Animal Bones and Archaeology: Recovery to archive
Supplement 3: Processing animal bone assemblages

Processing whole-earth samples for animal bones (see p 17)

✓ Process whole-earth samples as part of the excavation programme and feed information back to excavators and the zooarchaeologist to allow modification of the excavation strategy.
✓ Use appropriate methods (floation/sieving) and mesh sizes (see Fig S3.1).
✓ Keep bones from different processing methods and mesh sizes separate and clearly labelled (context, sample and mesh size).
✓ Look out for bones and teeth of very young and small animals, and modify your method if necessary (eg mesh sizes).
✗ Don’t process very fragile remains. Keep them separate and labelled with context and sample number. Seek advice from the zooarchaeologist.
✓ Dry-sieved bones should be cleaned.
✓ Slowly and thoroughly air dry sample residues that include bones. Don’t bag them up when damp.
✓ Ensure all bones from a sample are submitted for assessment and analysis with hand-collected bones.

Cleaning bones (see pp 23–4)

✓ Unless fragile or from a waterlogged context, bones and teeth should be cleaned with fresh water as soon as possible, preferably before they have dried out. Seek conservation advice for desalination, where appropriate.
✗ Don’t scrub or soak bones and be careful not to damage the bone surface (Fig S3.2). Don’t remove concretions or push tools into cavities as this can cause damage.
✓ Bones may discolor from burning or staining from metals and minerals (eg copper and its alloys, iron or manganese staining; Fig S3.3). Don’t attempt to remove this discolouration.
✓ The bones must be slowly and thoroughly air dried before they are bagged up. Bones from waterlogged contexts will need careful drying. Drying bones too quickly or in direct light may lead to cracking or loss of bone surface.
✓ Keep block-lifted bones cool and damp, following the advice of the conservator.

Labelling and marking (see p 24)

See Fig S3.4 for suggested label information but follow the project methods.
✓ Always use indelible ink not biro. Use Indian ink for marking bones.
✗ Don’t write on bones intended for biochemical analysis (radiocarbon, DNA, isotopes).
✓ Writing on bones and teeth should be legible but discrete and avoid the following features (eg Figs S3.3 and S3.5):
  - fragile surfaces
  - butchery or bone working marks, eg cuts, scrapes, saw marks or decoration
  - pathologies, eg raised or roughened areas (often grey coloured), creases, indented or polished areas
  - patches of staining or burning
  - unfused or porous surfaces of juvenile bones
  - diagnostic features, eg areas of complex topography, ridges, holes or roughness.

Bagging-up and boxing bones (see p 24)

✓ Pierce bags with pin-prick sized holes. Small bones can be lost through bigger holes.
✗ Don’t ever seal damp bones in bags – they’ll grow mould.
✗ Don’t over-fill bags or boxes – bones are fragile and boxes can be heavy!
✓ Bag the following categories of bones and teeth as discrete groups, clearly labelled with context, small find, sample and mesh size, and record why they are bagged separately. The bag may then be stored with other associated bones.
  - Bones and teeth from an animal bone group (ABG). These are usually bagged by area of the skeleton (see also p 18).
  - All teeth and pieces of bone from a single jaw, if the teeth may fall out.
  - Individual fragments from a single bone, if the bone was broken in situ or during excavation.
  - Fragile bones – these may be boxed rather than bagged.