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CASTLE STREET, CARLISLE; THE FISH REMAINS

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Fish bones were recovered from sieved deposits in Roman levels dating from the mid first to the mid third centuries of which 92% were unidentifiable. The high proportion of unidentifiable bone was either too fragmentary for identification, or classified as fin ray and rib fragments, these rarely have distinguishing marks permitting identification to species.

The following species were identified; eel (Anguilla anguilla), Salmonidae (the large specimens seem to resemble salmon, Salmo salar more closely than trout Salmo trutta), hake (Merluccius merluccius), plaice (Pleuronectes platessa), and flounder (Platichthys flesus). In addition the thick-lipped grey mullet (Chelon labrosus), ballon wrasse (Labrus bergylta), and mackerel (Scomber scombrus) were tentatively identified from fragmentary material. The table indicates the number of bones from each phase.

	1	2	3	4	5	6	7	
Eel	4v	14v	29v	14v	1v	5v	1v	
		3sk	1sk	1sk				= 73
Salmonidae	13v	50v	46v	14v	4v	7v	1v	
	3sk		2sk	1sk				= 141
Hake		1v	1v				1v	= 3
? mullet				2v				= 2
?wrasse				2v				= 2
?mackerel				1v				= 1
Plaice			1v					
			2sk				1sk	= 4
Flounder		1v						
	1sk	1sk		1sk				= 4
Plaice/	12v							
flounder	1sk							= 13
Flatfish indet	1v	7v	3v	1v		1v	5v	
						2sk		= 20
Unident	498	1292	554	433	130	54	171	= 3132
Total	533	1373	639	472	135	67	180	= 3399

Key: v = vertebral centra sk = skull fragment
1 = Flavian 2 = Late C1st
3 = Late C1st/Early C2nd 4 = Early C2nd
5 = Early-mid C2nd 6 = Mid-late C2nd
7 = Mid C2nd-Early C3rd

The most striking feature of the identified fish remains is the importance of the salmonids and eels, indicating that the majority of fish consumed were from a freshwater fishery. The salmonid remains, which as previously mentioned more closely resembled salmon than trout, included both mature and small young individuals. 63 vertebral centra and two maxillaries from 19 samples dating from the mid 1st to the mid 2nd centuries were from these small individuals. Large salmon may have been caught on their way upstream to spawn on hook and line, or in traps such as 'salmon bucks', which are stretched across the river (Wheeler 1979, 61), similarly eels may have been caught in 'eel-bucks',

the same type of trap working in reverse, catching the eels as they descend the river to the sea (Ibid). The young salmon 'parr' can remain in the stream up to three years before migrating to the sea (Wheeler 1978, 79), whether these fish were a deliberate catch is open to conjecture but Houghton (1879, 123) states that when the 'parr' are two years old, about 6 inches, and changing colour to become 'smolts' they used to be caught by anglers in large numbers before the law banned the capture of such small fish. The specimens from Castle Street were from individuals of less than 6 inches, but may never the less have been regarded as worth eating. The proximity of the rivers Caldew and Eden would have provided suitable areas for such fishing.

The only marine fish to be found away from the shore would be the hake, which lives in moderately deep water, 165-550m, near the bottom, although it can be found in shallower water during the summer (Wheeler 1978, 171). Hake would have been caught on lines possibly from a fishery operating in the Irish Sea. This fish may have been consumed in a salted or dried form. The remaining marine species identified, even tentatively, would be found inshore, the thick-lipped grey mullet is found in coastal waters, especially harbour mouths, estuaries and sandy bays (Ibid 271), and would most likely have been caught on hook and line, the ballan wrasse is common close to rocks and reefs from 2-3m to 20m (Ibid 278) and mackerel are found in large schools which make seasonal migrations inshore and northwards during the summer (Ibid 326). Both plaice and flounder can be found on the tide line where they feed, and can be trapped. The plaice is most common from 10-50m especially on sandy bottoms (Ibid 354) and the flounder is found from the shoreline to 55m, and can also tolerate freshwater conditions (Ibid 356) entering rivermouths.

The sandy shoreline of the Solway Firth could have provided suitable habitats for plaice, flounder and mullet, supporting a fishery using lines and traps, and the seasonal inshore migrations of hake and mackerel would not necessitate a deep water fishery for their capture. However the evidence from the fish bones from Castle Street indicates a preference for eel and salmon (both mature and immature), which is likely to be influenced by the availability of these two species in local rivers.

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References

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