Jones, GG 1994 Norwich, Fishergate. East Anglian Archaeology, 68.

at Fishergate includes vivianite and large quantities of charcoal and food refuse. It seems to consist predominantly of dumped material.

9. Deposits above 65cm (*52*, *54*: Period IV (eleventh-twelfth century)). *54* consists of a densely packed deposit of crushed chalk, laid down presumably to provide a firm surface for riverside activities. On this surface deposits of refuse with a high chalk content (*52*) accumulated.

II. Mammal and Bird Bone

by Gillian Jones

The mammal and bird bone from Fishergate, of late ninth century to late medieval date, is summarised in Table 7.

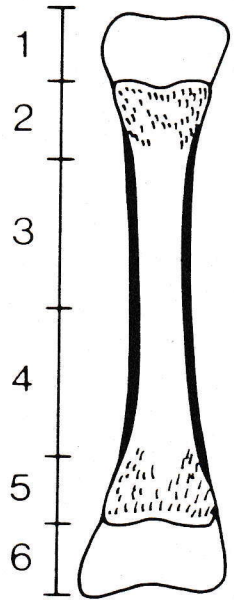
Method

(Fig. 22)

The main bone assemblage was hand collected. A small quantity of bone was recovered from the sieved samples. Bone was recorded on two lists, with the more complete bones on a zone list and the other bones on a fragments list. On the zone list were recorded complete bones or bone pieces as follows:

Skull:
substantial pieces of horncore, frontal, lacrimal, malar, parietal, squamous temporal, occipital; upper jaw and mandible with at least one tooth present; loose teeth.

Long-bones:
where more than half of any of the six areas shown on Figure 22 was present and where the following small areas of bone were present: humerus, the distal posterior part of the shaft; radius, the proximal part of the ulnar groove; femur, the supracondylar fossa; tibia, the anterior, distal part of zone 4.



Division of Long Bones into six zones (figure after Baker and Brothwell, 1984 p.44).

Figure 22 Division of long-bones into six zones.

Other bones:
more than half the following bone or bone elements: vertebra, the body and central arch; scapula, the neck and glenoid cavity; ulna, the olecranon and proximal articulation; pelvis, the iliac shaft and the iliac, ischial and pubic parts of the acetabulum; calcaneum, the proximal part and articulation; the patella, astragalus and phalanx.

With cattle, substantial pieces of the ends of long-bones, even when less-than-half complete, were included on the zone list. This was done in order to avoid loss of important epiphysial fusion data. However, few bones fell into this category, due to the well-preserved and relatively unfragmented nature of the bone assemblage.

The separation of the fragments in bone recording may be useful, in that it is likely to be less repeatable than that of the more-complete segment. Accurate identification of fragments probably varies somewhat between bone analysts, and for a single analyst depending on the time available for study. It will also tend to vary according to the number of similar-sized species present. Some fragments may be assigned to cattle which, if red deer and horse were as common as cattle, would have remained as 'large unidentified'. However, a fragment was not identified unless it bore clear features typical of the particular species.

Table 9 (microfiche), the Anatomical Analysis, shows the total number of bones (BN) and a reduced number of zones. For long-bones, these are zones 2 and 5, labelled p (proximal) and d (distal), and zone 4 for the humerus, femur and tibia, and zone 3 for the radius and metapodials, labelled s (shaft).

Dating

The dating of the bone is based on the identified site periods (see Chronological summary, p.ix) which were themselves dated by artefacts. There was, however, residual earlier pottery in later phases and some of the bone may therefore also be residual earlier material.

General description of the bone

The bone from the Period I marsh deposits was well-preserved and dominated by cattle. Many of the bones were fairly complete and had surfaces which were dark in colour and hard with little abrasion. The good state of preservation of the bone suggests that the marsh was used as a primary dump. In general few bones appeared to relate to each other. Upper and lower jaws of cattle from context *129* probably belong to each other, but, for example, no distal tibiae with matching astragalus were found and only two immature cattle bones were recovered as both metaphysis and epiphysis (against fourteen unfused metaphyses without epiphyses and eight epiphyses without metaphyses). Of thirty immature vertebral centra, in only one case was a matching epiphysis preserved.

Bone from Periods III1 and III2 was also well-preserved. The bone was less dark in colour than the Period I bone and some of it bore a sandy accretion. Again, few bones related to each other (upper and lower jaws, hock joint bones, or metaphyses and epiphyses). One might suggest that casual dumping of bone took place over time and that there may have been some post-depositional movement of bone in the deposits.

It is expected that access to the marsh to dump bone would favour the large bones of cattle and that the high percentage may be more informative about the particular area of the town than the general supply of meat in Nor-