**TITLE**: WF16 bird bone data from 2008-2010 excavation

**CREATOR**: Steven Mithen, University of Reading, and Judith White, Natural History Museum

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**PUBLICATION YEAR**: 2022

**DESCRIPTION:** The Excel workbook in this archive provides the data for the bird bones recovered from the 2008-10 excavation at WF16, southern Jordan. The bird bones were excavated between 2008-2010 using methods described in Mithen, S. et al. 2018 *WF16: Excavations at an Early Neolithic Settlement in Southern Jordan*, available at <https://cbrl.ac.uk/news/published-wf16-excavations-at-an-early-neolithic-settlement-in-southern-jordan-stratigraphy-chronology-architecture-and-burials/>. The bird bones had been removed from the animal faunal assemblages by Dr Cheryl Makarewicz. They were catalogued by Judith White at the Natural History Museum (Tring).

**CITE AS:** Mithen, Steven and White, Judith (2022): WF16 bird bone data from 2008-2010 excavation. University of Reading. Dataset. <https://doi.org/10.17864/1947.000357>

**PUBLICATIONS**: The generation of the data set and its interpretation are described within three publications:

White, J., Finlayson, B., Makarewicz, C., Khoury, F., Greet, B. & Mithen, S.J. 2021. The bird remains from WF16: An early Neolithic settlement in southern Jordan: assemblage composition, chronology and spatial distributions. *International Journal of Osteoarchaeology* <https://doi.org/10.1002/oa.3016>

White, J., Khoury, F., Greet, B. & Mithen, S.J. 2021. The utilization of birds at Neolithic Wf16, southern Jordan: cut marks, body parts and experimental skinning. *International Journal of Osteoarchaeology* <https://doi.org/10.1002/oa.3031>

Mithen, S.J., White, J., Finlayson, B. Greet, B. & Khoury, F. 2022. Birds as indicators of early Holocene diversity and the seasonal nature of human activity at Wf16, an early Neolithic site in Faynan, Southern Jordan. *Quaternary Science Reviews,* <http://doi.org/10.1002/jqs.3429>

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**PROJECT FUNDING:**

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AHRC funded ‘Excavations at WF16’ project (AH/E006205/1, PI: S.J. Mithen).

**DEFINTION OF VARIABLES (columns in Table 1):**

A: IRN: individual record number

B: Site: WF16, see Mithen et al. 2018

C: Layer: See column D

D: Context: the context at Wf16 from which the specimen was excavated. For context descriptions and stratigraphic information see Mithen et al. 2018

E: Sample: sample number assigned in the field

F: BF: Bulk Find sample relating to the unit of sediment sieved from which the sample(s) as extracted, see Mithen et al. 2018

G: Object: the area from which the sample derived in the excavation, see Mithen et al. 2018

H: Description: infield interpretation of the deposit from which the sample derived

I: Element, see Recording codes below

J: Side, see Recording codes below

K: Family, taxonomy follows Howard and Moore 3rd Edition

L: Genus, taxonomy follows Howard and Moore 3rd Edition

M: Species, taxonomy follows Howard and Moore 3rd Edition

N: Taxon (genus and species), taxonomy follows Howard and Moore 3rd Edition

O-V: Zone, zoning system according to Cohen and Serjeantson (1996)

W: % Completeness

X: Fragment number

Y: Fragment size, see Recording codes below

Z: Portion, see Recording codes below

AA: Break, see Recording codes below

AB: Preservation, see Recording codes below

AC: Weathering, see Recording codes below

AD: Butchery, see Recording codes below

AE: Butchery direction, see Recording codes below

AF: Gnawing, see Recording codes below

AG: Pathology

AH: Burning, see Recording codes below

AI: Age, see Recording codes below

AJ: Sex, see Recording codes below

AK: Photographed

AL: Notes

AM-BB: Measurements, see Recording codes below

**RECORDING CODES**

|  |  |
| --- | --- |
| I: Element |  |
| al | Alula |
| atlas | Atlas |
| axis | Axis |
| cmc | Carpometacarpus |
| cor | Coracoid |
| dm | Phalanx of minor digit |
| dm1 | Proximal phalanx of major digit |
| dm2 | Distal phalanx of major digit |
| fem | Femur |
| fib | Fibula |
| frag | Fragment |
| fron | Frontal |
| fur | Furcula |
| hum | Humerus |
| man | Mandible |
| man art | Mandible articulation |
| mt 1 | Metatarsal 1 |
| pel | Pelvis |
| per | Periotic capsule |
| phal | Phalanx |
| phal 1 | Phalanx 1.1 |
| phal 2.1 | Phalanx 2.1 |
| phal 2.2 | Phalanx 2.2 |
| phal 3.1 | Phalanx 3.1 |
| phal 3.2 | Phalanx 3.2 |
| phal 3.3 | Phalanx 3.3 |
| phal 4.1 | Phalanx 4.1 |
| phal 4.2 | Phalanx 4.2 |
| phal 4.3 | Phalanx 4.3 |
| phal 4.4 | Phalanx 4.4 |
| pmax | Premaxilla |
| quad | Quadrate |
| rad | Radius |
| radiale | Radiale |
| rib | Rib |
| scap | Scapula |
| sk frag | Skull fragment |
| squam | Squamosal |
| stern | Sternum |
| syn | Synsacrum |
| tbt | Tibiotarsus |
| th vert | Thoracic vertebra |
| tmt | Tarsometatarsus |
| uln | Ulna |
| ulnare | Ulnare |
| ung | Ungual Phalanx |
| ung 1 | Ungual Phalanx 1.2 |
| ung 2 | Ungual Phalanx 2.3 |
| ung 3 | Ungual Phalanx 3.4 |
| ung 4 | Ungual Phalanx 4.5 |
| vert | Vertebra |
|  |  |
| J: Side |  |
| r | right |
| l | left |
| ax | axial |
|  |  |
| L: Genus | taxonomy follows Howard and Moore 3rd Edition |
| cf. | compare |
| unid | unidentified |
|  |  |
| M: Species | taxonomy follows Howard and Moore 3rd Edition |
| sp. | species |
| small | small size |
| small/med | small/medium size |
| med | medium size |
| med/large | medium/large size |
| large | large size |
|  |  |
| Y: Fragment size  | Fragment size for unidentified fragments |
| e.g. 1 | 1cm (for groups of fragments, largest size given) |
|  |  |
| Z: Portion |  |
| p  | proximal |
| s | shaft |
| d | distal |
|  |  |
| AA: Break |  |
| a | ancient |
| m | modern |
|  |  |
| AB: Preservation |  |
| g | good - majority of surface solid or fresh or even slightly glossy; very localized flaky or powdery patches |
| f | fair - surface solid in places, but flaky or powdery on <50% of specimen |
| p | poor - surface flaky or powdery on >50% of specimen |
|  |  |
| AC: Weathering |  |
| root | root etching |
| stained | stained |
| concretion | concretion |
| mang | manganese staining |
|  |  |
| AD: Butchery |  |
| cut | cut (add zone) |
| ch | chop (add zone) |
|  |  |
| AF: Gnawing |  |
| rodent |  |
| carnivore |  |
| digested |  |
|  |  |
| AH: Burning |  |
| black/white | colour of burning |
| char | charring (add zone) |
|  |  |
| AI: Age |  |
| imm | immature - articulations porous or fusing, bone shaft solid |
| juv | juvenile - unfused articulations and porous shaft |
|  |  |
| AJ: Sex |  |
| male |  |
| female |  |

|  |  |
| --- | --- |
| AM-BB: Measurements | taken from Cohen and Serjeantson (1996) and von den Driesch (1976) |
| AM | GL | Greatest Length |
| AN | Lm | Length of medial side |
| AO | LS | Length of the symphysis (mandible) |
| AP | LV | Length along vertebrae (pelvis) |
| AQ | La | Axial Length |
| AR | L | Length of metacarpus II |
| AS | Bb | Basal breadth |
| AT | Bf |  |
| AU | Bp | Greatest breadth of proximal end |
| AV | Dp | Greatest depth of proximal end |
| AW | Dic | Greatest cranial diagonal |
| AX | Dip | Diagonal of proximal end |
| AY | SC | Smallest breadth of corpus |
| AZ | Bd | Greatest breadth of distal end |
| BB | Dd | Greatest depth of distal end |
| BB | Did | Diagonal of distal end |
|  |  |  |
| Coracoid |
| GL | Greatest length |
| Lm | Length of medial side |
| Bb | Basal breadth |
| Bf | Breadth of articular facet |
|  |  |
| Scapula |
| GL | Greatest length |
| Dic | Greatest cranial diagonal |
|  |  |
| Humerus |
| GL | Greatest length |
| Bp | Greatest breadth of proximal end |
| SC | Smallest breadth of Corpus |
| Bd | Greatest breadth of distal end |
|  |  |
| Ulna |
| GL | Greatest length |
| Bp | Greatest breadth of proximal end |
| Dip | Diagonal of proximal end |
| SC | Smallest breadth of Corpus |
| Did | Diagonal of distal end |
|  |  |
| Radius |
| GL | Greatest length |
| SC | Smallest breadth of Corpus |
| Bd | Greatest breadth of distal end |
|  |  |
| Carpometacarpus |
| GL | Greatest length |
| L | Length of metacarpus II |
| Bp | Greatest breadth of proximal end |
| Did | Diagonal of distal end |
|  |  |
| Femur |
| GL | Greatest length |
| Lm | Length of medial side |
| Bp | Greatest breadth of proximal end |
| Dp | Greatest depth of proximal end |
| SC | Smallest breadth of Corpus |
| Bd | Greatest breadth of distal end |
| Dd | Greatest depth of distal end |
|  |  |
| Tibiotarsus |
| GL | Greatest length |
| La | Axial length |
| Dip | Diagonal of proximal end |
| SC | Smallest breadth of Corpus |
| Bd | Greatest breadth of distal end |
| Dd | Greatest depth of distal end |
|  |  |
| Tarsometatarsus |
| GL | Greatest length |
| Dp | Greatest depth of proximal end |
| Bp | Greatest breadth of proximal end |
| SC | Smallest breadth of Corpus |
| Bd | Greatest breadth of distal end |
| Dd | Greatest depth of distal end |

**DEFINTIION OF VARIABLES RELATING TO TABLES 2-18**

PHASE 2: 11.30–10.80 ka BP, see Mithen et al. 2018

PHASE 3: 10.80–10.24 ka BP, see Mithen et al. 2018

MNI: Minimum number of individuals

NISP: Number of identified specimens

Note the taxonomy used in Tables 2-18 realting to the publications White, Finlayson et al. 2021, White, Khoury et al. 2021 and Mithen et al. 2022 use Howard and Moore 4th Edition.

**CAPTIONS FOR TABLES AND THEIR USE IN PUBLICATIONS**

Table 1: WF16 original data

Table 2: NISP and MNI for taxa at WF16 by Phase (White, Finlayson et al. 2021, Table 1)

Table 3: NISP counts by family and phase

Table 4: NISP counts by family and object (White, Finlayson et al. 2021, Table 2)

Table 5: Skeletal part frequencies for *Alectoris chukar* (White, Khoury et al. 2021, Figure 3)

Table 6: Skeletal part frequencies for *Pernis apivorus* (White, Khoury et al. 2021, Figure 3)

Table 7: Skeletal part frequencies for *Milvus* sp. (White, Khoury et al. 2021, Figure 3)

Table 8: Skeletal part frequencies for *Buteo* sp. (White, Khoury et al. 2021, Figure 3)

Table 9: Accipitridae: representation of body parts by NISP (White, Khoury et al. 2021, Figure 4)

Table 10: Accipitridae: distribution of cut marks (White, Khoury et al. 2021, Figure 5)

Table 11: Accipitridae: distribution of burning (White, Khoury et al. 2021, Figure 8)

Table 12: NISP by taxa and element at WF16 (White, Khoury et al. 2021, Table S1)

Table 13: Cut marks by taxa and element at WF16 (White, Khoury et al. 2021, Table S2)

Table 14: Burning by taxa and element at WF16 (White, Khoury et al. 2021, Table S3)

Table 15: Experimental butchery results (White, Khoury et al. 2021, Table S4)

Table 16: Passage migrants, residents and seasonal visitors represented at WF16. Faunal data from White, Finlayson et al., (2021); ecological data from Andrews (1995) and Khoury (personal observations) (Mithen et al. 2022, Table 1)

Table 17: Present day seasonal distribution in Jordan of birds represented at WF16 (derived from Andrews 1995), see also updated list in <http://www.jordanbirdwatch.com/birds-in-jordan/jordan-bird-list/> (Mithen et al. 2022, Table 2)

Table 18: Bird taxa represented at WF16 but not found in Faynan today (Mithen et al. 2022, Table 3)