Database documentation for the Archaeology Data Service

Title of project:	**A Review of Animal Bone Evidence from Central England**
Name of database file:	**eh_regional_review_central_england.mdb**

Data was entered into eight tables, whose structure is illustrated in *Fig.1*. There are four levels to the database, each corresponding to information of a different scale. The intentions behind each of these will be described in turn.

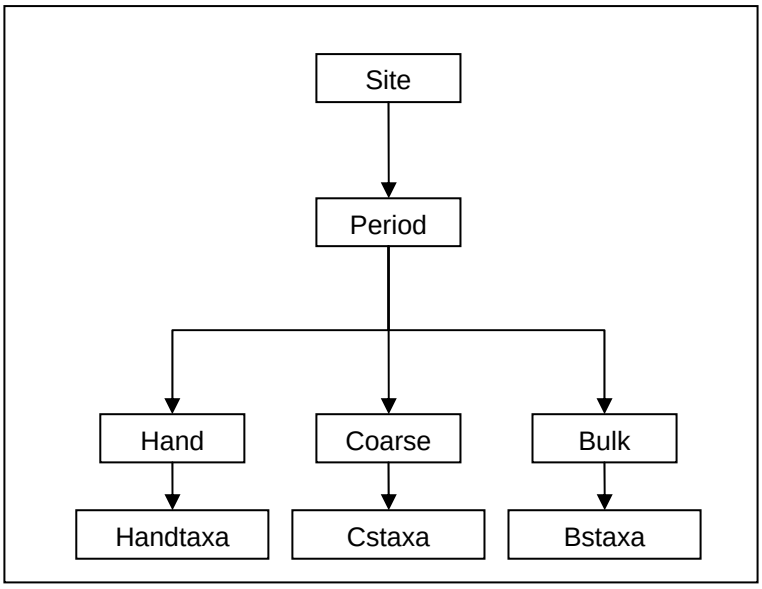

Fig.1 The structure of tables within the database.

Site

The basic unit of the database is the site report or specialist report. Each record in the top-level table [Site] therefore corresponds to a single bibliographic reference. Thus, one excavation may have several [Site] records, where, for instance, mammals and birds are reported separately or by different authors. This level of the database yields bibliographic, and geographical information about a site.

Name of table 1:	**Site**
Purpose of table:	**Top-level table providing site name, bibliographic reference (split into three parts), and geographical information (county, location and OS grid reference)**
Number of rows of data:	**504**
Primary key:	**siteno**

Name of field	**Full description of field and codes or terminology used**	**Data type**
Siteno	Unique identifier for site	Number
Gazetteer ref	Unused (refers to a gazetteer used in data analysis)	Number
Site	site name, as used in the site report, or, preferably, on the Environmental Archaeology Bibliography (where such a record already existed). The date of excavation is often appended to this, e.g. “Alms Ln 76”	Text
Location	description of geographical location, e.g. nearest village or town	Text
County	Uses lookup table (cty_chk)	Text
Grid ref	12-figure OS grid reference (12 figure numerical field)	Text
Handrec	"yes" or "no": has bone been recovered through hand collection?	Text
Sieved	"yes" or "no": has bone been recovered through sieving?	Text
Bibref	bibliographic field 1: contains details of the author, date and title, where the work is a collected volume or journal	Text
Fullref	bibliographic field 2: contains either the name of the journal/collected volume, or details of author, date and title where the work is a monograph	Text
Journal	bibliographic field 3: contains details of journal or publisher, and page numbers where appropriate.	Text

Period

This level of the database records information about phasing/dating and site types. Since several phases of activity may apply to a single [Site] record, several [Period] records may exist for each.

Name of table 2:	**Period**	
Purpose of table:	**Table providing the date of each phase of a site (e.g "12th century" and "medieval"), and information about the type of site (e.g. "monastery")**	
Number of rows of data:	**938**	
Primary key:	**linkcode**	
Name of field	**Full description of field and codes or terminology used**	**Data type**
Linkcode	Unique identifier for period	Number
Siteno	Linking field to Site table	Number
Detperiod	Uses lookup table (date_chk). Defines the period or a date range.	Text
Sitetype	Uses lookup table (typ_chk)	Text

Hand/bulk/coarse

At this level of the database, the hand-collected, coarse-sieved and bulk-sieved fractions of each phase are separated out (typically the identified material was only hand-collected, but sometimes more than one fraction is present). Only one (or no) [Hand], [Bulk] and [Coarse] record may exist for a single [Period] record.

Each sub-assemblage is quantified according to the quantity of identified material, and NISP ("number of identified specimens") counts are given for each of the different categories (i.e. large+medium

mammal, small mammal, bird, fish, amphibian and reptile) where these were present and the data available. These three tables together provide summary information about the faunal material.

Name of table 3:	**Bulk, coarse and hand**	
Purpose of table:	**Summary of bulk sieved material, coarse sieved material and hand collected material**	
Number of rows of data:	**176, 67, 850**	
Primary key:	**Bulk_ID, Coarse_ID, Hand_ID**	
Name of field	**Full description of field and codes or terminology used**	**Data type**
Bulk_ID, Coarse_ID, Hand_ID	Primary key for record	Number
Linkcode	Linking field to Period table	Number
L_M Mammal	total number of identified fragments of large and medium mammals	Number
Bird	total number of identified bird fragments	Number
Fish	total number of identified fish fragments	Number
Smallmam	total number of identified small mammal fragments	Number
Amphibian	total number of identified amphibian fragments	Number
Reptile	total number of identified reptile fragments	Number
Notes	text entry field containing comments on this fraction of the assemblage (e.g. recovery methods and quantification)	Memo

Handtaxa/bstaxa/cstaxa

This lowest level of the database contains records of each animal/taxon present per phase (again, with the various hand-collected and sieved fractions kept separate) together with quantitative and descriptive information about that taxon. The number of identified specimens (NISP) and minimum number of individuals (MNI) are as quantified in site reports. For sheep/goat, cattle and pig only, NISP% values have been calculated from NISP (see table below) for the purposes of data analysis. For some sites, actual numbers were not given, but NISP% or MNI% values were reported instead, for various taxa. The taxonomic category “sheep/goat” includes any specimens which were positively identified as “sheep” or “goat” (for which an additional record will be present).

Name of table 4:	**Bstaxa, cstaxa, handtaxa**	
Purpose of table:	**Details of bulk sieved material, coarse sieved material and hand collected material**	
Number of rows of data:	**1642, 875, 7579**	
Primary key:	**Bstaxa_ID, Cstaxa_ID, Handtaxa_ID**	
Name of field	**Full description of field and codes or terminology used**	**Data type**
Bstaxa_ID, Cstaxa_ID, Handtaxa_ID	Primary key for record	Number
Linkcode	Linking field to bulk, coarse and hand tables	Number
Taxa	Uses lookup table (taxa_chk)	Text

NISP	"number of identified specimens"	Number
NISP%	"number of identified specimens, as a percentage of cattle+sheep/goat+pig NISP"	Number
MNI	"minimum number of individuals"	Number
MNI%	"minimum number of individuals, as a percentage of cattle+sheep/goat+ pig MNI"	Number
Butchery	Uses lookup table (butc_chk)	Text
Butch_notes	text entry field containing comments on field "Butchery"	Memo
Bodyparts	Uses lookup table (body_chk)	Text
Bodynotes	text entry field containing comments on field "Bodyparts"	Memo
Biometry	Uses lookup table (biom_chk)	Text
Bionotes	text entry field containing comments on field "Biometry"	Memo
Age_at_death	Uses lookup table (age_chk). Summary information on mortality profiles or presence of certain age classes.	Text
Agenotes	text entry field containing comments on field "Age_at_death"	Text
Pathology	Uses lookup table (path_chk). Pathology and congenital traits.	Text
Pathnotes	text entry field containing comments on field "Pathology"	Text
Craftind	Uses lookup table (ind_chk). Craft and industry, for instance presence of tanning or bone-working waste.	Text
Craftnotes	text entry field containing comments on field "Craftind"	Text
Ecological	Uses lookup table (ecol_chk). Comments on local habitat, and on non-anthropogenic or intrusive remains.	Text
Ecolnotes	text entry field containing comments on field "Ecological"	Text
Fishing	Uses lookup table (fish_chk)	Text
Fishnotes	text entry field containing comments on field "Fishing"	Text

Look-up tables

For ease of data entry, copious use was made of a shorthand of codes, which could be selected via the 'lookup' tables.

Most lookup tables contain only two fields: a code (e.g. "NOR") and its longhand equivalent ("Norfolk"). For some tables, the longhand descriptions are mutually exclusive (e.g. a site may be in "Norfolk" or "Suffolk" but not both). However, many tables contain codes which are concatenations of shorter codes (for instance, the butchery code "hcbhokskisyb" refers to "Horncores chopped through base/hook damage/skinning marks/systematic butchery", a concatenation of four shorter codes).

The table [DATE_CHK] contains three descriptive fields: these are DATE_CHK.Detail (containing specific date ranges or periods), DATE_CHK.datecatchall (which refers to broader periods, e.g. 'medieval'), and DATE_CHK.catchallcode (which is a numerical equivalent of DATE_CHK.datecatchall).

Relationships to the main database tables are recorded in the tables above.

The look-up tables are described below:

- **age_chk** (40 rows of data)
  Summary of age profiles or mortality patterns of the whole assemblage
  Returns contents of field "Description" to [Handtaxa.Age_at_death] OR [Cstaxa.Age_at_death] OR [Bstaxa.Age_at_death]
- **biom_chk** (28 rows of data)

Summary of biometrical information
Returns contents of field "Type" to [Handtaxa OR Cstaxa OR Bstaxa.Biometry]

- **body_chk** (42 rows of data)

Summary of bodypart profiles or anatomical
Returns contents of field "Description" to [Handtaxa OR Cstaxa OR Bstaxa.Bodyparts]

- **butc_chk** (69 rows of data)

Summary of butchery types
Returns contents of field "Type" to [Handtaxa OR Cstaxa OR Bstaxa.Butchery]

- **cty_chk** (17 rows of data)

County names (1996 Ordnance Survey)
Returns contents of field "County" to [Site.County]

- **date_chk** (124 rows of data)

General period (e.g. "medieval") and more specific dating information (e.g. "12th century")
Returns contents of "Detail" AND "datecatchall" to [Period.detperiod]

- **ecol_chk** (7 rows of data)

Summary of ecological information
Returns contents of field "Description" to [Handtaxa OR Cstaxa OR Bstaxa.Ecological]

- **fish_chk** (2 rows of data)

Summary of information on fishing practices
Returns contents of field "Description" to [Handtaxa OR Cstaxa OR Bstaxa.Fishing]

- **ind_chk** (12 rows of data)

Summary of information about craft and industry
Returns contents of field "Type" to [Handtaxa OR Cstaxa OR Bstaxa.Craftind]

- **path_chk** (68 rows of data)

Summary of pathologies noted for this taxon
Returns contents of field "Type" to [Handtaxa OR Cstaxa OR Bstaxa.Pathology]

- **taxa_chk** (422 rows of data)

English taxonomic name, may be prefixed with "?" if identification is uncertain
Returns contents of field "Taxa" to [Handtaxa OR Cstaxa OR Bstaxa.Taxa]

- **type_chk** (75 rows of data)

Type of archaeological site, e.g. "monastery"
Returns contents of field "Sitetype" to [Period.Sitetype]

Relationships

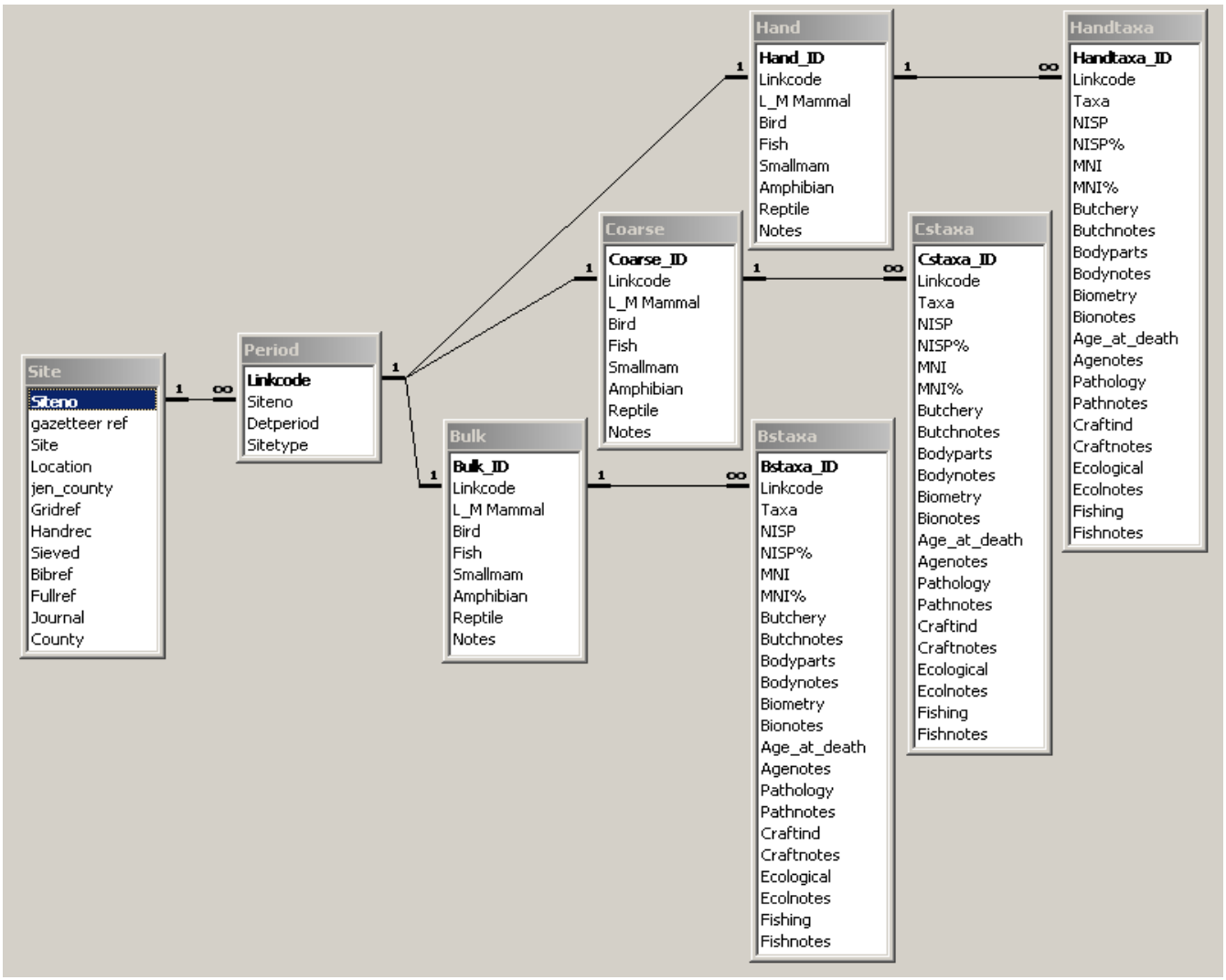

Figure 2. Entity relation diagram describing the main tables only, the 'lookup' tables being omitted. [Hand], [Coarse] and [Bulk] contain exactly the same fields as each other, and are linked to the higher and lower tables in identical ways. [Handtaxa], [Cstaxa] and [Bstaxa] are also identical to each other.

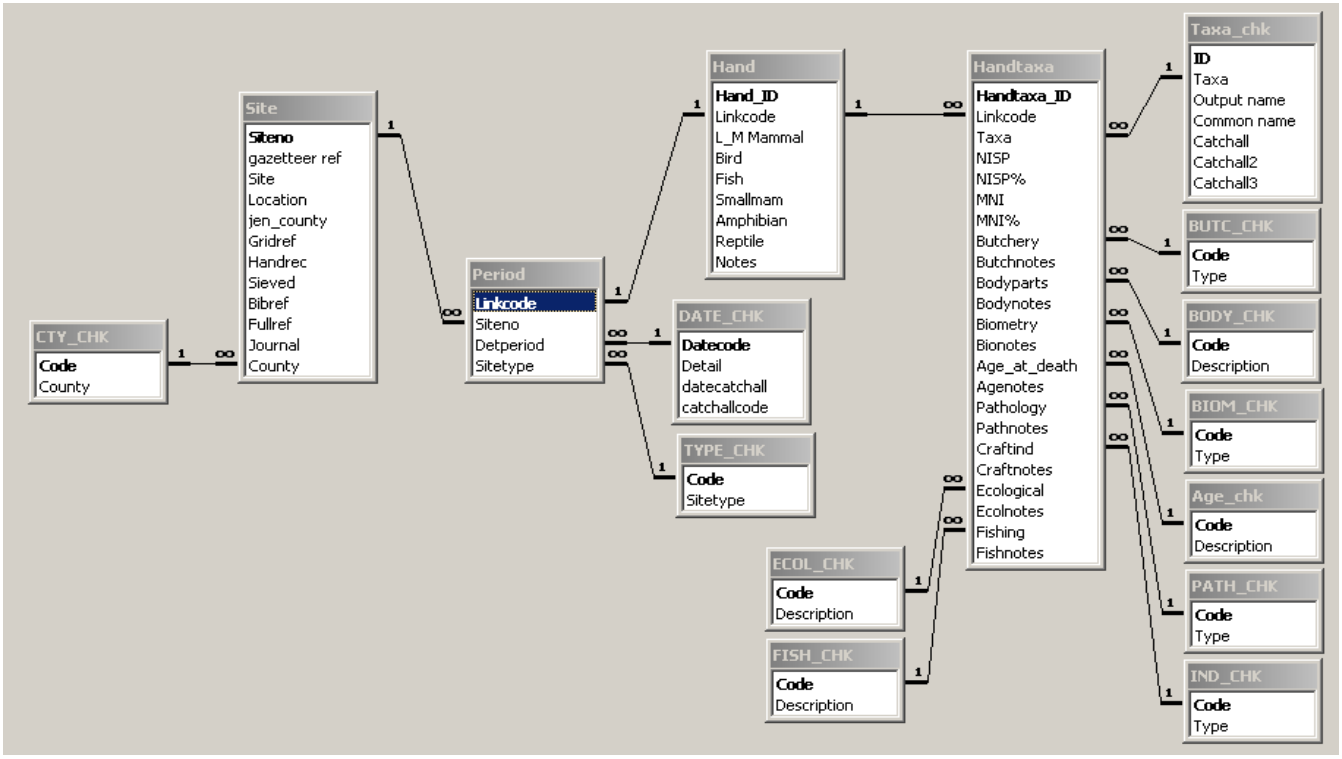

Figure 3. Entity relation diagram describing the links between the main tables and their accompanying 'lookup' tables (suffixed with "_CHK" or "_chk"). For the lowest two levels of the database relationships are given for tables [Hand] and [Handtaxa] only, for clarity. The omitted tables ([Coarse], [Cstaxa], [Bulk] and [Bstaxa]) use the same 'lookup' tables in an identical fashion to the example given here.