

## **Wilton Autos, Wilton (60515/12)**

### **Human Bone Archive Report**

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#### I. Articulated remains

Skeletal inventories including location of post-mortem breaks and pathological lesions are recorded on the various *pro-forma* record sheets and database: Skeleton Record, Dental and Metric Record (latter limited), Spinal & Extra Spinal Record.

Digital images of pathological lesions were taken where appropriate.

Following text includes description of morphology related to aging, sexing, pathological lesions etc.

Due to shortage funding/time only a limited no. of measurements were taken on the bone, the non-metric traits were not routinely recorded, context by context bone condition was not recorded, nor were details of bone morphology related to musculature etc.

*60512 (WB)*

#### **context 106 (inc. 102)**

Disarticulated bone from fill grave 104 but clearly one individual & joining fragments from context 102 – layer within modern disturbance.

LOWER LIMB: Large robust long bones.

Tibia; both proximal fibula articular surfaces have 25 x 20mm ‘coalition’ area below facet, raise new bone, pitted with uneven marginal bone - ?dislocation.

PHOTO

Large tarsals.

AXIAL SKELETON: Innominates; relatively small bones (poss. not this adult male)

No transverse patterning in auricular surfaces; densified surfaces, slightly uneven, no apical & limited retro. changes. Phase 5-6.

AGE: adult c. 40-50 yr.

SEX: male

COMMENT: NB> Some foot & rib bones could be = 105 but most from large male redep. (not = redep. bone under 105). ?Innominates ?not same individual

#### **context 105**

Extended, supine, grave 104; cut by? machine/earlier feature

SKULL: Mandible – slightly squared protuberance, off-set left, flared gonion. mod calculus esp. labial.

Maxilla – right M1-2 gross destructive lesion apices both sockets, amalgamated one large smooth-margined feature c. 13mm diameter, existing buccally from M1 mesial & M2 medial via 7mm diameter lesions coalesced towards alveolus; small ‘pinhole’ fistula into antrum but no sign infection. Coalesced apical lesion right P1-2, no buccal exits – fenestration. Similar calculus to mandible, slightly less.

Very large, pointed mastoid processes. Broad supra-orbital margins & moderate brow (3-4). Slight-mod. external occipital protuberance (3). Sutures half fused.

AXIAL SKELETON: Large vertebrae.

Innominates; acute greater sciatic notch (3-4); v. narrow shallow sulci left only. Auricular surface faint striated; fine grained surfaces; no apical/retro changes. Phase 3. Left ventral iliac bowl, superior to border- surface disrupted by series irregular coalesced shallow, smooth margined depressions, over c. 50 x 24mm area - ?plastic changes. PHOTO.

LOWER LIMB: Large bone, mod. robust. Very large foot bones.

UPPER LIMB: Left side noticeably smaller than right – terms length & robusticity.

Clavicle; left medial centre not quite fully ossified.

AGE: adult c. 30-35 yr.

SEX: male

COMMENT: Hand bones 2<sup>nd</sup>, smaller (female) individual mixed with hand bones from pelvic area & base of grave (few hand bones recovered as ‘hand bones’); **inc.. in MNI.**

*60515 (evaluation/excavation)*

#### **context 171**

Appears extended & supine, grave 169; cut by later grave.

SKULL: Mandible – large teeth, flared gonion.

Relatively large, pointed mastoid processes. Small wormian right mid-lambdoid.

AXIAL SKELETON: Axis; odontoid process almost fully ossified. Bodies full fused at laminae.

Thoracic; bodies not all quite fully fused at laminae.

AGE: juvenile/subadult c. 12-13 yr. (teeth)

SEX: ??male (mandible)

#### **context 173**

Extended supine grave 172.

SKULL: Mandible – broad even arch, slightly flared gonion.

Ossicle at lambda, small ossicle right lambdoid.

AXIAL SKELETON: Cervical: C1 – anterior arch just fused./ Axis odontoid process not ossified & body not quite fully fused. Laminae fused.

Thoracic & lumbar; laminae not all fully fused.

Sacrum; spinal fusion commenced, bodies sep.

Innominates; greater sciatic notch tending acute (i.e. <90 deg.)

LOWER LIMB: Tibia; patches coarse woven periosteal new bone on left mid-shaft lateral & medial sides c. 42-52mm length (Photo). Right similar but medial side only & lamellar.

AGE: juvenile 6-7 yr. (teeth; long bone 4-4.5yr.)

#### **context 233**

Supine, extended grave 232.

SKULL: Mandible narrow arch, slightly pointed mental protuberance. Loss alveolar height. Slight-mild calculus.

Maxilla – loss alveolar height.

Medium-large mastoid processes. Narrow-medium supra-orbital margins (3). No external occipital protuberance (1-2). Sutures well fused. Two patches coarse new bone on endocranial frontal; 20 x 20mm area thickish, lamellar like right adjacent to crest, smaller, more lamellar patch left superior.

AXIAL SKELETON: Sacrum; hardly any curve.

Ribs; Iscan phase 2

Innominate; greater sciatic notch tending acute (4); sub-pubic angle median (3) – cannot see form. Auricular surfaces very faint slight striae; coarse granularity inc. density; slight apical depression; pitting in left inferior half; no retroarticular changes. Phase 4-5. Very slight pattern symphyseal face; gen. smoothed some borders. Right enthesophytes superior-lateral iliac crest.

UPPER LIMB: Humerus; marked deltoid tuberosities.

Ulna; large bony nodule at left tuberosity; exostoses at ligament insertion 17 x 9 x 9mm, rugged but clearly remodelled (photo).

Small carpal bones; solitary bone cyst in scaphoid.

LOWER LIMB: Femur; marked gluteal.

Patella; mild-moderate enthesophytes both anterior surfaces.

Small-medium foot bones. Calcanea slight enthesophytes

AGE: adult c. 35-45 yr.

SEX: ?female

COMMENT: Some p.mortem damage to skull (later burials). NB> Most thoracic vertebrae appear to be missing.

### **context 237**

?disarticulated within grave 240, that of burial 241

SKULL: Mandible small squared protuberance, even arch. Small teeth. Mild-moderate calculus, esp. anterior labial. Loss alveolar height at M1 socket, esp. buccally 17mm m-d, smooth concave buccal lesion max. depth 11mm; sockets fully resorbed (PHOTO) some reactive new bone still in socket area - fine grained.

Medium supra-orbital margins (3); slight brow ridge (2-3); very large slightly pointed mastoid processes (5) small external occipital protuberance (1-2). Broad, rounded vault; sutures c. half fused. Ossicles (1-2) both side lambdoid).

AXIAL SKELETON: Innominate; large bone; greater sciatic notch (3-4); sub-pubic acute (5) flat & broad. Auricular surface; faint billowing & some striae; no apical & retro. changes (Phase 3) . Symphyseal face some transverse pattern but gen. flat, some ventral pitting & borders.

UPPER LIMB: Very large bones, not markedly strong attachments

AGE: adult c. 30-35 yr.

SEX: male

### **context 241**

Supine, extended grave 240.

SKULL: Mandible – small, very squared protuberance.

Small, rounded mastoid processes.

Ossicle at lambda & min. 2 in left lambdoid & 1 in right (suspect several more).

up 1<sup>st</sup> metacarpal 3<sup>rd</sup> distal centre commenced ossification.

AXIAL SKELETON: Cervical;; atlas anterior arch non fused. Axis – inferior body

centre fusing; no ossification of odontoid. Rest C – laminae almost fully fused.

Thoracic; laminae not fused.

Lumbar; laminae almost fully fused.

Sacrum; all centres separate.

Sternum; 7 centres, one vertical set fused.

Innominate; greater sciatic notch <90 deg.

LOWER LIMB: Tibia; right distal epiphysis articular surface remodelled - fine

micro- & slightly coarse macro-pitting across whole surface with uneven very fine thickening of bone at margins. PHOTO

Articular surface for tibia in right talus totally destroyed with gross destructive lesion exiting inferiorly into sulcus between calcaneal surfaces. Dorsal portion of bone almost totally gone, woven open new bone in interior of remaining c. 10mm 'diameter' (not actually spherical, irregular) of lesion.

1<sup>st</sup> metatarsals 3<sup>rd</sup> distal centres (metaphyses only).

AGE: juvenile c. 5-6 yr. (teeth; long bones c. 3 yr.)

### **context 248**

Supine, extended grave 247.

SKULL: Mandible – broad, even arch, slightly large gonion. Calculus slight-moderate esp. anterior lingual. Right M2/3 socket, loss alveolar height with concave smooth margined profile – infill following tooth loss?

Maxilla- left M1 socket tip carious meso-buccal branch only; rest healing absences, some reactive coarse new bone in rest open socket area & smooth margined buccal lesion. 5mm open to alveolus. Right I1 socket area not quite fully resorbed, slight concave area labial c. 6mm diameter open labially to alveolus. healed absence but not certain. Right M1 alveolus fully resorbed & reduced.

Large, rounded (R)/pointed (L) mastoid processes. Moderate-large supra-orbital ridge (3-4); medium margins (3) Small external occipital protuberance (1-2). Slight sagittal crest. Ossicle at lambda & several both sides lambdoid. Prominent nasal spines & prominent nasal bones.

Fragment calcified thyroid cartilage.

AXIAL SKELETON: Large vertebrae.

Cervical; disruption in C3-4 body surfaces, slight new bone spicules & micro-pitting ('melted' appearance).

Rib's very large. Iscan phase 2-3.

Sacrum; S1 lumbarised (Photo).

Short manubrium & very long sternum – appears to have extra segment (fused).

PHOTO

Innominate; large bones; greater sciatic notch tending acute (3-4); sub-pubic acute, straight & broad; no pa sulcus. Auricular surface very slight transverse patterning; coarse granular with some densification; no porosity; slight margins; no apical & slight retro articular changes (Phase 4-5). Symphyseal face: some transverse organisation; deep ventral pitting; macro-porosity; some dorsal border. Right: marginal destructive lesions with minimal osteophytes; mix juxta-articular & articular; smooth margined coalesced lesions c. 8 x 4mm.

UPPER LIMB: Very large bones; attachments not markedly robust except ulna tuberosity.

Clavicle; cortical defect medial attachment

LOWER LIMB: Very large bones!; attachments not markedly robust

Femur; left 19 x 11.5mm o.c. dessicans defect in centre medial condyle

PHOTO

Patella; very slight enthesophytes.

Fibula; right – smooth bony extension at peroneus longus attachment 32mm p-d & 12mm m-l.

Calcaneum; medium enthesophytes both posterior surfaces.

AGE: adult c. 35-45 yr.

SEX: male

COMMENT: skull badly warped. Disarticulated spare bits – min. 2 individuals, put & recorded with ‘disarticulated’.

### **context 251**

Flexed (foetal) grave 250 (though cut not visible)

AXIAL SKELETON: Innominate; greater sciatic notch >90 deg.

AGE: neonate c. 1-2 weeks

COMMENT: appears to be missing a femur

### **context 253**

Supine & apparently extended, no grave cut evident or what was cutting it

AXIAL SKELETON: All vertebrae have dorsal fusion laminae.

AGE: infant c. 1.5-2.5 yr. (teeth; long bones 1-1.5 yr)

COMMENT: slight mixing left & right upper limb (clavicles & scapulae).

### **context 258 (inc. redep. 271)**

Supine & extended apparently, grave cut 257. Cut by grave 269. Redep. bone from 271 (MISSING) may be from here

AXIAL SKELETON: Innominates; small bones; obtuse greater sciatic notches; short, narrow, deep & lobulated sulci. Auricular surfaces granular, uneven, v. slight striae; marked anterior borders, hollowed at apices; little/no retro changes. Phases

LOWER LIMB: Ling bones relatively gracile

Patella; small; slight enthesophytes.

Tibia; right; patch coarse grained, semi-lamellar new bone c. 80mm length mid-medial shaft. Both shafts slightly bowed anteriorly.

Foot bones moderate size. Calcanea moderate enthesophytes. Small medial notch in anterior medial talal facet of right calcaneum.

AGE: adult c. 35-45 yr.

SEX: ?

COMMENT: Slight mixing left & right foot. Fe staining left prox. anterior tibia & fibula

### **context 270**

Supine, extended, grave 269

SKULL: Mandible – even rounded arch, obtuse angle. Great loss alveolar height.

Remaining teeth shifted slightly in shallow sockets (resorbed alveolus) & angled anteriorly.

Maxilla- right abscess gross lesion existing buccal & palatal via smooth margined lesions c. 7mm & 6mm diameter, open to alveolus Photo. All alveolar margin much reduced almost to palate level. Left canine abscess existing labially c. 5mm diameter, smooth & open to alveolus M2 lesion existing buccal 7mm open to alveolus; smooth margins PHOTOS

Large, slightly pointed mastoid processes (5). Medium-narrow supra-orbital margins (2-3); flat brow (2). No external occipital protuberance (1). Sutures  $\frac{1}{4}$  -  $\frac{1}{2}$  fused.

AXIAL SKELETON: L5 – inf. accessory facets

Manubrium; fine & slightly coarse lamellar new bone on both sides of bone.

Ribs; 10<sup>th</sup> – small patches fine gained periosteal new bone ventral & visceral surfaces c. 8mm from head, c. 12mm sq areas

Innominate; greater sciatic notch tending acute (3-4); sub-pubic acute but narrow. Auricular surfaces - no transverse organisation, uniformly coarse grained no densification or other changes apical or retro. (3-4). No pattern in symphyses; uniform coarse-grained surface with marked borders. Narrow, long, shallow pre-auricular sulcus. Left auricular surface series upstanding areas smooth new bone along length of surface – lamellar appearance (PHOTO). Fine active periosteal new bone over all side of right pubic crest, slightly coarser ventral

UPPER LIMB: Clavicle – left fine slight lamellar new bone over much central & lateral shaft.

Radius; small groove/lone across medial dorsal of distal articular surface describing triangular area c. 15 x 9mm suggesting of healed fracture. PHOTO

Scapula; fine, fairly thick active periosteal new bone both sides medial spines min. 25mm sq area; ?thin smear fine lamellar new bone both sides acromion.

Ulna; mild enthesophytes in tuberosity; gross changes in right with surface defects & exuberant new bone PHOTO.

Small hand bones & too many fingers (*possibly some from 258*). Right scaphoid, capitate & triquetral solitary bone cysts

LOWER LIMB: Femur; left – gross smooth lamellar new bone all central-distal shaft creating thick lagging. Both heads appear collapsed into neck creating almost ‘mushroom’ appearance & lack of spherical form (remodelled); slight new bone on medial-inferior of heads c. 6mm diameter below infilled notches. PHOTO. Right – very slight, fine cover of largely lamellar new bone in patches of distal shaft, particularly dorsal at distal end

Patella; both have 9mm area pitting & upstanding smooth new bone in centre articular surfaces.

Tibia: left – thick covering of smooth lamellar new bones along whole length of shaft heaviest medial (smooth) & lateral heavy extended spicules). Broken cross section shows 3mm ‘sleeve’ between original cortical bone & new cortex with lamellar bone between., PHOTO. Right – prox. shaft bowed laterally Heavy covering of smooth (medial) & coarse/striated (lateral) lamellar new bone on proximal & central shaft (esp. prox.) – only slightly laps over onto dorsal surface PHOTO

Fibula; left extensive-gross new bone along entire length of shaft, lamellar but with thick coarse woven appearance esp. along medial length. Broken cross section shows infilling of medullary cavity by trabecular bone. PHOTO. Right – slight-mild cover coarse lamellar new bone along length anterior border (PHOTO)

O. myelitis assoc. syphilis.

Medium-small foot bones. Mild enthesophytes left calcanea, very slight in right.

Left 5<sup>th</sup> metatarsal has thick, fine-grained active periosteal new bone long dorsal length of shaft c. 4mm thick. PHOTO

AGE: adult c. 35-45 yr. (v. contro traits. ex teeth suggests 35-45 yr. but teeth much older)  
SEX: ?male (contro – pelvis & some measures indicate. male, skull & other measures sugg. female)  
COMMENT: Disarticulated left 2<sup>nd</sup>, 4-5<sup>th</sup> metacarpals with left foot bones & pisiform – probably =258.

**context 276**

Supine, extended grave 275; disartic. bone in grave.  
SKULL: Mandible – slight–moderate calculus, esp. anterior lingual. c. 2mm loss alveolar height. Broad even arch, flared gonion, acute angle.  
Maxilla – slightly-moderate calculus sep. disto-buccal. Loss alveolar height as man. Abscess c. 6mm diameter smooth margined lesion existing buccally right P2 c. 4mm above alveolus. Left M2 socket open buccally to socket base, smooth margins to reduced alveolus; 13mm nm-d, 8mm from alveolus, some coarse grained new bone in socket. PHOTO  
Medium-large mastoids; very long styloid; narrow supra-orbital (102); neg ridge (102). slight external occipital protuberance (102). Sutures open-1/4 fused. Slight hyperporosity at coronal/sag junction (itching?)  
AXIAL SKELETON: Vertebrae large; most end plates not fully fused; lumbar closest, spinal process epiph. also not quite completed. .  
Cervical; small surface defects in C4-5 superior articular process facets.  
Sacrum; lateral epiph. fusing.  
Ribs; head epiph. not fused in most. Iscan phase 1.  
Sternum/manubrium articulation angled.  
Innominate; greater sciatic notch acute (5); short shallow sulcus. Auricular surfaces; fined grained with shallow billowing & some striate; no retro/apical changes (Phase 1-2). Crests fusing.  
UPPER LIMB: Epiph. lines evident prox. humeri & distal ulnae.  
Left 3<sup>rd</sup> metacarpal – ?cartilaginous coalition at styloid process; process itself missing PHOTO  
LOWER LIMB: Large bones inc. foot bones.  
Femur; prox. epiph. line still evident & distal in right.  
Patella; small surface defect in medial left.  
Tibia; left – patch striated lamellar new bone on prox. medial shaft c. 40mm. Right prox. epiph. line evident.  
Large irregular concave defect in right calcaneum posterior surface – superior c. 20 x 15mm, 10mm deep; all margins smooth; addition spherical defect just superior. PHOTO  
AGE: adult c. 18-20 yr.  
SEX: male

**context 327**

Supine, extended, grave 419. Machine disturbance.  
AXIAL SKELETON: vertebrae; laminae fused dorsally.  
Innominate; greater sciatic notch <90 deg.  
AGE: juvenile c. 5-7 yr. (c. 4-5 yr. from long bones but undoubtedly underaged by c. 2 yr.)

SEX: ??male

**context 340**

Supine, extended, grave cut 339. Cuts adult grave.

AXIAL SKELETON: Innominates; greater sciatic notches >90 deg.

UPPER LIMB: Coarse surface bone over much of right long bone shafts & parts of scapula blade; left same but less pronounced - ?normal or path?

AGE neonate c. 2-3 weeks

SEX: ?female

**context 372**

Supine, extended, grave 371; cut by grave 406, ?169 & ?419

SKULL: Mandible – broad, even arch, moderately flared gonion. Calculus mild-heavy, esp. right side, thick buccal & lingua;, over part occlusal surface. Left P2 abscess c. 4mm diameter smooth margined lesion existing buccal from sockets apex, open to alveolus one side 6mm superior .

Maxilla; mild-gross calculus esp. right side, M2 completely masked in thick deposits. PHOTO.

Medium supra-orbital margins (2-3); flat brow (1); small slightly pointed mastoids (2); small external occipital protuberance (1-2). Sutures 2/3 – fully fused. Neat rounded vault.

Fragments calcified thyroid.

AXIAL SKELETON: C7 – bi-lateral cervical rib, left fused, right facet only. PHOTO  
L5/S1 – only 4 lumbar vertebrae, 5<sup>th</sup> doubles as S1 semi-lumbarised/sacralised. Smooth continuation from lateral portion on right side, separated on left , resulted in skewing of bone to left side. PHOTO

Ribs; Iscan phase 2

Innominates; greater sciatic notch tending obtuse (2-3); sub-pubic obtuse & narrow. Long, narrow, deep pre-auricular sulcus. Auricular surfaces some striae, uniform coarse granularity, minor retro. changes, slight micro-porosity in places (Phase 3). Symphyseal face some transverse organisation but gen. smoothed ventral pitting & dorsal boarders.

UPPER LIMB: Small-medium, relatively gracile bones.

Humerus; 11mm juxta-articular defect dorsal side head. Slight enthesophytes on lateral epicondyle anterior

LOWER LIMB: Patella; series defects across superior of anterior surface – c. 6 pits some coalesced, smooth margins, trab. exposed in base few (PHOTO). Right mild enthesophytes anterior surface; few defects in superior of posterior surface as left; heavily pitted and new bone spicules in apex across all area of fat pack & patellar ligament. PHOTO

Tibia; left heavy lamellar new bone over length medial & lateral surfaces – medial heavier with more uneven contours (PHOTO). Right as lefts but slightly heavier PHOTO

Fibula; left heavy lamellar new bone over central-distal shaft posterior & lateral sides. PHOTO Right as left but limited to dorsal posterior surface (PHOTO)

Medium sized foot bones. PHOTO. Left calcaneum small ‘hook’ like bony extension from dorso-medial of medial talal surface – exostoses. PHOTO. Slight periosteal new bone on superior lateral surface; lamellar.



Right 1<sup>st</sup> metatarsal mild-medium enthesophytes at *peroneus longus* attachment.  
AGE: adult c. 30-35yr.  
SEX: female

**context 407**

Supine, extended in grave 406; cut by graves 535 & 538  
LOWER LIMB: Patella – small bi-lateral defects in medial inferior of anterior surfaces – notch-like – irregular & smooth.  
Smooth bony ankylosis left fibula & tibia at distal end c. 62mm from fibula head. 32mm length smooth new bone; related to well headed fracture in distal fibula, very slightly displaced distally (prox. portion) possible spiral but looks transverse; X-ray shows very faint transverse opaqueness c. 68mm from head. PHOTO  
Foot bones – large. Calcanea; enthesophytes mild-moderate posterior surface & mild anterior planter surface left. Both, esp. right have small surface defects in superior of dorsal surface at peroneus longus attachments.  
Left 1<sup>st</sup> metatarsal series small erosions juxta-articular medial side of head. Left 1<sup>st</sup> prox. phal. small circular surface defect centre prox. articular surface; similar lesion off-centre in right. .  
AGE: adult >25 yr.  
SEX: male

**context 453**

Supine, extended in grave 452, cut by grave 406  
LOWER LIMB: Fibula; patches relatively coarse grained periosteal new bone(?) on distal medial parts prox. shaft.  
AGE: neonate c. 3 mth.

**context 509**

Supine, extended grave 508; at edge of trench.  
AXIAL SKELETON: Sacrum; 1-2<sup>nd</sup> body centres partially fused to lateral centres.  
Innominates; greater sciatic notch at c. 90 deg.  
LOWER LIMB: 3<sup>rd</sup> distal centre in 1<sup>st</sup> metatarsals almost fully ossified.  
AGE: infant/juvenile c. 4-6 yr. (aged c. 3.5 yr. long bone shafts but doubtless underaged)

**context 513**

Supine, extended in grave 512. Cut by 523.  
SKULL: Very small teeth. Calculus slight-mild.  
Mandible; Extensive (4) periodontal disease on lingual side right M3 socket. Slight periosteal new bone (active) buccal right body adjacent to M1/P2 socket; left M1 socket fully resorbed. Even arch, no flaring.  
Maxilla – right M2 socket profile almost fully destroyed & impinging on M3 socket; irregular opening buccally from alveolar margin 8mm depth c. 154mm m-d; coarse lamellar bone in socket & on margins but not fully healed. Left M1 socket fully resorbed. M2 shallow sockets, much reduced alveolus; tooth rotated slightly, meso-buccal root now mesial, 5mm smooth margined lesion in socket with more loss

height palatal side. 3mm. M3 socket smooth margined c. 6.5mm lesion existing buccal, open to alveolar level; fine grained reactive new bone distal to & slightly just above socket. PHOTO.

Small, rounded skull. Sharp supra-orbital margins & flat brow (1); medium sized mastoid processes (3) pointed (left) & rounded (right) no external occipital protuberance (1). 2 ossicles at lambda & several small ossicle both sides lambdaoid. Vault flattened/almost foreshortened) in posterior parietals. Sutures partially fused but gen. open.

AXIAL SKELETON: Small vertebrae. End plates not quite fully ossified.

C7 – extended transverse process, at least on left side c. 9m with anterior curve.

UPPER LIMB: Scapula; lateral border epiph. fusing but incomplete.

AGE: adult c. 18-23 yr.

SEX: female

COMMENT: Scapula missing – see grave 523

#### **context 524**

Supine, extended grave 523

SKULL: Mandible - broad even arch, slightly flared gonion. Mild-moderate calculus esp. anterior labial. Alveolar resorption following *ante mortem* tooth loss complete left side, right side still some coarse infilling on going.

Maxilla – mild-very heavy calculus esp. bucco-distal, thick deposits almost to occlusal level. Right P2 abscess, 4mm diameter smooth margined spherical lesion exiting buccally at socket apex 7mm above alveolus. Similar lesion left P1 socket 7mm oval lesion slightly irregular 4.5mm sup. to alveolus; some root resorption clear. Slight periodontal disease (1-2) in distal alveolus with irregular resorption. Some loss alveolar height all round. PHOTO.

Fragments calcified thyroid cartilage.

Broad supra-orbital margins (4); pronounced ridge (4-5); very large rounded mastoid processes (5); small-moderate external occipital protuberance (2-3). Sutures min. half fused. Small ivory osteoma in left lateral frontal irregular but c. 12mm diameter. PHOTO.

AXIAL SKELETON: Large vertebrae.

Thoracic; anterior collapse of T8-1, max. loss body height T9 4mm; X-ray show narrow (half height) core of ‘normal’ trabecular bone with marked break-down in rest and several discrete areas translucency sub-surface both upper & lower, not all appear reflected in Schmorl's nodes seen in both surfaces – surface appearance otherwise ‘normal’ morphology. PHOTO

Sacrum; Long bone, part coccyx fused. Partial sbo, open to centre 3<sup>rd</sup>,

Large sternum; calcification 1<sup>st</sup> cartilage on manubrium .

Rib; Iscan phase 2-3.

Innominate: broad but acute greater sciatic notches (4). Auricular surfaces uniform coarse grained, remnants billowing mostly striae; some macro-porosity, no apical changes or retro. Phase 2-3

UPPER LIMB: Very large bones, mod. robust attachments. Large hand bones.

Scapula; c. 7mm diameter irregular surface defect centre left glenoid. Small marginal erosions in lateral new bone right glenoid (?rheumatoid)

Radius; both have marked pronator teres attachments.

LOWER LIMB: Very large robust bones, inc. foot bones.

Tibia; small exostoses 'hook' on right medial shaft, central-dorsal.  
Very slight enthesophytes posterior calcanea. Left 4<sup>th</sup> metatarsal base reduced in size planter-medial with adjacent medial irregular concave surface defect; smooth margins - giving more triangular forms to prox. articular surface. Small (3-4mm) surface defect centre both 1<sup>st</sup> prox. phal bases. Right 1<sup>st</sup> metatarsal juxta-articular erosion medial side head. Right 4<sup>th</sup> prox. phal. head markedly flattened with very slightly centrally concave surface.  
AGE: adult c. 30-35 yr.  
SEX: male

### **context 529**

Supine, legs flexed, grave 530 (though no cut seen)  
AXIAL SKELETON: Innominates; greater sciatic notch c. 90 deg.  
AGE: foetal/neonate 40 weeks/birth

### **context 533**

Supine, extended, grave 532.  
SKULL: Mandible – markedly flared gonion (PHOTO), small teeth, even dental arch. Mild-medium calculus esp. anterior lingual.  
Maxilla – mild-mod. calculus esp. disto-buccal; left.  
Narrow supra-orbital margins (2); slight supra-orbital ridge (2-3); neg. external occipital protuberance (1-2); large mastoid processes (left rounded, right pointed). Sutures open. Small ossicle each side lambdoid.  
AXIAL SKELETON: Atlas –posterior bridging  
Thoracic; 13.  
Lumbar; L5 sacralised with coalition in right side only, left separate; slight fusion only via 14mm length smooth new bone right ant-lateral body. PHOTO  
Sternum; long – once centre (sup. not quite fully fused).  
Innominates; acute greater sciatic notch & sub-pubic angles, broad & flat. Line epiphyseal fusion crest just evident in parts. Uniform fine grained auricular surface with faint billowing; no other changes. Symphyseal faces clear transverse patterning with slight ventral remodelling . Very slight sort shallow sulci.  
UPPER LIMB: Medium-large bones; medium-large hand bones.  
Clavicle; medial epiphyses not quite fully fused. Left slightly shorted than right with marked angulation of medial shaft (v, triangular profile); both esp. left have deep surface defects at medial ligament attachment  
Ulna; marked tuberosities.  
Left 3<sup>rd</sup> metacarpal styloid process absent with cartilaginous coalition in place – as seen earlier; right same but does have slight process & smaller coalition area  
LOWER LIMB: Femur; both heads elongated m-l giving 'mushroom' rather than spherical form. PHOTO  
Tibia; proximal epiphyseal line still evident.  
Left navicular slight enthesophytes superior central dorsal surface. Both 1<sup>st</sup> metatarsal head deep p-d grooves in planter portion of head – extension of normal shape.  
AGE: adult c. 20-25 yr.  
SEX: male  
COMMENT: Right leg missing p.exc – found wrongly # in disartic. bone

**context 536 (inc. 540)**

Supine, extended, grave 535; cut by grave 538. At trench edge.

SKULL: Mandible – pointed mental protuberance, no flaring. Medium,-large permanent teeth.

Moderately large, rounded mastoid processes. Ossicle in right lambdoid.

LOWER LIMB: 1<sup>st</sup> metatarsal 3<sup>rd</sup> distal centre almost fully ossified/fused.

AGE: juvenile c. 10-12 yr. (6.5-7 yr. from long bones)

COMMENT: 540 redep. bone in grave 538

**context 539**

Supine, extended, grave 538. At trench edge.

AXIAL SKELETON: Innominate; greater sciatic notch <90 deg.

LOWER LIMB: 1<sup>st</sup> metatarsal 3<sup>rd</sup> distal centre ossifying.

AGE: infant 3-5 yr. (aged c. 2.5-3 yr. from long bones – adjusted)

**context 548**

Supine, ?extended, no grave cut noted; cut by 532

SKULL: Mandible- squared mental protuberance. Medium sized teeth. Slight calculus.

Very small mastoid process; smooth margined c. 3.5mm diameter destructive lesion in tip with very fine-grained porosity over lateral & disto-lateral portion of process; healed fine-grained new bone. Very fine 'labyrinthine-like' ?erosions in articular tubercle ?ass. with infection (X-ray of limited assistance but the mastoid cells appear particularly numerous and enlarged through whole length of process with clear, distinct margins - ?mastoiditis, could be related to middle ear infection since structure within external auditory meatus appears far more open than usual with enlargement of cavity to slightly larger diameter than meatus itself; smooth margins – poss. indicative of plastic & destructive changes ass. with infection) PHOTO

AXIAL SKELETON: Cervical; laminae fused to bodies.

Thoracic; laminae & bodies unfused.

Lumbar; laminae fused to bodies, epiphyses evident.

Innominate; greater sciatic notch <90 deg.

UPPER LIMB: 1<sup>st</sup> metacarpal 3<sup>rd</sup> distal centre partly ossified/fused.

AGE: juvenile c. 7-8 yr. (NB. long bone lengths suggest age 5-6 yr. – aged on teeth; take note for other aging done on long bone lengths, probably all underage)

SEX: ??male

**context 549**

Disarticulated but clearly all one individual. Overlying ditch – disturbed by later burials.

AXIAL SKELETON: Atlas anterior arch unfused. Axis lower odontoid portion unfused to body, process unossified. Cervical laminae fused/fusing.

Thoracic; laminae unfused to bodies.

Lumbar laminae fused, epip. line just evident.

AGE: infant c. 4-5 yr. (long bone age 3 yr.)

### context 559

Supine, extended, grave 558

SKULL: Mandible – large bone, very flared gonion, extensive reduction alveolus following *ante mortem* tooth loss, smooth alveolar margin. Small apical lesion left canine socket, woven bone.

Maxilla; Right canine apical lesion exiting buccally ? mm from alveolus. 4mm diameter. Small 4mm diameter apical lesion P1 socket exiting buccally 4mm from alveolus. Apical lesion M1 only remains socket (distal) similar size to other – appears exit superiorly. Left canine small apical lesion. 4mm diameter. P1 sockets disrupted & enlarged existing distal via 6mm diameter smooth margined lesion into P2 socket; disrupted & damaged p.mortem so unclear what is real & what taphonomic.

Mastoid tubercles medium-large, slightly pointed (3-4); medium supra-orbital margins (3); very slight brow (2); slight external occipital protuberance (2). Sutures ¼-1/2 fused.

AXIAL SKELETON: Ribs; Iscan phase 2-3. One left shaft fragment has c. 9m area slight striated bone loss (?headed cut) with v. slight lamellar new bone inferior visceral surface.

Innominate; acute greater sciatic notch. Auricular surface inc. densification from coarse granularity; some v. faint transverse organisation; little apical & no retro. changes; slight macro-porosity (Phases 4-5).

UPPER LIMB: Humerus; right c. 15 x 16mm concave area heavy eburnation juxta-articular anterior-lateral head removing most of lesser tuberosity esp. superior part; no obv. new bone or pitting & not encroaching on surface  
united 5<sup>th</sup> prox. IP

LOWER LIMB: Tibia; right = 44mm length smooth ridge exostoses on right mid-shaft, lateral border; enthesophytes at distal interosseous. PHOTO

Mild-moderate enthesophytes on posterior calcaneum surface.

AGE: adult c. 35-45yr. (dental sugg. >> 50 yr.)

SEX: male

COMMENT: skull vault badly warped. Fragment right rib shaft has puncture mark suggesting of dog gnawing!

### context 562

Supine, extended, grave 561.

SKULL: Mandible – even arch, slightly flared gonion. Where *ante mortem* tooth loss alveolus almost sharp. very shallow incisor socket. Canine socket enlarged with 10mm diameter lesion existing labially smooth margins open 9mm to alveolus; coarse grained active new bone in socket & sinus down to canal. PHOTO

Maxilla – narrow – almost pointed medial; sharp alveolus where *ante mortem* tooth loss. 5mm diameter lesion apex P2 socket with coarse woven new bone margins; fenestrated rather than existed? c. 4mm smooth margined spherical lesions apex left canine socket, existing buccally c. 7mm from alveolus.

Very small, narrow malar processes. Narrow-sharp supra-orbital margins (1-2); flat brow (1-2) small-medium mastoid process (pointed & rounded; 3); no external occipital protuberance (1). High frontal, rounded vault. Ossicles at lambda & upper part both sides lambdoid. Sutures fused but clear.

Small fragment calcified thyroid cartilage.

AXIAL SKELETON: Rib; left shaft with smooth margined sub-circular destructive

lesion in inferior margin 8 x 4.5mm PHOTO. Iscan phase 2-3.

Innominate; obtuse greater sciatic notch & sub-pubic angles (1); narrow; short shallow sulcus. Symphyseal faces billowing, some striae; macro porosity, limited apical & no retro changes; coarse grainy surface (Phase 2-4).

UPPER LIMB: Clavicle: ?sugg. recent full oss. medial articular surface?

Humerus; left slight enthesophytes epicondyles.

Radius; 'thickening' of right distal shaft medially & anterior v. well healed lamellar new bone. PHOTO w. ulna. left appears to have thickening of distal half shaft - ?anterior at least very well healed lamellar bone?

Ulna; left moderate enthesophytes olecranon superior & lateral of sigmoid surface. 'Thickening' of right distal shaft anterior & lateral with coarse-grained lamellar new bone. PHOTO

Small carpals; juxta-articular erosions /solitary cysts in left capitate & triquetral. Small erosions juxta-articular middle phalanx head (left). Right capitate, scaphoid, hamate & triquetral all have varying nos. & size juxta-articular erosions. solitary bone cysts. Lunate also but several erosion encroaching on radius articular surface (rheumatic. 4mm diameter, little/no new bone. PHOTO. Small juxta & articular erosions right 3<sup>rd</sup> metacarpal base (in surface margins) & head (juxta).

LOWER LIMB: Bones not esp. large but relatively robust.

Femora; both have areas of raised, pitted new c. 15x 10mm areas; around & dorsal to notches. PHOTO.

Tibia; contours both remodelled & irregular with 'thickened' shafts & coarse lamellar new bone across most length medial side & patches on lateral. PHOTO

Fibula; left coarse, uneven exostoses on anterior margin proximal shaft c. 70mm length. PHOTO. some coarse, lamellar new bone but less obv. than on tibiae. Right ?healed fracture in distal half shaft c. 90mm from head - ;bend' in shaft dorsal; slight callus on posterior side 28mm length lamellar new bone on medial & dorsal side of distal shaft in gen. area. X-ray show slightly increase opacity with loss medullary cavity but no clear single location suggestive of a healed fracture; changes appear to correspond more closely within increased bone thickness evident from gross surface changes than anything else – no fracture; surface infection & enthesopathies. PHOTO

Patella; slight enthesophytes anterior surface.

Medium-small foot bones. Left calcaneum; moderate enthesophytes posterior & plantar surfaces; right less plantar.

AGE: adult c. 40-55 yr. (very contro traits; cervical spine & teeth say older, rest say 35-45 yr.)

SEX: female

### **context 573**

Supine, pres. extended, no grave cut noted. On trench edge.

SKULL: Mandible – small even arch, very slight flaring, obtuse angle. Extensive alveolar resorption shallow remaining sockets. Heavy calculus all remaining crowns esp. lingual. – masks most of crown other than occlusal (hyp. rec. min. consequently); sev. mm. thick. c. 3.5mm diameter spherical lesion apex. left I2 socket, active coarse woven new bone margins.

Maxilla – grt. loss alveolar height Area I2 socket not fully smoothed – active new bone woven in alveolus though no socket profile. Mod.-heavy calculus (\*much fallen off).

Small, rounded mastoid processes; short, narrow zygomatic arches; short gracile malars; narrow supra-orbital margins with flat brow (1-2); no external occipital protuberance. Sutures ½ - fully fused. Ossicle at lambda with smaller ossicles min. left lambdoid sutures. Distal 6.5mm of nasal bone bent in/flattened by c. 5-10deg. & splayed slightly; both halves fully fused over c. 4mm length of mend. PHOTO

Small area pitting in right occipital condyle with v. slight marginal osteophytes.

AXIAL SKELETON: Rib; 4 fragment shaft & left 11<sup>th</sup> visceral surfaces have patches fine grained periosteal new bone – likely to be more than one rib & not convinced its this individual since all these fragments are a slightly different colour (paler) than rest of bone.

UPPER LIMB: Small bones, fairly gracile

AGE: adult c. 35-50yr. (gen. not look old but teeth – ancient)

SEX: female

### **context 582**

Supine, extended, grave 581; cut by grave 561.

AXIAL SKELETON: Sacrum; spina bifida occulta; open to min 2<sup>nd</sup> body level.

Innominate; acute greater sciatic notch; ossification commenced within acetabulum

AGE: juvenile/subadult c. 11-14 yr. (c. 10-12 yr. from long bone - measures under aging)

SEX: ??male

COMMENT: Left leg missing in p.exc.

### **context 589**

Supine, extended, grave 588; cut by grave 591; at trench edge.

SKULL: mandible – small squared but slightly pointed protuberance, no flaring.

Sockets fully resorbed; some loss alveolar height. Uneven occlusal wear - wave-like form (prob. due to pain from max. teeth). PHOTO

Maxilla – c. 9mm diameter smooth spherical apical cyst right I2 socket apex; fenestration. Large apical cyst in left anterior maxilla over I1-P1 socket areas 22mm m-d x 19mm area, poss. remnants abscess in P1 socket (some coarse new bone as V. the smoother margins to rest of lesion (damage//fenestrated). Gross coarse woven new bone thick across all of remaining left antrum (floor, wall & roof with fistula from M1 socket suggesting 2ndry sinusitis; M2-3 sockets exposed in antrum floor & M3 pulp cavities exp. Damage means extant unclear but coarse & fine-grained periosteal new bone on max. body over min. 40 x 30mm area from alveolus to maxillary foramen. PHOTO

Sharp/narrow supra-orbital margins (1); flat brow (1-2); large pointed mastoid processes (304); no external occipital protuberance (1); high frontal & rounded skull. Sutures fused but clear.

AXIAL SKELETON: Rib; cartilage calcifying – up to 10mm.

UPPER LIMB: Fairly gracile bones though longish. No strong markings.

AGE: adult c. 30-40 yr. (despite extensive tooth loss clearly a relatively young ind.)

SEX: female

### **context 592**

Supine, extended, grave 591; cut by grave 619.

AXIAL SKELETON: Very large ribs. Iscan 2.

Innominate; acute greater sciatic notches & sup-pubic angles (5), latter broad. No sulci. Auricular surfaces; v. slight striae; coarse granular surface some densification; some macro- & micro-pitting; apical depression & osteophytes anterior; no retro. changes. Phase 4-5. No transverse organisation symphyseal faces, very slight marginal changes only & no pitting; uneven but relatively smooth surfaces.

UPPER LIMB: Very large, robust long bones & hand bones.

Mild-mod. enthesophytes right trapezoid inf. posterior surface.

LOWER LIMB: Very large, robust long bones and foot bones.

Femur; patches raised new bone on head adjacent to notch.

Patella; mild enthesophytes on anterior surfaces.

Tibia; well-headed but badly misaligned fracture in distal half shaft; distal portion displaced disto-lateral with full overlapping of fragments c. 95mm between broken ends with shortening of bone by min. 4cm, disto-lateral displacement c. 38mm. Smooth, thick bony callus with 3 linear points fusion to fibula (also fractured), max. 31mm area min. 12mm. Patch probable well healed lamellar new bone at distal end of proximal fragment. Transverse fracture. PHOTO

Fibula; enthesophytes at prox. interosseous attachment, mild-medium. Well healed, misaligned fracture in distal shaft (transverse) 12cm from distal head; 31mm overlap between fragments (from x-ray); distal end displaced anteriorly c. 15mm. Point of fusion to tibia (incomplete due to damage); 2 evident; well healed lamellar new bone on assoc. lateral shaft. PHOTO

Slight enthesophytes calcaneal posterior surfaces. Left 5<sup>th</sup> metatarsal head; 2 erosions in plantar surface c. 2mm diameter, smooth margins slight adj. micro-pitting (not osteoarthritis pitting). ?infection/rheumatoid – no new bone). PHOTO. Small erosions in ‘surface; of left sesamoid. Right 1<sup>st</sup> prox. mod. enthesophytes at extensor hallucis brevis attachment

AGE: adult c. 35-45 yr.

SEX: male

## context 602

Supine, ?extended, no grave cut recorded; trench edge.

SKULL: Mandible – small even arch, no flaring. Med-small teeth. Mild calculus sep. anterior lingual . Some alveolar resorption.

Maxilla – right M3 lost ante mortem, socket space appears infilled at alveolar level, X-ray suggests open cavity at socket apices. 5mm diamtere. PHOTO. Left canine prob. carious (v. small shallow socket only) but lost. M1 crown destroyed, separate roots only Gross destructive lesion, smooth margined, exiting palatally , smooth semi-circle 15mm m-d, from alveolus to palate level; from M1 socket tracking into M2 mesial socket. Small 4mm diameter smooth margined lesion existing buccally from M1 bucco-distal socket 3.5mm superior to alveolus. Mild calculus as mandibular. PHOTO.

Very small malars. Small-medium rounded mastoid processes (3); sharp supra-orbital margins ( flat brow (1); no external occipital protuberance (1). Sutures ½- 1/3 fused.

AXIAL SKELETON: Small vertebrae.

Cervical; C2- mild enthesophytes on tip odontoid process. C3 smooth-margined spherical lesion in left lateral from inf. of transverse foramen 9mm diameter,



extending superiorly & medially into body with small exit lesion in superior surface  
c. 2.5mm; soft tissue tumour. PHOTO  
Ribs; very small. Iscan 2-3.  
AGE: adult c. 35-45 yr.  
SEX: female

**context 607**

Supine, grave 606; cut by later graves & at trench edge. *NB> Could be = 407*  
AXIAL SKELETON: large vertebrae.  
Ribs; Iscan 2-3.  
UPPER LIMB: Large robust bones.  
AGE: adult c. 25-45 yr.  
SEX: male

**context 617**

Supine, extended, grave 616; at trench edge.  
LOWER LIMB: Large, relatively robust bones.  
Patella; very slight enthesophytes anterior surfaces.  
Tibia; left mild eth soleal line.  
Large tarsals; slight-mild enthesophytes calcaneal posterior surface. Small surface  
defect centre left 1<sup>st</sup> prox. phalanx base.  
AGE: adult c. 20-35 yr.  
SEX: male

**context 620**

Supine, extended, grave 619.  
SKULL: Mandible – rounded protuberance, narrow even arch, v. slight flaring.  
Medium teeth. Slight-moderate calculus esp. anterior lingual. Alveolus  
disrupted where *ante mortem* tooth loss, uneven surface with some woven bone in fill  
Maxilla – moderate-heavy calculus esp. distal (crown & roots); some loss alveolar  
height. 5mm diameter lesion apex right II socket, some fenestration but some woven  
new bone active within.  
Very small, gracile malar. Small-medium pointed mastoid processes (2-3); narrow  
supra-orbital margins (1); flattish brow (1-2); no external occipital protuberance (1).  
Even rounded skull. Sutures well fused. Parts sagittal obliterated. Slight occipital  
bunning. Ossicles at lambda & frequent both sides lambdoid suture. PHOTO  
Fragments calcified thyroid cartilage.  
AXIAL SKELETON: T6; Schmorl's node small both dorsal surfaces; slight  
degenerative disc disease anterior inferior.  
With left ribs; c. 14mm diameter semi-spherical almost complete thin shell osseous  
tissue – hydatid cyst. PHOTO  
Innominate; obtuse greater sciatic notch & sub-pubic (102); latter narrow with  
slight arch. Shallow, indistinct sulci. Strongly pronounced pubic tubercles 12mm m-  
d, c. 4mm a-p PHOTO. Auricular surfaces very slight striae, dense, some macro-  
porosity apical areas, no retro changes. Phase 5-6. Symphyseal face no trans. pattern,  
dorsal border & ventral uneven; coarse uneven surface no pitting.  
UPPER LIMB: Small-medium, relatively gracile bones.

Small carpals; small-medium meta-phal. Both scaphoids & left lunate each have several solitary bone cysts.

LOWER LIMB: Large, moderately robust bones.

Patella; mild-moderate enthesophytes anterior surfaces.

Calcaneus; mild-moderate enthesophytes posterior surfaces & small surface defects in both superior dorsal surfaces. Surface defects in centre both 1<sup>st</sup> prox. phalanges bases. Both tali have fused os trigonum – right with hook-like extension.

AGE: adult c. 40-45 yr.

SEX: female

### **context 626**

Supine, extended, grave 625. Cut by something at distal end

SKULL: Mandible - *ante mortem* loss all teeth; reduction body depth, obtuse angle.

Maxilla – extensive loss alveolar height almost to palate level distal. Left C impacted, fully formed, laid at c. 70 deg. angle to normal with root apex in correct position & tooth crown at I1 location. Slight-mild calculus mostly on roots. PHOTO  
Medium supra-orbital margins (3); slight brow ridge (2-3); medium-large, rounded mastoid processes (3-4); no external occipital protuberance (1). Sutures fused but clear.

Fragment right antrum wall & floor (incomplete) shows patchy coarse lamellar new bone – odd patch in surviving frag. left floor also. Small ivory osteoma c. 6mm diameter in superior-dorsal right parietal. Few small ossicle both side lambdoid. Endosteal frontal appears to have a thin covering of pale, smooth new bone with micro-pitting in this new surface; PHOTO

AXIAL SKELETON: Medium-sized vertebrae.

Innominate; greater sciatic notch & sub-pubic tending obtuse (2-3), latter narrow with slight arch. Long, fairly deep sulci with uneven base in left. Auricular surfaces: no transverse organisation; coarse grained with some densification; apical depression, some anterior osteophytes borders; slight-moderate retro. changes. Phases 5-6. Mild enthesophytes iliac crests.

UPPER LIMB: Medium long bones; small carpals.

Ulna; moderate enthesophytes right olecranon.

Juxta-articular erosion in left 3<sup>rd</sup> metacarpal base.

LOWER LIMB: Medium-sized not particularly robust ones.

Femur; enthesophytes greater trochanter – moderate left, mild right.

Mild enthesophytes calcaneal dorsal surfaces. Right 3-4<sup>th</sup> metatarsal articular surfaces (joining); both have slight cover fine-grained new bone; slight marginal (dorsal surface) osteophytes juxta-articular enthesophytes dorsal surface of 3<sup>rd</sup>. PHOTO.

AGE: adult c. 40-50 yr.

SEX: ?female

### **context 642**

Supine, extended, grave 641.

SKULL: Mandible – broad even arch, slightly flared. Total *ante mortem* tooth loss with gross reduction in alveolar height.

Maxilla – extensive loss alveolar height; most of remaining roots exposed in very shallow sockets, P1 socket almost non-existent! Right canine wear down palatal tooth root as well as crown PHOTO. Mild calc, except P2 crown, very heavy labially

PHOTO – almost over occlusal surface. 5mm diameter smooth margined lesion P2 socket existing buccally 1.5mm above reduced alveolus (some superior fenestration) Narrow supra-orbital margins & flat brow (1); medium pointed mastoid processes (3); slight external occipital protuberance (103); Fairly even rounded vault, very slight bunning. Sutures open.

AXIAL SKELETON: Rib; Iscan 2-3.

Innominate: obtuse greater sciatic notch (1) & sub-pubic (2), latter narrow & slight arched. Very faint shallow long sulci. Auricular surfaces; no transverse organisation; coarse granulation with some apical densification; heavy micro- & macro-pitting left (less right) with smooth surface new bone; generally irregular little retro changes (Phase 5-8!). Symphyseal faces irregular remodelled no transverse organisation, break-down of margins with borders & macro-pitting.

UPPER LIMB: Medium sized long bones. Very small carpals; rest medium.

Humerus; slight enthesophytes epicondyle.

LOWER LIMB: Medium length relatively gracile long bones. Small-medium foot bones.

Patella; mild enthesophytes anterior surfaces.

Tibia; well-healed lamellar new bone left disto-lateral shaft. Right; lamellar new bone slight central medio-lateral & esp. distal medial shaft - slight 'bulge' in latter shaft contours; v. well healed. Both soleal lines moderate enthesophytes.

Fibula; lamellar new bone along much left anterior-lateral shaft length esp. central 1/3<sup>rd</sup>. Slight patches well-healed lamellar in distal-lateral right shaft.

Mild-mod. enthesophytes calcaneal posterior surfaces. Slight enthesophytes right navicular posterior-distal shaft; superior margins right intermediate & medial cuneiform.

AGE: c. 45-55 yr.

SEX: female

COMMENT: skull slightly warped

#### **context 647**

Supine, extended, grave 646; cut by grave 641 (?& others)

UPPER LIMB: Small-medium long bones, fairly gracile. Small carpal.

AXIAL SKELETON: Thoracic; T4 inf surface-T12 superior surface – smooth platy pale new bone across all adjacent surfaces, polishing appearance in some case, others as if fused to adjacent body surface; extensive macro-pitting also across surfaces with some marginal micro-pitting. PHOTO

Rib; Iscan 2-3.

AGE: adult c. 35-55 yr.

SEX: ?female

#### **context 650**

Supine, extended, grave 649; at trench edge.

AGE: infant c. 3-4 yr. (c. 2.5 yr. from long bone – adjusted)

#### **context 661**

Supine, extended, grave 660; cut either end

SKULL: Mandible - pointed protuberance, even arch. Medium-sized teeth; crowding

anterior teeth, I2s set half lingual to I1.  
AXIAL SKELETON: Cervical; upper laminae fused to body; upper portion axis not fused to body.  
Thoracic; laminae & bodies unfused.  
Lumbar; laminae fused but lines clear.  
Sacrum; bodies & lateral portions all unfused.  
Innominate; greater sciatic notch >90 deg.  
LOWER LIMB: 1<sup>st</sup> metatarsal distal centre partly ossified.  
AGE: juvenile c. 5.5-7 yr. (infant c. 3.5-4 yr. from long bones)  
COMMENT: See 664 for hand bones – mixed in p.exc. & cannot now be separated – siding with ind. burials often mixed anyway even where separated (similar age, left & right mixed etc...)

#### **context 664**

Supine, extended, grave 660; in trench edge  
SKULL: Mandible – small sq. protuberance; even arch; overcrowding anterior teeth with rotation I2. Calculus mild-mod. heaviest anterior labial. Right canine unerupted but defects at crown of teeth with incomplete enamel over dentin  
PHOTO.  
Maxilla – P1 faint-mild linear defects in neck area of tooth with marked linear defect in upper 1/3<sup>rd</sup> root.  
AXIAL SKELETON: Cervical; odontoid process min. half ossified; upper body fused to lower. All laminae fused to bodies & lines almost obliterated.  
Thoracic; laminae fused to bodies but lines clear.  
Lumbar laminae fused, line evident.  
Sacrum; bodies fused to laminae but segments still sep.  
Innominate; greater sciatic notch <90 deg.  
UPPER LIMB: 1<sup>st</sup> metacarpal 3<sup>rd</sup> distal centre almost fully ossified.  
LOWER LIMB: Surface defect centre tibia surface left talus. 1<sup>st</sup> metatarsal 3<sup>rd</sup> distal centre almost fully ossified; same 1<sup>st</sup> prox. phal. distal centre. 4.5mm area micro-pitting in 1<sup>st</sup> distal phalanx lateral side epiphysis.  
AGE: juvenile 8-10 yr. teeth (6-6.5 long bone lengths)  
SEX: ??male  
COMMENT: NB hand bone = mix 664 & 661; mixed in p.exc. processing, difficult to sep. because of similar age & gen. mixing left & right.

#### **context 667**

Supine, extended, grave 666; in trench edge  
LOWER LIMB: Tibia; 8 x 4mm surface defect right distal tibia towards dorsal margin. Slight enthesophytes soleal lines & dorsal margins right distal interosseous border.  
Fibula; slight enthesophytes right prox. & distal interosseous margins.  
Calcaneum; dorsal talus surface extended anteriorly (matches talus) with angled facets; main part surface disrupted with deep lateral crease giving uneven surface. Moderate enthesophytes posterior surface & moderate-heavy at extensor digitorum brevis attachment. talus has matching angled anterior-lateral extension to dorsal calcaneal surface. PHOTO  
AGE: adult >25 yr.  
SEX: ??male

### **context 670**

Supine, extended, grave 669; cut distal end in trench edge.

AXIAL SKELETON: Lumbar; L4 slight collapse upper body surface; marginal osteophytes smooth extending up from anterior-lateral body & irregular arching up over L3.

Innominate; acute greater sciatic notch (5) & sub-pubic angles (1); no sulci or pubic tubercles. Auricular surfaces; some very slight marginal transverse organisation but gen. irregular micro-pitted surfaces, granular with some densification; marginal osteophytes; irregular apices; slight-moderate retro-articular changes. Phase 5-7. Symphyseal faces no pattern; relatively smooth with macro-pitting in ventral surface & slight dorsal border. Left lesions conc. in superior acetabulum. Both have great increased vascularity in notch areas. Right lesions also conc. in superior; acetabular rim destroyed & pitting extended across shallow concave area c. 24mm sq describing encroaching on acetabulum & adjacent iliac area. PHOTO

UPPER LIMB: Robust long bone.

Carpals small. Small scb in left & right scaphoids & left capitate. Small-medium metacarpals. 1 proximal & 3 middle phalanges have small juxta-articular erosions in sides of heads. Unsided (as are all phalanges) 2<sup>nd</sup>/4<sup>th</sup> prox. IP joint – total destruction IP surfaces, though just retain slight concave/convex form, gross macro-pitting with moderate irregular marginal osteophytes. - ?erosive osteoarthritis? PHOTO

LOWER LIMB: Femur; Large, robust bones. Very short necks with low angles – almost horizontal; head contours elongated slightly m-l. Gross destructive change left head extensive macro-pitting extending deep into trabecular bone most anterior half head; slight eburnation margins; smooth ‘collar of new bone anterior & superior margins. PHOTO. Small area fine lamellar new bone anterior neck juxta-articular. Mild enthesophytes intertrochanteric lines.

Patella; slight enthesophytes anterior surfaces.

AGE: adult c. 45-55 yr.

SEX: male

COMMENT: Missing vertebrae numbered 592 in p.exc. processing, now relocated.

### **context 675**

Supine, extended, grave 674; at trench edge.

LOWER LIMB: Small, gracile bones.

Tibia; epiphyseal lines clear esp. prox. – not fully fused. Fused metatarsal epiphyseal lines clearly evident

AGE: subadult c. 14-16 yr.

SEX: ?female

## II. Disarticulated remains

Minimum no. various skeletal elements recorded on *pro forma* sheets by context. Approx. age &, where appropriate, sexing, given on sheet. Pathology not recorded in

general – notes on fracture/periosteal new bone/cribra orbitalia/spinal osteoarthritis & Schmorl's node noted below, plus any unusual pathological conditions.

**NB. Ages on long bones unadjusted**

60512 (WB)

**context 103**

medieval layer

AXIAL SKELETON: male pelvis 35-50 yr. lateral surfaces superior to acetabulum.

7mm diameter smooth margined spherical exit lesions from large sub-surface cysts in anterior-inferior iliac spines. PHOTO.

MNI: 1 adult male.

NB Bone could all be one individual.

**context 115**

Foundation trench in NW corner.

LOWER LIMB: Tibia; right mid shaft slight, fine-grained periosteal new bone lateral mid shaft.

Fibula; distal right coarse striated & fine grained, rel. thick periosteal new bone on lateral surface min. 70mm length

MNI 3 – 2 adults & 1 infant.

60515 (evaluation & excavation)

All – inc. 107! - derived from cemetery soil Gp.# 184; 50 context nos. all really = this one.

**context 107**

Overburden above cemetery soil.

AXIAL SKELETON: Thoracic; min. 6 with mod. osteoarthritis; 5 fused together via smooth bony ankylosis of bodies down right side (PHOTO) ?DISH/ASp.

LOWER LIMB: One large (male) right femur shaft gross exostoses mid shaft 42 x 13mm, 29mm upstanding

NB. Why were fragments (various, incomplete) of one neo. kept in separate bag?)

**context 184**

Disarticulated, redep. bone within cemetery soil.

SKULL: Right orbits 6 (3 female & 3 imm.) with cribra orbitalia; left supra-orbital 2 imm & 3 adult females with cribra. 2 immature frontals metopic & 1 adult male.

Maxilla – 2 total *ante mortem* tooth loss, 1 most.

AXIAL SKELETON: Cervical; 3 (of compete) with osteoarthritis.

Thoracic; of complete vertebra, 1 with osteoarthritis & 19 with Schmorl's nodes. 3 mid-lower (7-9<sup>th</sup>?) fused via smooth bony ankylosis over right sides bodies, disc spaces maintained. PHOTO. 4of bodies with Schmorl's node & one with smooth

flowing new bone over right side (upper vert.); 3 of articular processes with osteoarthritis.

Lumbar; 2 with Schmorl's node. 2 semi-sacralised (lateral processes enlarged.

Bodies:- 1 with Schmorl's node. 2 articular processes with osteoarthritis.

Sternum; 1 with central aperture in superior portion.

Rib; 2 11/12<sup>th</sup> with well-healed fractures c. 50mm from heads – slight callusing.

U/s shaft fragment with fine grained periosteal new bone sternal end both sides min. 30mm length

UPPER LIMB: Scapula; 1 left & 1 right os acromiale.

Humerus; right subadult shaft has smooth exostoses lateral mid-shaft 31 x 10, upstanding 7mm. PHOTO (lower deltoid)

Radius; adult male left shaft with well-healed transverse fracture distal 1/3<sup>rd</sup> shaft, slight smooth callus only. PHOTO

Ulna; extensive exostoses olecranon one male left (right pair same)

2<sup>nd</sup> metacarpal – 1 left & 1 right minus styloid process, also missing one left immature metacarpal.

LOWER LIMB: Femur; one left distal lateral condyle heavily eburnated (adult female)

Tibia; one right tibia & fibula (adult male) well healed fracture to fibula with subsequent ankylosis between bones – smooth bony bridging c. 60mm callus, distal 1/3<sup>rd</sup> shaft. Well healed lamellar new bone on anterior tibia. Marked enthesophytes around prox. articular surface, soleal line & medial semi-membraneous attachment. PHOTO

Fibula; fragments 1 shaft with extensive coarse periosteal new bone all sides esp. lateral mid shaft.

Middle phalanx with gross destruction centre surface, smooth margined lesions, 2 macros dorsal & several micro. planter, no new bone - ?rheumatoid. PHOTO.