

Centre for Human Palaeoecology

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The fish bone from Cartergate, Grimsby

by

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Summary

A small assemblage (42 identified specimens) was recovered from three contexts. Cod was the predominant species recovered; other taxa included herring, haddock and saithe.

KEYWORDS: GRIMSBY; FISH BONES; ZOOARCHAEOLOGY

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The fish bone from Cartergate, Grimsby

Introduction

A small fish bone assemblage was recovered from the site (site code CGG03) which has mediaeval and early modern features (D. Young *pers comm.*). Unfortunately, at the time of writing no phasing information was available for the deposits with fish bone.

Methods

Recording followed the York protocol as outlined by Harland *et al* 2003. All specimens are counted and weighed and are classified as either 'diagnostic' or 'non-diagnostic' elements. The diagnostic elements are identified to species level where possible and are further divided into three groups; quantification codes 1, 2 and 4. For a suite of 18 QC1 elements, criteria including estimation of fish size, element completeness, bone modification (such as butchery) and metric data are recorded. Generally, unless modified in some way vertebrae (QC2 elements) are not recorded in detail beyond taxonomic identification. However, due to the small size of this assemblage estimated fish size was recorded for vertebrae where possible. Special elements such as dermal denticles (quantification code 4) are recorded in a similar level of detail as the QC1 elements. Under the York protocol all other (QC0) elements are usually recorded as unidentified. A list of Latin and common names for all taxa in the assemblage is included in appendix 1.

The complete archive has been submitted to Lindsey Archaeological Services with this report, as a Microsoft Access database file and a series of text files which duplicate its content. A copy of the archive will also be kept on file at the University of York.

Analysis

Fish bone was recovered from three sampled and wet sieved contexts (408, 506 and 542); material from the greater than 2mm fraction was analysed. In total, 963 specimens were recorded (table 1), of which 42 were diagnostic (as defined above). No burnt, or otherwise modified, specimens were recorded. The small number of QC1 elements does not permit comment on element completeness and surface texture (table 2).

The majority of identified specimens were cod (table 3). Haddock, saithe, eel, herring, the ray family and gurnard family were present in small numbers. Context 542 yielded the most specimens (856, 32 of which were diagnostic). Although a wide range of elements are represented in this context, there are insufficient specimens to comment on element distribution (table 3). It can be noted, however, that these same elements are generally from fish greater than 500mm estimated total length.

References

Harland, J. F., J. H. Barrett, J. Carrott, K. Dobney, and D. Jaques. 2003. The York System: An integrated zooarchaeological database for research and teaching. *Internet Archaeology* 13:http://intarch.ac.uk/journal/issue13/harland_index.html

Table 1. Number of identified specimens

context	count			weight		
	unidentified	diagnostic	total	unidentified	diagnostic	total
						_
408	30	6	36	5.86	8.38	14.24
506	67	5	72	20.03	6.11	26.13
542	824	32	856	109.02	32.53	141.55
total	921	42	963	17.36	68.81	86.15

Table 2. Bone preservation by context (only recordable for certain contexts)

	408	506	542	total
Element completeness (QC1 elements only)				
0-20% 21-40% 41-60% 81-100%	2 2	1 2 1	8 10 1	9 12 3 3
Surface texture (QC1 elements only)*				
excellent good fair poor	1 2 1	2 2	2 4 13	1 4 7 15

^{*}Assessment of surface texture based on the following criteria (Harland *et al* 2003): excellent - majority of surface fresh or even slightly glossy; very localized flaky or powdery patches good - lacks fresh appearance but solid; very localized flaky or powdery patches fair - surface solid in places, but flaky or powdery on upto 49% of specimen poor- surface flaky or powdery on over 50% of specimen

Table 3. Element representation

		408	500		542	
ray family	dermal denticle					1
eel	dentary		1			
Atlantic herring	abdominal vertebra caudal vertebra					1
cod	articular abdominal					1
	vertebra 1 abdominal			1		3
	vertebra 2					1
	abdominal vertebra 3		2			2
	ceratohyal dentary					2
	hyomandibular palatine			1 1		1
	posttemporal					2
	premaxilla quadrate		1	2		2 1
	vomer					2
haddock	caudal vertebra 1 premaxilla					1 1
saithe	opercular premaxilla		1 1			
and fourths	abdominal					0
cod family	vertebra dentary					2 3
	maxilla					1
gurnard family	caudal vertebra					1

Table 4. Estimated fish total length (based on comparison with reference specimens of known length)

size	taxon	408	506	542
151-300mm	cod family			1
301-500mm	haddock			1
501-800mm	eel cod haddock	1	2	4 1
801-1000mm	cod saithe	3 2	2	16

Appendix 1. Common and Latin names of taxa mentioned in the text

Common name	Latin name		
ray family	Rajidae		
eel	Anguilla anguilla		
Atlantic herring	Clupea harengus		
cod	Gadus morhua		
haddock	Melanogrammus aeglefinus		
saithe	Pollachius virens		
cod family	Gadidae		
gurnard family	Triglidae		