An experimental investigation, into the effects of thermal alteration on microstructures in mammalian long bones.

**Data summary**

**All pig samples**

|  |  |
| --- | --- |
| Data column(s) | Details |
| Temperature (oC) | Temperature at which the bones were burnt at |
| Total | Total number of osteons counted |
| Min (μm) | Minimum diameter of osteon |
| Max (μm) | Maximum diameter of osteon |
| Mean (μm) | The mean diameter of osteons observed within the burnt remains |

**All tables in one**

|  |  |
| --- | --- |
| Osteon number | The number given to the osteon observed in each sample |
| Sample x | The diameter of each osteon within the sample thin sections |

**Box and whisker**

|  |  |
| --- | --- |
| B1:E1 | Osteons measured, within each of the temperatures. |

**Curves**

This is sheet shows the osteon diameters of the osteons obtained and their stand deviations, with how they overlap within a curve diagram.

**Femur vs Humerus**

|  |  |
| --- | --- |
| Min, max, mean | The minimum, maximum, and mean measurements of the osteons observed. |
| F, H | F = femur H = Humerus |

**Maceration comparison**

|  |  |
| --- | --- |
| Chemical osteon diameter | Diameter of the osteons measured from the chemical maceration technique |
| Beetles osteon diameter | Diameter of the osteons measured from the beetle maceration technique |
| Whole bone osteon diameter | Diameter of the osteons measured from the bone placed in with the beetles whole |
| Sectioned bone osteon diameter | Diameter of the osteons measured from the bone sectioned and then placed in with the beetles |

**Munsell Colour Chart**

|  |  |
| --- | --- |
| Sample | The sample number given to each of the bones in the investigation |
| Burn condition | The temperature/ condition that the bone was given |
| Munsell soul colour value (hue) | From the chart what set matched the bone the best |
| Munsell soil colour value (value) | The colour which matched the bone the best |

**OHI Numbers**

|  |  |
| --- | --- |
| Sample number | Sample title given to each bone |
| OHI | The oxford histological index score given to each sample |
| Number of samples | How many samples have been given each OHI |
| OHI and average diameter | OHIs given and the average diameter of osteons |

**Pig vs other animals**

|  |  |
| --- | --- |
| Pig, cow, deer pyre, pig pyre and deer shf | All the osteons measured at each temperature for the animal samples |
| Burn type | The burn condition |
| Total | Total number of osteons observed |
| Min, max and average | Measurements of osteons |

**Sample table**

|  |  |
| --- | --- |
| Sample number | The sample number given to each sample |
| Animal species | Which species the bone is taken from |
| Burn condition | The condition in which the bone was given |
| Temperature | The temperature the bones were burnt at or the max |
| Element | The bone identity |
| Sampling area | The area of the bone in which was cut in to |