reign of Caligula. We might then expect his Romanized name to be something like Gaius Caesar Prasutagus, or possibly even Gaius Caesar Augustus Germanicus Prasutagus. Whichever emperor actually granted this right, we can assume that Prasutagus had a Romanised name too.

It is highly ironic that Boudica - apparently the widow of a "friendly king" of one of Rome's earliest British allies and probably a full Roman citizen in her own right (Braund pers.comm. 2006) - should have ended up leading what Tacitus called the bloodiest of all the British rebellions against the Romans, thus ending a friendly alliance with Rome which may have been in place for over a hundred years.

General conclusions

The study of Icenian coins – both stratified and unstratified – and in particular their hoards has been fruitful in assisting in the production of new models for the LIA in this area. These may be tested in future through further numismatic work (for example die linking), through distribution studies and through more metallurgical work.

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