Supplementary file 1.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Bison number** | **Sex** | **Age (year/mount)** | **Bodyweight (kg)** | **LCA** | | **RCA** | |
| **length (mm)** | **width (mm)** | **length (mm)** | **width (mm)** |
| 890 | F | 26/0 | 380 | 11,82 | 5,73 | 5,99 | 5,16 |
| 929 | F | 5/5 | 340 | 11,96 | 4,70 | 6,08 | 4,20 |
| 909 | F | 24/5 | 400 | 14,50 | 6,68 | 7,69 | 6,57 |
| 934 | F | 21/0 | 540 | 12,61 | 4,98 | 6,59 | 4,12 |
| 925 | F | 0/6 | 65 | 7,99 | 6,34 | 4,00 | 3,79 |
| 885 | F | 24/0 | 350 | 11,70 | 6,22 | 8,19 | 4,85 |
| 896 | F | 20/0 | 310 | 10,85 | 5,12 | 5,73 | 4,10 |
| 928 | F | 0/6 | 77 | 6,29 | 3,34 | 5,03 | 3,08 |
| 2 | F | 15/0 | 450 | 9,11 | 8,26 | 6,67 | 4,37 |
| 3 | F | 5/0 | 320 | 7,47 | 4,19 | 5,94 | 3,89 |
| 927 | M | 2/5 | 280 | 9,91 | 6,40 | 6,40 | 5,85 |
| 884 | M | 1/5 | 220 | 12,19 | 7,40 | 5,58 | 3,20 |
| 883 | M | 8/0 | 570 | 12,93 | 9,43 | 9,73 | 8,93 |
| 924 | M | 20/0 | 535 | 17,31 | 9,13 | 7,04 | 5,58 |
| 921 | M | 7/0 | 430 | 12,80 | 9,95 | 8,45 | 3,75 |
| 922 | M | 5/0 | 500 | 13,76 | 8,79 | 9,77 | 7,45 |
| 926 | M | 3/0 | 300 | 13,33 | 7,46 | 3,87 | 3,09 |
| 891 | M | 0/7 | 90 | 7,48 | 4,20 | 4,44 | 3,81 |
| 881 | M | 1/5 | 160 | 5,92 | 4,17 | 3,91 | 2,65 |
| 882 | M | 3/5 | 390 | 10,97 | 5,38 | 6,13 | 3,64 |
| 1446 | M | 13/5 | 420 | 14,84 | 8,19 | 9,03 | 5,54 |
| 935 | M | 0/5 | 43 | 6,24 | 4,35 | 3,27 | 2,75 |
| 897 | M | 23/0 | 610 | 15,38 | 6,34 | 7,00 | 6,01 |
| 944 | M | 14/0 | 560 | 12,93 | 5,63 | 4,96 | 3,95 |
| 924 | M | 15/0 | 650 | 9,77 | 6,15 | 8,30 | 5,93 |
| 1 | M | 5/0 | 500 | 10,49 | 7,47 | 8,71 | 7,33 |
| 4 | M | 0/3 | 40 | 3,43 | 2,45 | 2,93 | 1,72 |

Supplementary file 2. Relationship between ostium dimensions and sex adjusted by age evaluated by ANCOVA

|  |  |  |
| --- | --- | --- |
| Ostium dimension | Males *vs*. females | Relationship with age given as standardized regression coefficient (β) with standard error (SE) and p-value |
| LCA Length [mm] | p=0.071 | 0.70 (0.16), p<0.001 |
| LCA Width [mm] | p=0.273 | 0.31 (0.21), p=0.273 |
| RCA Length [mm] | p=0.472 | 0.47 (0.20), p=0.025 |
| RCA Width [mm] | p=0.109 | 0.49 (0.19), p=0.016 |
| LCA Area [mm2] | p=0.081 | 0.51 (0.19), p=0.011 |
| RCA Area [mm2] | p=0.129 | 0.43 (0.20), p=0.037 |