

## CHAPTER 5:

### MATERIALS AND METHODS

*'Skeletal growth and its relationship with the environment deserves far more attention. Perhaps such a diversion would stop some people writing science fiction when it comes to demographic interpretation' (Brothwell 1978: 96)*

#### 5.1 INTRODUCTION

In order to carry out this research, data were collected from a wide variety of sites, time periods and bones of domestic taxa from across the North Atlantic. The following chapter describes the sites examined, the methods of data collection and the problems encountered with collection of data from such a wide range of sources and how these were dealt with to produce a standardised dataset. Methods of data processing and issues of sample size are also discussed.

#### 5.2 SITES

##### 5.2.1 Selection Criteria

The selection of sites for this study and also to some extent the particular bone measurements used was largely dependent on the availability of material. Some data was collected from published sources, much of the data was kindly donated by archaeozoological colleagues, and a further portion was collected directly by the author. Certain criteria were used for the collection of data from published sources. All sites chosen were settlement sites within the region of study, and the measurements presented had to be taken according to von den Driesch (1976) or be very clearly comparable to these. The raw data had to be presented and not just the

means and summary statistics. In some cases where summary data were presented in a publication raw data could be obtained from the original author, for example the measurements for bones from the site of Dun Vulcan in the Western Isles (Mulville 1999 & pers. comm.). There also had to be a certainty that measurements of different dimensions of the same bone could be related to each other i.e. that different measurements of the same bone were kept together. It was for this reason that the bone measurement data for Scalloway in Shetland (published on the Archaeology Data Service website (<http://ads.ahds.ac.uk/>) were discarded, as lists of length and breadth measurements could not with any certainty be related to each other. For multi-period sites it was essential that site phasing data could be obtained and related to the bone measurement data; however the resolution of phasing did vary from site to site. Bone measurement data from the site of Jarlshof, Shetland were disregarded for this reason: bone measurements were available from the site (Platt 1933 & 1934) but were not related to the phases they were found in and were not reiterated in the final, phased site report (Platt 1956).

### **5.2.2 Sites selected and periods covered**

In total 40 sites were examined in the course of this study and a summary of their locations, dates and site types is given in table 5.1. The following section gives a more detailed description of the sites and phases by geographical area.