

***Research Note***

**Research in Retrospect: The Animal Bones from Daima,  
Northeast Nigeria**

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**Supplementary Material**

TABLE S1    Dimensions of cattle dentition from Daima

| Cattle molars       |   |                     |   |                              |    |
|---------------------|---|---------------------|---|------------------------------|----|
| Lower               |   | Lower               |   | Lower                        |    |
| M1                  |   | M2                  |   | M3                           |    |
| Maximum height (mm) |   | Maximum height (mm) |   | Maximum height: not recorded |    |
| 27                  | 1 | 37                  | 1 | Maximum breath (mm)          |    |
| 32                  | 1 | 42                  | 1 | 41                           | 1  |
| 35                  | 1 | Total               | 2 | 39                           | 2  |
| Total               | 3 |                     |   | 38                           | 1  |
|                     |   |                     |   | 37                           | 7  |
| Maximum breath (mm) |   | Maximum breath (mm) |   | 36                           | 1  |
| 20                  | 1 | 26                  | 1 | 35                           | 7  |
| 23                  | 2 | 27                  | 1 | 34                           | 8  |
| Total               | 3 | Total               | 2 | 33                           | 2  |
|                     |   |                     |   | 32                           | 2  |
|                     |   |                     |   | Total                        | 31 |
| Upper               |   | Upper               |   | Upper                        |    |
| M1                  |   | M2                  |   | M3                           |    |
| Maximum height (mm) |   | Maximum height (mm) |   | Maximum height (mm)          |    |
| 32                  | 1 | 21                  | 1 | 22                           | 1  |
| 34                  | 1 | 27                  | 1 | 27                           | 1  |
| 39                  | 1 | 33                  | 1 | 34                           | 1  |
| 42                  | 1 | 38                  | 1 | 38                           | 1  |
| Total               | 4 | 42                  | 1 | 42                           | 1  |
|                     |   | 47                  | 1 | 47                           | 1  |

|                     |   |                     |   |  |                     |   |
|---------------------|---|---------------------|---|--|---------------------|---|
|                     |   | Total               | 6 |  | Total               | 6 |
|                     |   |                     |   |  |                     |   |
| Maximum breath (mm) |   | Maximum breath (mm) |   |  | Maximum breath (mm) |   |
| 32                  | 1 | 26                  | 1 |  | 24                  | 1 |
| 35                  | 1 | 27                  | 1 |  | 29                  | 4 |
| 39                  | 1 | 28                  | 2 |  | 30                  | 1 |
| 42                  | 1 | 31                  | 1 |  | Total               | 6 |
| Total               | 1 | Total               | 5 |  |                     |   |

TABLE S2 Dimensions of cattle limb bones at Daima

| Body              | No. | %                 | Body              | No. | %          | Body              | No. | %                 |
|-------------------|-----|-------------------|-------------------|-----|------------|-------------------|-----|-------------------|
| part              |     |                   | part              |     |            | part              |     |                   |
| Humerus           |     |                   | Radius            |     |            | Tibia             |     |                   |
| Primal width (mm) |     |                   | Distal width (mm) |     |            | Prixmal width     |     |                   |
| 110-114           | 1   |                   | 85-89             | 1   |            | 105-              | 1   |                   |
|                   |     |                   |                   |     |            | 109               |     |                   |
| 100-104           | 1   | Not<br>calculated | 80-84             | 1   |            | 90-94             | 2   |                   |
| 85-89             | 1   |                   | 75-79             | 1   |            | 85-89             | 4   | Not<br>calculated |
| 75-79             | 1   |                   | 70-74             | 3   | Not        | 60-84             | –   |                   |
| Total             | 4   |                   | 65-69             | 54  | calculated | 55-59             | 1   |                   |
|                   |     |                   | 55-59             | 2   |            | 30-34             | 1   |                   |
|                   |     |                   | 50-54             | –   |            | Total             | 9   |                   |
|                   |     |                   | 40-49             | 1   |            |                   |     |                   |
|                   |     |                   | 35-39             | –   |            |                   |     |                   |
|                   |     |                   | Total             | 15  |            |                   |     |                   |
| Humerus           |     |                   | Femur             |     |            | Tibia             |     |                   |
| Distal width (mm) |     |                   | Distal width (mm) |     |            | Distal width (mm) |     |                   |
| 90-94             | 4   | 10                | 110-115           | 1   |            | 65-69             | 2   | 4                 |
| 85-89             | 2   | 5                 | 105-109           | –   |            | 60-64             | 14  | 28                |
| 80-84             | 3   | 7.5               | 100-104           | 1   |            | 55-59             | 14  | 28                |
| 75-79             | 10  | 25                | 95-99             | –   | Not        | 50-54             | 6   | 12                |
| 70-74             | 3   | 7.5               | 90-94             | 1   | calculated | 45-49             | 1   | 2                 |
| 65-69             | 4   | 10                | 85-89             | 2   |            | 40-44             | 1   | 2                 |
| 60-64             | –   | –                 | 80-84             | 1   |            | 35-39             | 7   | 14                |
| 55-59             | –   | –                 | 70-79             | –   |            | 30-34             | 3   | 6                 |

|       |    |      |       |   |       |    |     |
|-------|----|------|-------|---|-------|----|-----|
| 50-54 | —  | —    | 65-69 | 1 | 25-29 | 1  | 2   |
| 45-49 | 2  | 5    | 45-49 | 1 | 20-24 | 1  | 2   |
| 40-44 | 9  | 22.5 | Total | 8 | Total | 50 | 100 |
| 25-39 | 2  | 5    |       |   |       |    |     |
| 30-34 | —  | —    |       |   |       |    |     |
| 25-29 | 1  | 2.5  |       |   |       |    |     |
| Total | 40 | 100  |       |   |       |    |     |

TABLE S3 Dimensions of cattle metapodials and calcanea from Daima

| <b>Body part</b>    | <b>No.</b> | <b>%</b> | <b>Body part</b>    | <b>No.</b> | <b>%</b>   | <b>Body part</b> | <b>No.</b> | <b>%</b> |
|---------------------|------------|----------|---------------------|------------|------------|------------------|------------|----------|
| Metacarpal          |            |          | Metatarsal          |            |            | Calcaneum        |            |          |
| Proximal width (mm) |            |          | Proximal width (mm) |            |            | Length (mm)      |            |          |
| 60-64               | 2          | 8.0      | 45-49               | 3          |            | 130-134          | 3          | 12       |
| 55-59               | 11         | 44.0     | 40-44               | 1          | Not        | 125-129          | 1          | 4        |
| 50-54               | 7          | 28.0     | 35-39               | 1          | calculated | 120-124          | 8          | 32       |
| 45-49               | –          | –        | 30-34               | 5          |            | 115-119          | 5          | 20       |
| 40-44               | 1          | 4.0      | Total               | 10         |            | 110-114          | 2          | 8        |
| 35-39               | –          | –        |                     |            |            | 95-109           | –          | –        |
| 30-34               | 3          | 12.0     |                     |            |            | 90-94            | 1          | 4        |
| 25-29               | 1          | 4.0      |                     |            |            | 85-89            | –          | –        |
| Total               | 25         | 100.0    |                     |            |            | 80-84            | 1          | 4        |
|                     |            |          |                     |            |            | 75-79            | 3          | 12       |
|                     |            |          |                     |            |            | 60-74            | –          | –        |
|                     |            |          |                     |            |            | 55-59            | 1          | 4        |
|                     |            |          |                     |            |            | Total            | 25         | 100      |
| Metacarpal          |            |          | Metatarsal          |            |            | Calcaneum        |            |          |
| Distal width (mm)   |            |          | Distal width (mm)   |            |            | Breath (mm)      |            |          |
| 70-74               | 1          | 2.5      | 65-69               | 1          | 2.5        | 50-54            | 3          | 12       |
| 65-69               | 5          | 12.5     | 60-64               | 6          | 15         | 45-49            | 4          | 16       |
| 60-64               | 3          | 7.5      | 55-59               | 9          | 22.5       | 40-44            | 9          | 36       |
| 55-59               | 13         | 32.5     | 50-54               | 14         | 35         | 35-39            | 3          | 12       |

|       |    |     |       |    |      |       |    |     |
|-------|----|-----|-------|----|------|-------|----|-----|
| 50-54 | 8  | 20  | 45-49 | 3  | 7.5  | 30-34 | 6  | 24  |
| 45-49 | —  | —   | 40-44 | 1  | 2.5  | Total | 50 | 100 |
| 40-44 | 1  | 2.5 | 35-39 | 1  | 2.5  |       |    |     |
| 35-39 | 3  | 7.5 | 30-34 | 5  | 12.5 |       |    |     |
| 30-34 | 4  | 10  | Total | 40 | 100  |       |    |     |
| 25-29 | —  | —   |       |    |      |       |    |     |
| 20-24 | 2  | 5   |       |    |      |       |    |     |
| Total | 40 | 100 |       |    |      |       |    |     |

TABLE S4 Dimensions of cattle extremities at Daima

| <b>Body part</b> | <b>No.</b> | <b>%</b> | <b>Body part</b> | <b>No.</b> | <b>%</b>   | <b>Body part</b> | <b>No.</b> | <b>%</b>   |
|------------------|------------|----------|------------------|------------|------------|------------------|------------|------------|
| Astragulus       |            |          | Phalanges        |            |            | Phalanges        |            |            |
| Length (mm)      |            |          | First            |            |            | Third            |            |            |
| 80-84            | 1          | 2        | Breadth (mm)     |            |            | Length (mm)      |            |            |
| 75-79            | –          | –        | 35-39            | 1          | 3          | 70-74            | 2          |            |
| 70-74            | 2          | 4        | 30-34            | 12         | 40         | 65-69            | 2          |            |
| 65-69            | 19         | 38       | 25-29            | 7          | 24         | 60-64            | –          | Not        |
| 60-64            | 11         | 22       | 20-24            | 3          | 10         | 55-59            | 1          | calculated |
| 55-59            | 6          | 12       | 15-19            | 6          | 20         | 45-54            | –          |            |
| 50-54            | 1          | 2        | 10-14            | 1          | 3          | 40-44            | 1          |            |
| 45-49            | 3          | 6        | Total            | 30         | 100        | Total            | 6          |            |
| 40-44            | 5          | 10       |                  |            |            |                  |            |            |
| 35-39            | 1          | 2        |                  |            |            |                  |            |            |
| 30-34            | 1          | 2        |                  |            |            |                  |            |            |
| Total            | 50         | 100      |                  |            |            |                  |            |            |
| Phalanges        |            |          | Phalanges        |            |            | Phalanges        |            |            |
| First            |            |          | Second           |            |            | Third            |            |            |
| Length (mm)      |            |          | Length (mm)      |            |            | Breadth (mm)     |            |            |
| 70-74            | 1          | 2        | 40-44            | 8          |            | 35-39            | 3          |            |
| 65-69            | 6          | 12       | 35-39            | 5          | Not        | 30-34            | 2          | Not        |
| 60-64            | 19         | 38       | 30-34            | 2          | calculated | 25-29            | 1          | calculated |
| 55-59            | 20         | 40       | Total            | 15         |            | Total            | 6          |            |
| 50-54            | 2          | 4        |                  |            |            |                  |            |            |
| 45-49            | 2          | 4        |                  |            |            |                  |            |            |



|       |    |     |
|-------|----|-----|
| Total | 50 | 100 |
|-------|----|-----|

Phalanges

Second

Breadth

|       |    |            |
|-------|----|------------|
| 30-34 | 3  |            |
| 25-29 | 7  | Not        |
| 20-24 | 3  | calculated |
| 15-19 | 2  |            |
| Total | 15 |            |

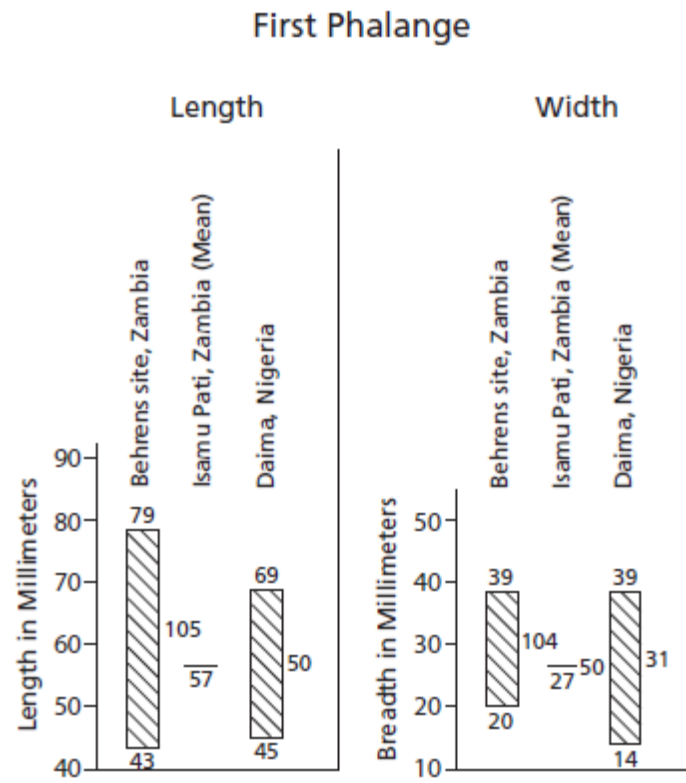


FIGURE S1 Dimensions of Daima cattle compared with shorthorn examples from Zambia.

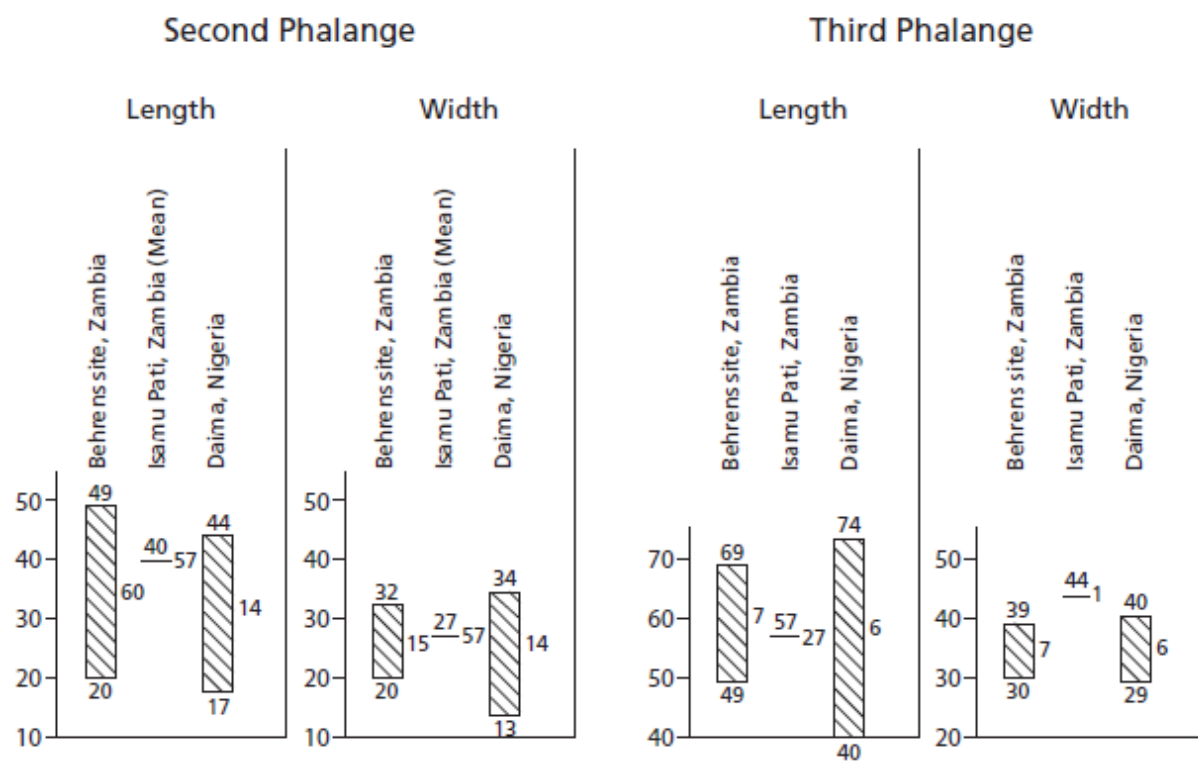


FIGURE S2 Dimensions of second and third phalanges at Daima.