

NORTHAMPTON SITE N80-82 M115THE FISH REMAINS

by Alison Locker

Introduction

A total of 351 fish bones was recovered from deposits dating from pre 700 AD to at least the post medieval period. The following species were identified; eel (Anguilla anguilla), herring (Clupea harengus), pike (Esox lucius), cod (Gadus morhua), haddock (Melanogrammus aeglefinus), ling (Molva molva), mackerel (Scomber scombrus), plaice (Pleuronectes platessa), and halibut (Hippoglossus hippoglossus). The non specific groups are Salmonidae, since although the two large vertebral centra seem likely to belong to salmon (Salmo salar), the possibility of trout (Salmo trutta) could not be excluded. Gadoid refers to bones that belong to fish of cod/ling size but were too fragmented for positive identification, and flatfish which similarly were too fragmented for specific identification. Tables 1, 2 and 3 show the species and the type of bone identified in each context.

Biology and fishing methods

The identified fish are predominantly marine, cod, ling and the gadoid group dominate the medieval contexts. Situated inland transportation of fresh marine fish to Northampton would have been an impossible task prior to the Industrial Revolution, therefore they were probably salted or dried. The nearest port would be King's Lynn, although the biology of some of the fish suggests they were caught from more northerly ports.

An offshore fishery based on lines is suggested by cod, haddock and ling. Cod are found from the shoreline to depths of 600 metres, the few comparative measurements (four) that were possible suggest that from the medieval period onwards the cod were between 91-117 cms in total length which is up to the average size found today (Wheeler 1978, 150). Haddock live on the sea bed in depths of 40-300 metres, both these fish could have been caught by a fishery based at Kings Lynn. However ling are more northerly in their distribution. A deep water fish (commonly found between 300-400 metres) their range does not normally extend farther south than the northern part of the North Sea. So it seems likely that ling were brought either overland from one of the Yorkshire ports, or by sea to King's Lynn and then overland.

Halibut are large, up to 2.5 metres in length, boreal flatfish, caught on hooks, today they are more common in deep water of the northern part of the North Sea (Wheeler and Jones 1976, 220), though it is possible it occurred farther south in the Saxon period. Plaice occur on all coastlines commonly from 10-50 metres, and can be caught by hook or in shoreline traps.

Fine surface nets are used for both herring and mackerel, both of which form large shoals and are seasonally plentiful off the East Anglian coast. Herring particularly formed a important fishing industry.

Fresh fish are poorly represented, eels are likely to have been

caught in their fresh water stage by trapping in 'eel-bucks' (Wheeler 1979, 61), spearing or they could also be stored live in ponds (Hickling 1971-2 119). Pike are predatory fish typically found in lowland rivers and lake, and would be caught by rod and line.

The Saxon Period

As seen in Table 1 only 18 bones were found, and of these only 9 were identifiable. The unidentifiable bone included fin rays which generally cannot be assigned to species. Eel fisheries were very important in the Saxon period. 'Eel-bucks' were wickerwork traps set in the millstream above the waterwheel, water mills became widespread in lowland Britain after the eighth century (Wilson 1973, 29). The single herring skull fragment is scant evidence of the fishery that was an important factor in the economy of Britain by the Norman Conquest (Wilson 1973, 27). At this time herrings would have been salted, which did not have such a long storage life as that of the later smoked and pickled herring. The single cod vertebral centrum would have been from a dried or possibly salted fish. The identification of halibut from a large caudal centrum is unusual in deposits of the ninth and tenth centuries, since as previously discussed it is a deep water fish of more northerly distribution. However it is a valued foodfish, and the centrum was chopped right through in a medio-lateral direction, with a single knifecut also across the centrum. Perhaps only a portion of this fish was brought to Northampton, dried or salted.

The Medieval Period

Fish bone from medieval deposits make up 74% of the fish bone from the whole site, of which cod, ling and gadoid group make up 82%, as can be seen from Table 2. When cod and ling were prepared at the port for drying and salting the fish were gutted and the heads removed. No ling skull bones were present, and cod was mainly represented by vertebral centra (85 out of 89 identified bones). Knifecuts were observed on both cod and ling vertebral centra, and one fifteenth century cod cleithrum was chopped through. so the fish bone is clear evidence of the importance of preserved fish during this period, when a large number of fish days were obligatory until the end of the fifteenth century (Wilson 1973, 31). Ling were only found in medieval deposits. Other marine fish included two fragments of herring, which as in the Saxon period is poor evidence of the thriving industry prosecuted from the East Anglian coast (which would be the nearest source) as well as from many other ports from which salted and later smoked and pickled herring were marketed. Mackerel was identified from a single vertebral centrum, and being an oily fish was also smoked and pickled. Plaice and other flatfish seem to be of little importance at this particular site. Two salmonid (probably salmon) vertebral centra were identified, if they were not caught locally, may have come from Ireland or Scotland in pickled form (Wilson 1973, 37). Pike was identified from a single skull bone, and was not a large specimen. The preference for marine fish over those from fresh water during the medieval period (Wilson 1973, 41), is reflected in the low numbers found in proportion to the marine fish and seems to be true for all periods at this site.

Post Medieval and Later

Table 3 also includes some fifteenth century or later deposits which could not be dated more closely. Another two pike skull fragments were found, the rest were cod and/or gadoid fragments. The cod included three cleithra dated to the fifteenth century and onwards which had all been chopped about the mid point in a dorso-ventral direction, and one had also been chopped at the cranial most point. These chop marks were in a similar position to that from the medieval deposits, and similar marks were also found in post medieval deposits from Pontefract Castle (Locker unpublished). These may be associated with primary butchery in the removal of the head.

Conclusions

The amount of fish bone recovered from Saxon deposits is really too low such suggest any trends, but certainly from the medieval period onwards the transport of preserved fish to Northampton was important. Cod, headless, salted or dried seems to have been the most frequently used at this particular site.

Acknowledgements

I would like to thank Dr S Colley for the use of reference material and comparative measurements from the Faunal Remains Project, University of Southampton.

REFERENCES

Locker A 1984. *Pontefract Castle, The Fish Remains*. Unpublished

Wheeler A 1978. *Key to the Fishes of Northern Europe*. Warne

Wheeler A 1979. *The Tidal Thames*. Routledge and Kegan Paul.

Wheeler A & Jones A 1976. *Fish Remains*. In A Rogerson.
*Excavations at Fuller's Hill; Great Yarmouth. East
Anglian Report No 2. Norfolk Archaeological Unit.*
pp 208-223

Wilson C Anne 1973. *Food and Drink in Britain*. Constable.

NORTHAMPTON SITE NSO-82 M115

TABLE 1 SAXON

<u>CONTEXT</u>	<u>EEL</u>	<u>HRG</u>	<u>COD</u>	<u>HLB</u>	<u>FFH</u>	<u>UND</u>	<u>TOTAL</u>
<u>Pre 700</u>							
AA 451	-	-	-	-	-	1sk	1
<u>700-850</u>							
AA 923	-	-	1v	-	-	-	1
AA 208 2082	2v	-	-	-	-	-	2
AA 208 2070	1v	-	-	-	-	2fr	3
AA 208 2074	1v	-	-	-	-	1fr	2
AA 208 2075	-	-	-	-	-	1v	1
AA 208 2071	-	-	-	-	-	1fr	1
<u>850-1100</u>							
Z 52.2	-	-	-	1v	-	-	1
Y 55	-	-	-	-	1	-	1
AA 132.2 523	-	-	-	-	-	2fr	2
AA 132.2 524	-	1sk	-	-	-	-	1
AA 132.32 1434	-	-	-	-	-	1fr	1
AA 132.37 1908	1sk	-	-	-	-	-	1
<u>Total</u>	<u>5</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>9</u>	<u>18</u>

KEY

EEL = Eel v = vertebral centrum
 HRG = Herring sk = skull fragment
 COD = Cod fr = fragment
 HLB = Halibut
 FFH = Flatfish
 UND = Unidentifiable

NORTHAMPTON SITE NBQ-82 M115

TABLE 2 MEDIEVAL

CONTEXT	HRG	SLM	PKE	COD	HDD	LNG	GAD	NCK	PLC	FFH	UND	TOTAL
<u>1100-1400</u>												
W 16.1	-	-	-	-	-	-	-	-	-	-	1fr	1
Y 50	-	-	-	-	-	-	-	-	-	-	4fr	4
Y 62	-	-	-	-	-	-	-	-	-	-	4fr	4
Y 87	-	-	-	-	1sk	-	-	-	1sk	-	-	2
AA 10.2	-	-	-	-	-	-	1sk	-	-	-	-	1
AA 97	-	1v	-	1v	-	-	-	-	-	-	2fr	4
AA 99	-	-	1sk	-	-	-	-	-	-	-	-	1
AA 100	-	-	-	-	1sk	-	-	-	-	-	1sk	2
AA 327.1	-	-	-	14v	-	4v	2v	-	-	-	-	41
							21fr					
AA 347.1	-	-	-	-	-	1v	-	-	-	-	-	1
AA 347.2	-	-	-	64v	-	15v	32v	-	-	-	-	154
							1sk					
							42fr					
AA 371	-	-	-	2v	-	2v	-	-	-	-	-	4
AA 397	-	-	-	-	-	-	-	-	-	-	1fr	1
<hr/>												
<u>1400-1500</u>												
Y 8.2	-	-	-	1sk	-	-	-	-	-	-	-	1
Y 31	2sk	-	-	1v	-	-	-	-	-	-	4fr	9
				2sk								
AA 35	-	-	-	1sk	-	-	-	-	-	1v	-	2
AA 62	-	-	-	3v	-	-	-	-	-	-	-	3
AA 95	-	-	-	-	-	-	-	-	-	-	16fr	16
AA 95.1	-	1v	-	-	-	-	-	-	-	-	-	1
AA 543	-	-	-	-	-	-	3v	-	-	-	-	3
AA 568	-	-	-	-	-	-	-	-	-	-	2fr	2
<hr/>												
<u>1100-1500</u>												
AA 521	-	-	-	-	-	-	1fr	-	-	-	1fr	2
<hr/>												
Total	2	2	1	89	2	22	103	1	1	1	37	261

KEY

HRG = Herring v = vertebral centrum
 SLM = Salmon fr = fragment
 PKE = Pike sk = skull fragment
 COD = Cod
 HDD = Haddock
 LNG = Ling
 GAD = Gadoid
 NCK = Mackerel
 PLC = Plaice
 FFH = Flatfish
 UND = Unidentifiable

NORTHAMPTON SITE N80-82 M115

TABLE 3 POSTMEDIEVAL & UNSTRATIFIED

CONTEXT	PKE	COD	GAD	UND	TOTAL
<i>1500-1700</i>					
AA 211	-	-	-	1fr	1
<i>1700 onwards</i>					
Z 49	-	-	1fr	-	1
Y 2.3	-	-	-	1fr	1
<i>1400 onwards</i>					
Y 32	2sk	7sk	2sk	32fr	50
		2v		5sk	
Y 32.1	-	-	-	1fr	5
				4sk	
Y 32.3	-	1v	1sk	1fr	3
Y 32.4	-	-	1fr	-	1
Y 32.6	-	1sk	1sk	5fr	7
Y 32.8	-	1sk	-	1fr	2
U/S	-	-	-	-	1
<i>Total</i>	<i>2</i>	<i>13</i>	<i>6</i>	<i>51</i>	<i>72</i>

KEY

PKE = Pike sk = skull fragment
 COD = Cod fr = fragment
 GAD = Gadoid v = vertebral centrum
 UND = Unidentifiable

NORTHAMPTON SITE NBO-82 M115

THE FISH BONES: A SUMMARY

The summary tables (1, 2 & 3) indicate the total number of fish bones recovered in each phase. The following species were identified; eel (Anquilla anguilla), herring (Clupea harengus), Salmonidae, pike (Esox lucius), cod (Gadus morhua), haddock (Melanogrammus aeglefinus), ling (Molva molva), Gadoid, mackerel (Scomber scombrus), plaice (Pleuronectes platessa), and halibut (Hippoglossus hippoglossus).

The halibut from ninth century deposits was a large individual judging by the size of the vertebral centrum, it had been chopped and cut with a knife. Cod was predominant in all periods, with ling also appearing in medieval deposits, chopmarks and knifecuts were seen on both these species. Freshwater fish do not appear to have been very important.

It is suggested that the cod could have been brought inland from a port such as King's Lynn where it had been salted or dried, ling because of its natural distribution would have come from a fishery based at one of the ports on the north east coast. Salted and dried fish are well documented as having been an important food especially in inland areas until the development of cheap, fast transport and refrigeration.

NORTHAMPTON SITE N80-82 M115

SUMMARY TABLES

TABLE 1 SAXON

<u>DATE</u>	<u>EEL</u>	<u>HRG</u>	<u>COD</u>	<u>HLB</u>	<u>FFH</u>	<u>UND</u>	<u>TOTAL</u>
pre 700	-	-	-	-	-	1	1
700-850	4	-	1	-	-	5	10
850-1100	1	1	-	1	1	3	7
Total	5	1	1	1	1	9	18

TABLE 2 MEDIEVAL

<u>DATE</u>	<u>HRG</u>	<u>SLM</u>	<u>PKE</u>	<u>COD</u>	<u>HDD</u>	<u>LNG</u>	<u>GAD</u>	<u>MCK</u>	<u>PLC</u>	<u>FFH</u>	<u>UND</u>	<u>TOTAL</u>
1100-1400	-	1	1	81	2	22	99	1	1	-	14	222
1400-1500	2	1	-	8	-	-	3	-	-	1	22	37
1100-1500	-	-	-	-	-	-	1	-	-	-	1	2
Total	2	2	1	89	2	22	103	1	1	1	37	261

TABLE 3 POSTMEDIEVAL & UNSTRATIFIED

<u>DATE</u>	<u>PKE</u>	<u>COD</u>	<u>GAD</u>	<u>UND</u>	<u>TOTAL</u>
1500-1700	-	-	-	1	1
1700 on	-	-	1	1	2
1400 on	2	12	5	49	68
U/S	-	1	-	-	1
Total	2	13	6	51	72

KEY

EEL = Eel
SLM = Salmon
COD = Cod
LNG = Ling
MCK = Mackerel
HLB = Halibut
UND = unidentifiable
HRG = Herring
PKE = Pike
HDD = Haddock
GAD = Gadoid
PLC = Plaice
FFH = Flatfish