## Supplementary A Morphometric data and identifications of medium-size bovid specimens studied

Table A.1 Morphometric data and identification results of Caprinae humeri specimens

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Element** | **Specimen** | **Measurements** | | | | | | | | **Morphometric ID1** | | **Morphometric ID2** | **Ratio of correction ID** |
| **Bd** | **BT** | **Dd** | **HT** | **SHT** | **BTm** | **BTl** | **LHT** | **ID1** | **Prob** |
| **humerus** | **2012CXIT0103②** | 30.32 | 28.99 | 25.06 | 17.95 | 13.24 | 19.41 | 8.94 | 12.96 | *C. hircus*\* | 59.10% | *Pseudois* | 93.40% |
| **2012CXIT0202②** | 35.16 | 35.07 | 28.05 | 20.93 | 14.56 | 21.81 | 11.67 | 14.37 | *Pseudois* | 99.60% | *C. hircus* |
| **2012CXIIIT0206③** | - | >33.84 | >28.47 | ~21.86 | ~16.24 | ~21.59 | ~10.66 | ~14.67 | *-* | - | *-* | *-* |
| **2012CXIH2** | ~31.96 | - | ~27.56 | ~18.95 | ~14.63 | ~21.06 | ~9.4 | ~12.36 | *-* | - | *-* | *-* |

\*Notes: Although the highest probable identification for specimen 2012CXIT0103② is *C. hircus* in discriminant analysis, the posterior probability for this identification is very low --- only 59.1%. After careful examination of the specimen, we discovered that the attrition of the bones might have led to low posterior probability in morphometric analysis. Finally we decide to follow the results derived from morphological and size analysis for this specimen, which is *Pseudois*.

Table A.2 Morphometric data and identification results of Caprinae radius specimens

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Element** | **Specimen** | **Measurements** | | | | | **Morphometric ID1** | | **Morphometric ID2** | **Ratio of correction ID** |
| **Bp** | **BFp** | **Dp** | **BFpl** | **SDp** | **ID1** | **Prob** |
| **radius** | **2012CXIT0102②UF1** | 35.18 | - | 17.77 | 8.5 | 9.01 | Pseudois | 68% | C.h | 79.50% |
| **LD035** | >32.89 | >31.35 | >16.15 | 6.65 | 10.37 | - | - | - | - |
| **LD040** | >33.95 | - | 18.81 | - | - | - | - | - | - |

Table A.3 Morphometric data and identification results of the Caprinae astraglus specimen

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Element** | **Specimen** | **Measurements** | | | | | | | | **Morphometric ID1** | | **Morphometric ID2** | **Ratio of correction ID** | |
| **GLl** | **M3** | **Bd** | **DL** | **M6** | **M7** | **Dm** | **GLm** | **ID1** | **Prob** |
| **astraglus** | **LD001** | 26.35 | 17.32 | 16.85 | 14.89 | 18.71 | 17.36 | 14.43 | 25.46 | *Ovis* | 99.2% | *Pseudois* | 81.10% |

Table A.4 Morphometric data and identification results of the Caprinae tibia specimen

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Element** | **Specimen** | **Measurements** | | | | **Morphometric ID1** | | **Morphometric ID2** | **Ratio of correction ID** |
| Bd | Dd | Dlda | Dldb | **ID1** | **Prob** |
| **tibia** | **LD042** | 30.06 | 23.44 | 6.05 | 10.1 | *Pseudois* | 47% | *C. hircus* | 75.90% |

Table A.5 Morphometric data and identification results of the Caprinae Phalanx 1 specimens

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Element** | **Specimen** | **Measurements** | | | | | | **Morphometric ID1** | | **Morphometric ID2** | **Ratio of correction ID** |
| **Bp** | **Dp** | **SD** | **Glpe** | **Bd** | **Dd** | **ID1** | **Prob** |
| **phalanx 1** | **KD003** | 12.28 | 14.34 | 11.12 | 36.58 | 12.04 | 11.02 | N | 81.60 | P | 85.70% |
| **phalanx 2** | **LD041** | ~10.7 | ~12.19 | ~8.44 | ~31.73 | ~8.97 | ~8.28 | *-* | *-* | *-* | *-* |

Table A.6 Metric data of Caprinae phalanx 3 specimens

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Element** | **Specimen** | **Measurements** | | | |
| **LD** | **MBS** | **DLS** | **HP** |
| **phalanx 3** | **KD001** | 21.14 | 4.99 | 29.20 | 14.83 |
| **phalanx 3** | **KD002** | 22.83 | 4.57 | 29.06 | 14.84 |

Table A.7 Metric data of the Caprinae scapula specimen

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | **Specimen** | **Measurements** | |
| **BG** | **SLC** |
| **scapula** | **HDT005** | >22.53 | 21.24 |

Table S1.H Metric data of Caprinae teeth specimens

|  |  |  |  |
| --- | --- | --- | --- |
| **Element** | **Specimen** | **Measurements** | |
| **L** | **B** |
| **upper P2** | **KD006** | 7.29 | 5.91 |
| **upper P3** | **KD006** | 8.12 | 8.31 |
| **upper P4** | **KD006** | 8.08 | 9.93 |
| **upper M1** | **KD006** | 11.99 | 13.19 |
| **upper M2** | **KD006** | 15.29 | 13.79 |
| **upper M3** | **LD002** | 15.59 | 10.89 |
| **upper M3** | **KX003** | 20.27 | 12.92 |
| **upper M1/M2** | **LD003** | 16.62 | 13.06 |
| **upper M1/M2** | **LD049** | *-* | - |
| **upper M1/M2** | **LD154** | *-* | >9.28 |
| **upper M1** | **LD023** | *-* | - |
| **upper M1** | **HDT002** | 11.66 | 13.03 |
| **upper M2** | **HDT002** | 12.61 | 13.12 |
| **upper M3** | **HDT002** | 18.58 | 13.04 |
| **upper M1/M2/M3** | **LD043** | *-* | >10.04 |
| **lower P3** | **LD004** | 8.08 | 6.31 |
| **lower M1/M2** | **LD024** | *-* | - |
| **lower M1/M2** | **LD045** | *-* | - |
| **lower M1/M2** | **LD046** | *-* | - |
| **lower M1/M2** | **KX041** | - | - |
| **lower M2** | **KX012** | 19.05 | 7.99 |
| **lower M1** | **KX013** | 15.50 | 8.14 |