

## APPENDICES

### APPENDIX A: Mashatu Den 1 Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
astragalus	one end of non-long bone	none	none	none	none
astragalus	one end of non-long bone	none	none	none	none
atlas	none	unknown	unknown	one end of non-long bone	unknown
axis	unknown	unknown	unknown	one end of non-long bone	unknown
cervical vert	none	unknown	unknown	one end of non-long bone	unknown
cervical vert	none	unknown	unknown	one end of non-long bone	unknown
cervical vert	one end of non-long bone	none	none	one end of non-long bone	none
femur	both prox and dis ends	none	none	over most of bone	none
femur	distal end	none	none	distal shaft	none
great cornu	none	none	none	one end of non-long bone	none
humerus	proximal end	none	none	proximal end	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	none	none	none	over most of bone	none
mandible	one end of non-long bone	none	none	none	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandibular hinge	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
metacarpal	none	none	none	proximal shaft	none
metacarpal	none	none	none	proximal shaft	none
metapodial	none	none	over most of bone	none	none
pelvis (acetabulum)	both prox and dis ends	unknown	unknown	both prox and dist ends	unknown
pelvis (acetabulum)	one end of non-long bone	unknown	unknown	both prox and dist ends	unknown
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
phalanx 2	proximal shaft	none	none	none	none
phalanx 2	none	none	over most of bone	none	none
phalanx 3	over most of bone	none	none	none	none
radius	none	none	none	distal shaft	none
radius	none	none	none	both prox and dist ends	over most of bone
radius/ulna fused	none	none	none	none	over most of bone
rib	none	none	none	one end of non-long bone	none

rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	over most of bone	over most of bone
sacrum	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
skull	one end of non-long bone	none	none	none	none
skull	over most of bone	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	none	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	unknown	unknown	one end of non-long bone	unknown
thoracic vert	none	unknown	unknown	one end of non-long bone	unknown
thoracic vert	none	unknown	unknown	one end of non-long bone	unknown
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	one end of non-long bone	none	none	over most of bone	none
thoracic vert	over most of bone	none	none	over most of bone	none
thoracic vert	none	none	none	one end of non-long bone	none
tibia	none	none	none	distal end	none
tibia	none	none	none	proximal shaft	none
tibia	proximal end	none	none	proximal end	none
tibia	none	none	none	distal shaft	none
unidentified fragment	none	none	none	none	one end of non-long bone
unidentified fragment	none	none	over most of bone	none	none
unidentified fragment	none	none	over most of bone	none	none
unidentified fragment	none	none	over most of bone	none	none
unidentified fragment	none	none	over most of bone	none	none
unidentified fragment	over most of bone	none	none	over most of bone	over most of bone

## APPENDIX B: Mashatu Den 2 Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
atlas	one end of non-long bone	none	none	none	none
axis	none	none	none	none	none
cervical vert	none	none	none	none	none
cervical vert	none	none	none	one end of non-long bone	none
femur	distal end	none	none	proximal shaft	none
femur	none	none	none	distal shaft	none
femur	proximal shaft	none	none	distal shaft	none
femur	proximal end	none	none	proximal shaft	none
femur	proximal end	none	none	none	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	proximal shaft
humerus	distal end	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	distal shaft	none
lumbar vert	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
maxilla	none	none	none	one end of non-long bone	none
metacarpal	proximal shaft	none	none	distal shaft	none
metapodial	none	none	none	both prox and dist ends	none
metapodial	none	none	none	none	none
metatarsal	none	none	none	none	none
phalanx 1	none	none	none	none	none
phalanx 1	none	none	none	none	none
phalanx 2	none	none	none	none	none
phalanx 3	none	none	none	none	none
radius	none	none	none	none	none
skull	none	none	none	none	none
skull fragment	one end of non-long bone	none	none	one end of non-long bone	none
skull fragment	none	none	none	none	none
skull fragment	unknown	unknown	unknown	unknown	unknown
skull fragment	none	none	none	none	none
thoracic vert	none	none	none	one end of non-long bone	none
tibia	none	none	none	over most of bone	none

ulna	none	none	none	none	none
unidentified fragment	none	none	none	none	none
unidentified fragment	one end of non-long bone	none	none	none	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	none	one end of non-long bone
unidentified fragment	none	none	none	one end of non-long bone	one end of non-long bone
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	none	none
unknown tooth	none	none	none	none	none

### APPENDIX C: Mashatu Den 3 Bone Damage

Element	gnawed/type	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
caudal vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	none	none	none	one end of non-long bone	none
femur	carnivore gnawed	proximal shaft	none	none	none	none
femur	carnivore gnawed	both prox and dis ends	none	none	distal shaft	none
femur	carnivore gnawed	both prox and dis ends	none	none	both prox and dist ends	none
humerus	carnivore gnawed	distal end	none	none	proximal end	none
humerus	carnivore gnawed	distal end	none	none	distal shaft	none
humerus	carnivore gnawed	proximal end	none	none	proximal end	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	over most of bone	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
illium	carnivore gnawed	one end of non-long bone	none	none	both prox and dist ends	none
illium	carnivore gnawed	none	none	none	both prox and dist ends	none
mandible	rodent and carnivore gnawed	none	none	none	one end of non-long bone	none
mandible	carnivore gnawed	mandibular heal	none	none	none	none
mandibular hinge	carnivore gnawed	none	none	none	mandibular heal	none
metacarpal	carnivore gnawed	distal end	none	none	distal shaft	none
metacarpal	carnivore gnawed	both prox and dis ends	none	none	none	distal shaft
metacarpal	carnivore gnawed	proximal end	proximal shaft	none	none	none
metapodial	carnivore gnawed	none	none	none	over most of bone	none
phalanx 1	carnivore gnawed	none	none	none	distal shaft	none
phalanx 1	carnivore gnawed	proximal end	none	none	none	none
phalanx 2	carnivore gnawed	proximal end	none	none	none	none
scapula	carnivore gnawed	proximal end	none	none	distal end	none
scapula	carnivore gnawed	none	none	none	over most of bone	none
skull	carnivore gnawed	none	none	none	one end of non-long bone	none
skull fragment	carnivore gnawed	one end of non-long bone	none	none	none	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
tibia	carnivore gnawed	proximal end	none	none	none	none
tibia	carnivore gnawed	none	none	none	over most of bone	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
unidentified fragment	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
unidentified fragment	carnivore gnawed	none	none	none	one end of non-long bone	none
unidentified fragment	carnivore gnawed	none	none	none	both prox and dist ends	none
unidentified fragment	carnivore gnawed	none	over most of bone	none	none	none
unidentified fragment	carnivore gnawed	none	none	none	over most of bone	none
unidentified fragment	carnivore gnawed	none	none	none	one end of non-long bone	none
vertebra	carnivore gnawed	none	none	none	over most of bone	none

## APPENDIX D: Mashatu Den 4 Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
astragalus	one end of non-long bone	none	none	none	none
astragalus	over most of bone	none	none	none	none
calcaneus	distal end	none	none	distal end	none
calcaneus	proximal end	none	none	distal end	none
calcaneus	proximal end	none	none	distal end	none
calcaneus	proximal shaft	none	none	none	none
calcaneus	over most of bone	none	none	over most of bone	none
cervical vert	none	none	none	one end of non-long bone	none
femur	none	none	none	proximal shaft	none
femur	none	none	none	distal end	none
femur	proximal shaft	none	none	both prox and dist ends	distal shaft
femur	none	none	none	distal shaft	none
femur	distal end	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	proximal end	none	none	none	none
femur	none	none	none	distal shaft	none
femur	distal end	none	none	distal shaft	none
femur	both prox and dis ends	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	both prox and dis ends	none	none	both prox and dist ends	none
femur	both prox and dis ends	none	none	proximal end	none
femur	proximal shaft	none	none	proximal shaft	none
femur	distal end	none	none	distal end	none
femur	proximal end	none	none	none	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	proximal end	none
femur	distal end	none	none	none	none
femur	both prox and dis ends	none	none	distal end	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal end	none
humerus	distal end	none	none	none	none
humerus	distal end	none	none	distal shaft	none
humerus	none	none	none	proximal end	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	proximal end	none	none	proximal end	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	over most of bone	none

humerus	both prox and dis ends	none	none	proximal shaft	none
humerus	distal shaft	none	none	none	none
humerus	distal end	none	none	proximal shaft	none
humerus	none	none	none	proximal end	none
humerus	none	none	none	proximal end	none
humerus	both prox and dis ends	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	over most of bone	none
humerus	proximal end	none	none	proximal shaft	none
illium	one end of non-long bone	none	none	one end of non-long bone	none
illium	one end of non-long bone	none	none	one end of non-long bone	none
illium	none	none	none	over most of bone	none
illium	one end of non-long bone	none	none	over most of bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
mandible	one end of non-long bone	none	none	mandibular heal	none
mandible	mandibular heal	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
metacarpal	distal shaft	none	none	none	none
metacarpal	proximal end	none	none	none	none
metacarpal	distal shaft	none	none	none	none
metacarpal	distal end	none	none	distal end	none
metacarpal	distal end	none	none	proximal shaft	none

metacarpal	none	none	none	proximal end	none
metacarpal	none	none	none	proximal shaft	none
metacarpal	proximal shaft	none	none	none	none
metapodial	distal end	none	none	distal end	none
metapodial	none	none	none	distal end	none
metatarsal	distal end	none	none	none	none
metatarsal	none	none	none	proximal shaft	none
metatarsal	none	none	none	none	over most of bone
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
phalanx 1	proximal end	none	none	none	none
phalanx 1	proximal end	none	none	none	none
phalanx 1	distal end	none	none	proximal shaft	none
phalanx 1	proximal shaft	none	none	none	none
phalanx 1	proximal end	none	none	none	none
phalanx 2	none	none	none	over most of bone	none
phalanx 2	distal end	none	none	none	none
phalanx 2	over most of bone	none	none	none	none
phalanx 2	none	none	none	none	proximal shaft
radius	none	none	none	distal shaft	none
radius	distal end	none	none	none	none
radius	both prox and dis ends	none	none	none	none
radius	none	none	none	proximal shaft	none
radius	distal shaft	none	none	none	none
radius	none	none	none	distal shaft	none
radius	proximal end	none	none	none	none
radius	none	none	none	distal shaft	none
radius	distal end	none	none	none	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal end	none
radius	distal shaft	none	none	none	none
radius/ulna fused	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
sacrum	none	none	none	one end of non-long bone	none



scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	over most of bone	none
scapula	proximal end	none	none	none	none
scapula	none	none	none	distal end	none
scapula	proximal shaft	none	none	distal end	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	one end of non-long bone	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	distal shaft	none
skull	one end of non-long bone	none	none	one end of non-long bone	none
skull	one end of non-long bone	none	none	one end of non-long bone	none
skull	one end of non-long bone	none	none	none	none
skull	none	none	none	one end of non-long bone	none
skull	none	none	none	one end of non-long bone	none
skull	one end of non-long bone	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	one end of non-long bone	none
tarsal	proximal end	none	none	none	none
tibia	proximal end	none	none	proximal shaft	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	one end of non-long bone	none	none	none	none
tibia	proximal end	none	none	none	none
tibia	proximal end	none	none	both prox and dist ends	none
tibia	none	none	none	proximal end	none
tibia	proximal shaft	none	none	proximal shaft	none
tibia	proximal end	none	none	over most of bone	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	proximal end	none	none	none	none
ulna	proximal end	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	distal end	none
ulna	proximal end	none	none	proximal end	none
ulna	proximal end	none	none	proximal end	none
ulna	distal shaft	none	none	distal end	none
ulna	none	none	none	over most of bone	none



vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none

## APPENDIX E: Rietvlei Den R01 Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
radius/ulna fused	proximal end	none	none	proximal end	over most of bone
radius/ulna fused	proximal end	none	none	proximal end	none
metacarpal	distal end	none	none	proximal shaft	none
metapodial	proximal shaft	none	none	none	none
horn/antler	none	none	none	proximal end	proximal end
femur	proximal end	proximal shaft	none	proximal shaft	over most of bone
radius	none	none	none	none	proximal shaft
atlas	none	none	none	over most of bone	none
atlas	none	none	none	over most of bone	none
cervical vert	one end of non-long bone	none	none	over most of bone	none
metacarpal	none	none	none	over most of bone	none
metapodial	none	none	none	over most of bone	over most of bone
unidentified fragment	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
scapula	proximal end	none	none	over most of bone	none
ulna	none	none	none	both prox and dist ends	none
skull	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	one end of non-long bone	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	over most of bone
ulna	proximal shaft	none	none	both prox and dist ends	over most of bone
tibia	none	none	none	both prox and dist ends	none

## APPENDIX F: Rietvlei Den R02 Bone Damage

Element	damage	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
mandible	carnivore gnawed	none	none	none	one end of non-long bone	none
radius	carnivore gnawed	none	none	none	proximal shaft	over most of bone
horn/antler	carnivore and beattle damage	none	none	none	none	over most of bone
humerus	rodent and carnivore gnawed	none	none	none	proximal end	none
unidentified fragment	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
calcaneus	carnivore gnawed	proximal end	none	none	none	proximal end
scapula	carnivore gnawed	none	none	none	over most of bone	none
mandible	carnivore gnawed	none	none	none	both prox and dist ends	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	over most of bone	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	over most of bone	none

## APPENDIX G: Rietvlei Den R03 Bone Damage

Element	damage	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
humerus	carnivore gnawed	distal end	none	none	both prox and dist ends	none
metacarpal	rodent and carnivore gnawed	distal shaft	none	none	proximal end	none
pelvis (acetabulum)	carnivore gnawed	none	none	none	both prox and dist ends	none
pelvis (acetabulum)	carnivore gnawed	one end of non-long bone	none	none	over most of bone	none
pelvis (acetabulum)	carnivore gnawed	one end of non-long bone	none	none	both prox and dist ends	none
radius	carnivore gnawed	distal end	none	none	none	none
tibia	carnivore gnawed	none	none	none	distal shaft	none

**APPENDIX H: Brown Hyaena Project D-P 1 Bone Damage**

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	over most of bone	none
femur	none	none	none	proximal shaft	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	proximal end	none	none	proximal end	none
femur	distal end	none	none	distal shaft	none
humerus	distal shaft	none	none	proximal shaft	none
humerus	none	none	none	distal end	none
humerus	none	none	none	distal shaft	none
illium	none	none	none	one end of non-long bone	none
illium	over most of bone	none	none	both prox and dist ends	none
illium	over most of bone	none	none	one end of non-long bone	none
mandible	mandibular heal	none	none	both prox and dist ends	none
mandible	both prox and dis ends	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
maxilla	one end of non-long bone	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	mandibular heal	none
maxilla	none	none	none	both prox and dist ends	none
maxilla	none	none	none	over most of bone	none
metapodial	none	none	none	none	over most of bone
pelvis (acetabulum)	over most of bone	none	none	over most of bone	none
pelvis (acetabulum)	over most of bone	none	none	over most of bone	none
radius	distal shaft	none	none	distal shaft	none
radius/ulna fused	none	none	none	both prox and dist ends	over most of bone
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none

rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	proximal end	over most of bone
scapula	none	none	none	over most of bone	none
skull	one end of non-long bone	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	none	none
thoracic vert	one end of non-long bone	none	none	none	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
tibia	proximal shaft	none	none	proximal shaft	none
tibia	distal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibio-tarsus	proximal shaft	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	over most of bone
ulna	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	none	over most of bone
unidentified fragment	proximal shaft	none	none	none	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	none	over most of bone
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	both prox and dis ends	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	distal shaft	none
unidentified fragment	none	none	none	both prox and dist ends	none



**APPENDIX I: Brown Hyaena Project D-P 2 Bone Damage**

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
femur	proximal shaft	none	none	proximal shaft	none
femur	none	none	none	both prox and dist ends	proximal shaft
femur	none	none	none	both prox and dist ends	distal shaft
femur	none	none	none	none	none
femur	none	none	none	both prox and dist ends	over most of bone
femur	none	none	none	proximal end	none
horn/antler	none	none	none	one end of non-long bone	none
humerus	proximal shaft	none	none	both prox and dist ends	over most of bone
humerus	none	none	none	one end of non-long bone	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
lumbar vert	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	mandibular heal	one end of non-long bone
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandibular hinge	one end of non-long bone	none	none	one end of non-long bone	none
mandibular hinge	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	none	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
metapodial	none	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	over most of bone	none
metapodial	none	none	none	distal shaft	none
pelvis (acetabulum)	over most of bone	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	over most of bone	none	none	over most of bone	none



tibia	none	none	none	both prox and dist ends	distal shaft
tibia	distal shaft	none	none	both prox and dist ends	distal shaft
tibia	none	none	none	distal shaft	none
ulna	proximal end	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	none
ulna	proximal shaft	none	none	both prox and dist ends	none
ulna	over most of bone	none	none	over most of bone	none
ulna	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	proximal shaft	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	over most of bone	none	none
unidentified fragment	none	none	none	one end of non-long bone	none
vertebra	over most of bone	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none

**APPENDIX J: Brown Hyaena Project D-P 4 Bone Damage**

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
atlas	none	none	none	over most of bone	none
atlas	none	none	none	over most of bone	none
atlas	none	none	none	over most of bone	none
axis	none	none	none	one end of non-long bone	none
axis	one end of non-long bone	none	none	none	none
axis	one end of non-long bone	none	none	none	none
axis	none	none	none	over most of bone	none
axis	none	none	none	one end of non-long bone	none
axis	none	none	one end of non-long bone	none	none
axis	none	none	one end of non-long bone	none	none
axis	none	none	one end of non-long bone	none	none
coracoid	none	none	none	one end of non-long bone	none
femur	none	none	none	proximal shaft	none
femur	none	none	none	over most of bone	none
femur	none	none	none	proximal shaft	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	distal shaft	none	none	none	none
femur	proximal end	none	none	none	none
femur	distal shaft	none	none	proximal end	none
femur	none	none	none	proximal shaft	none
femur	distal end	none	none	proximal shaft	none
femur	distal end	none	none	both prox and dist ends	none
femur	none	none	none	over most of bone	none
femur	distal shaft	none	none	distal shaft	none
femur	proximal end	none	none	distal shaft	none
femur	proximal end	none	none	both prox and dist ends	none
femur	distal end	none	none	none	none
femur	none	none	none	both prox and dist ends	both prox and dist ends
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	proximal end	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
humerus	distal end	none	none	proximal end	none

humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	none	one end of non-long bone
humerus	none	none	none	both prox and dist ends	over most of bone
humerus	none	none	none	over most of bone	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	distal shaft	none
humerus	proximal end	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal shaft	none	none	proximal end	none
humerus	distal end	none	none	both prox and dist ends	none
humerus	distal end	distal end	none	proximal shaft	distal end
humerus	distal end	none	none	distal shaft	none
humerus	distal shaft	none	none	distal shaft	distal shaft
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal end	none
humerus	none	none	none	proximal end	none
humerus	proximal end	none	none	distal shaft	distal shaft
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	over most of bone	over most of bone
humerus	none	none	none	over most of bone	none
humerus	over most of bone	none	none	over most of bone	none
humerus	none	none	none	both prox and dist ends	over most of bone
illium	none	none	none	one end of non-long bone	none
ishium	none	none	none	both prox and dist ends	none
ishium	over most of bone	none	none	none	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	mandibular heal	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none

mandible	none	none	none	over most of bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	over most of bone	none	none	over most of bone	none
mandible	one end of non-long bone	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	mandibular heal	none
mandible	mandibular heal	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	over most of bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	mandibular heal	none	none	none	none
mandibular hinge	none	none	none	over most of bone	none
mandibular hinge	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none



pelvis (acetabulum)	none	none	none	one end of non-long bone	none
phalanx 1	proximal end	none	none	none	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 1	none	none	none	proximal shaft	none
phalanx 2	none	none	none	one end of non-long bone	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	both prox and dist ends	none
radius	proximal end	none	none	both prox and dist ends	none
radius	none	none	none	proximal shaft	none
radius	proximal end	none	none	distal end	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	distal end	none
radius	distal end	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	distal end	none	none	none	none
radius	both prox and dis ends	none	none	none	none
radius	distal end	none	none	proximal shaft	none
radius	none	none	none	both prox and dist ends	over most of bone
radius	over most of bone	none	none	over most of bone	none
radius	distal end	none	none	none	none
radius	none	none	none	distal shaft	none
radius	proximal end	none	none	distal shaft	none
radius	proximal end	none	none	distal shaft	proximal shaft
radius	none	none	none	distal shaft	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	both prox and dist ends	none
radius	proximal end	none	none	none	none
radius	distal shaft	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	one end of non-long bone	none	none	none	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none



rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
sacrum	over most of bone	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	one end of non-long bone	none	none	none	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	distal end	none
scapula	none	none	none	distal end	none
scapula	none	none	none	distal end	none
scapula	none	none	none	distal end	none
scapula	proximal end	none	none	distal end	none
scapula	proximal end	none	none	distal end	none
scapula	proximal end	none	none	distal end	none
scapula	none	none	none	distal end	none
scapula	proximal end	none	none	distal end	none
scapula	proximal end	none	none	distal end	none
scapula	none	none	none	distal end	none
scapula	none	none	none	distal end	none
scapula	proximal end	none	none	distal end	none
scapula	proximal end	none	none	distal end	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none







skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	over most of bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	over most of bone	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	none	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	over most of bone	none	none	none	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal end	none
tibia	none	none	none	proximal end	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	proximal shaft
tibia	none	none	none	proximal shaft	proximal shaft
tibia	distal end	none	none	proximal end	over most of bone
tibia	none	none	none	over most of bone	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	distal shaft	none	none	none	none
tibia	proximal end	none	none	distal end	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	proximal shaft	none
tibio-tarsus	proximal shaft	none	none	none	none
ulna	proximal end	none	none	proximal shaft	none
ulna	proximal end	none	none	proximal end	none
ulna	distal end	none	none	proximal end	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	proximal shaft	none
ulna	proximal end	none	none	none	none

ulna	none	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	both prox and dist ends	distal shaft
ulna	proximal shaft	none	none	both prox and dist ends	none
ulna	proximal end	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	proximal end
ulna	none	none	none	proximal end	none
ulna	proximal shaft	none	none	proximal end	none
ulna	none	none	none	proximal end	proximal shaft
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	over most of bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	none	over most of bone
unidentified fragment	none	none	none	both prox and dist ends	over most of bone
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	over most of bone	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	one end of non-long bone	none	none	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
vertebra	one end of non-long bone	none	none	none	none
zygomatic arch	one end of non-long bone	none	none	one end of non-long bone	none

## APPENDIX K: Brown Hyaena Project D-P 9 Bone Damage

Element	gnawing	punctates/location	scouring/location	acid etching	crenulated edges/location	striations/location
atlas	carnivore gnawed	none	none	none	over most of bone	none
atlas	carnivore gnawed	none	none	none	over most of bone	none
atlas	carnivore gnawed	none	none	none	over most of bone	none
atlas	carnivore gnawed	none	none	none	over most of bone	none
atlas	carnivore gnawed	none	none	none	one end of non-long bone	none
atlas	carnivore gnawed	none	none	none	over most of bone	none
atlas	carnivore gnawed	none	none	none	over most of bone	none
axis	carnivore gnawed	none	none	none	one end of non-long bone	none
axis	carnivore gnawed	none	none	none	one end of non-long bone	none
axis	carnivore gnawed	none	none	none	one end of non-long bone	none
axis	carnivore gnawed	none	none	none	one end of non-long bone	none
axis	carnivore gnawed	none	none	none	one end of non-long bone	none
axis	carnivore gnawed	none	none	none	over most of bone	none
axis	carnivore gnawed	none	none	none	over most of bone	none
axis	carnivore gnawed	none	none	none	one end of non-long bone	none
carpal	carnivore gnawed	one end of non-long bone	none	none	none	none
carpal	carnivore gnawed	one end of non-long bone	none	none	none	none
caudal vert	carnivore gnawed	over most of bone	none	none	none	none
caudal vert	carnivore gnawed	over most of bone	none	none	none	none
caudal vert	carnivore gnawed	over most of bone	none	none	none	none
caudal vert	carnivore gnawed	over most of bone	none	none	none	none
caudal vert	carnivore gnawed	over most of bone	none	none	none	none
caudal vert	carnivore gnawed	none	none	none	one end of non-long bone	none
caudal vert	carnivore gnawed	none	none	none	one end of non-long bone	none
caudal vert	carnivore gnawed	none	none	none	one end of non-long bone	none
caudal vert	carnivore gnawed	none	none	none	one end of non-long bone	none
caudal vert	carnivore gnawed	none	none	none	one end of non-long bone	none
caudal vert	carnivore gnawed	none	none	none	one end of non-long bone	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
cervical vert	carnivore gnawed	one end of non-long bone	none	none	none	none
coracoid	carnivore gnawed	one end of non-long bone	none	none	over most of bone	none
disk joints	carnivore gnawed	one end of non-long bone	none	none	none	none
disk joints	carnivore gnawed	one end of non-long bone	none	none	none	none

disk joints	carnivore gnawed	one end of non-long bone	none	none	none	none
femur	carnivore gnawed	proximal end	none	none	none	none
femur	carnivore gnawed	none	none	none	proximal end	proximal end
femur	carnivore gnawed	none	none	none	proximal end	none
femur	carnivore gnawed	none	none	none	proximal end	none
femur	carnivore gnawed	proximal end	none	none	proximal end	none
femur	carnivore gnawed	none	none	none	distal shaft	none
femur	carnivore gnawed	none	none	none	distal end	none
femur	carnivore gnawed	both prox and dis ends	none	none	proximal end	none
femur	carnivore gnawed	none	none	none	distal end	none
femur	carnivore gnawed	proximal shaft	none	none	none	none
femur	carnivore gnawed	distal end	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	distal end	distal end
femur	carnivore gnawed	none	none	none	distal end	none
femur	carnivore gnawed	distal end	none	none	proximal shaft	none
femur	carnivore gnawed	distal end	none	none	none	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	over most of bone
femur	carnivore gnawed	none	none	none	both prox and dist ends	over most of bone
femur	carnivore gnawed	distal shaft	none	none	none	none
femur	carnivore gnawed	proximal end	none	none	distal shaft	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	over most of bone
femur	carnivore gnawed	proximal end	none	none	both prox and dist ends	none
femur	carnivore gnawed	proximal shaft	none	none	both prox and dist ends	none
femur	carnivore gnawed	none	none	none	proximal end	none
femur	carnivore gnawed	both prox and dis ends	none	none	none	none
femur	carnivore gnawed	distal shaft	none	none	both prox and dist ends	over most of bone
femur	carnivore gnawed	distal end	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	distal shaft	none
femur	carnivore gnawed	none	none	none	none	proximal shaft
femur	carnivore gnawed	both prox and dis ends	none	none	proximal end	none
femur	carnivore gnawed	proximal end	none	none	proximal shaft	proximal shaft
femur	carnivore gnawed	none	none	none	over most of bone	none
femur	carnivore gnawed	none	none	none	over most of bone	over most of bone
femur	carnivore gnawed	proximal end	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	distal shaft	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none
femur	carnivore gnawed	proximal end	none	none	both prox and dist ends	over most of bone
femur	carnivore gnawed	none	none	none	over most of bone	none
femur	carnivore gnawed	distal end	none	none	both prox and dist ends	none
femur	carnivore gnawed	none	none	none	over most of bone	none
femur	carnivore gnawed	proximal end	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	proximal end	none	none	distal shaft	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none



femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	distal end	none	none	both prox and dist ends	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	distal end	none	none	none	none
femur	carnivore gnawed	distal end	none	none	none	none
femur	carnivore gnawed	none	none	none	distal shaft	distal shaft
femur	carnivore gnawed	proximal end	none	none	none	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none
femur	carnivore gnawed	both prox and dis ends	none	none	none	none
femur	carnivore gnawed	distal end	none	none	none	none
femur	carnivore gnawed	distal end	none	none	proximal shaft	none
femur	carnivore gnawed	distal shaft	none	none	none	none
femur	carnivore gnawed	distal end	none	none	none	none
femur	carnivore gnawed	both prox and dis ends	none	none	none	none
femur	carnivore gnawed	distal end	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	distal end	none
femur	carnivore gnawed	proximal end	none	none	distal shaft	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none
femur	carnivore gnawed	proximal end	none	none	none	none
femur	carnivore gnawed	proximal end	none	none	none	none
femur	carnivore gnawed	proximal shaft	none	none	none	none
femur	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
fibula	carnivore gnawed	none	none	none	distal shaft	none
fibula	carnivore gnawed	none	none	none	none	none
fibula	carnivore gnawed	none	none	none	none	none
fibula	carnivore gnawed	none	none	none	distal shaft	distal shaft
fibula	carnivore gnawed	distal end	none	none	proximal shaft	none
fibula	carnivore gnawed	distal end	none	none	proximal shaft	none
fibula	carnivore gnawed	none	none	none	distal shaft	distal shaft
fibula	carnivore gnawed	none	none	none	proximal shaft	none
fibula	carnivore gnawed	none	none	none	distal shaft	none
fibula	carnivore gnawed	none	none	none	both prox and dist ends	none
horn/antler	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
humerus	carnivore gnawed	both prox and dis ends	none	none	proximal shaft	none
humerus	carnivore gnawed	proximal end	none	none	proximal shaft	none
humerus	carnivore gnawed	proximal end	none	none	proximal end	none
humerus	carnivore gnawed	none	none	none	proximal end	none
humerus	carnivore gnawed	distal end	none	none	none	none
humerus	carnivore gnawed	proximal end	none	none	none	none

humerus	carnivore gnawed	none	none	none	proximal end	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	none	none
humerus	carnivore gnawed	proximal end	none	none	distal shaft	none
humerus	carnivore gnawed	distal end	none	none	none	none
humerus	carnivore gnawed	distal end	none	none	proximal shaft	over most of bone
humerus	carnivore gnawed	distal end	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	distal end	none
humerus	carnivore gnawed	proximal end	none	none	distal shaft	none
humerus	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	distal end	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	distal end	none	none	proximal shaft	none
humerus	carnivore gnawed	proximal end	none	none	distal shaft	none
humerus	carnivore gnawed	distal shaft	none	none	proximal end	none
humerus	carnivore gnawed	both prox and dis ends	none	none	none	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	distal end	none	none	proximal shaft	none
humerus	carnivore gnawed	proximal end	none	none	none	proximal end
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	both prox and dis ends	none	none	proximal end	none
humerus	carnivore gnawed	both prox and dis ends	none	none	none	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	distal end	none
humerus	carnivore gnawed	both prox and dis ends	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
humerus	carnivore gnawed	both prox and dis ends	none	none	both prox and dist ends	none
humerus	carnivore gnawed	proximal end	none	none	proximal end	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	over most of bone	none	none	both prox and dist ends	none
humerus	carnivore gnawed	both prox and dis ends	none	none	both prox and dist ends	over most of bone
humerus	carnivore gnawed	distal end	none	none	proximal shaft	over most of bone
humerus	carnivore gnawed	none	none	none	over most of bone	none
humerus	carnivore gnawed	distal shaft	none	none	both prox and dist ends	none
humerus	carnivore gnawed	proximal end	none	none	distal end	none
humerus	carnivore gnawed	distal end	none	none	both prox and dist ends	none

humerus	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	over most of bone
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	distal end	none
humerus	carnivore gnawed	proximal shaft	none	none	both prox and dist ends	none
humerus	carnivore gnawed	distal end	none	none	none	none
humerus	carnivore gnawed	distal end	none	none	none	none
humerus	carnivore gnawed	none	none	none	distal end	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	distal end	none	none	none	distal shaft
humerus	carnivore gnawed	both prox and dis ends	none	none	none	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	distal end	none	none	proximal shaft	none
humerus	carnivore gnawed	distal end	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	distal end	none	none	proximal shaft	none
humerus	carnivore gnawed	distal end	none	none	proximal shaft	over most of bone
humerus	carnivore gnawed	proximal end	none	none	distal end	none
humerus	carnivore gnawed	proximal end	none	none	proximal end	none
humerus	carnivore gnawed	distal end	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	proximal end	none
humerus	carnivore gnawed	proximal end	none	none	distal end	none
humerus	carnivore gnawed	distal end	none	none	distal shaft	none
humerus	carnivore gnawed	proximal end	none	none	distal shaft	none
humerus	carnivore gnawed	both prox and dis ends	none	none	none	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	proximal end	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	over most of bone
humerus	carnivore gnawed	over most of bone	none	none	over most of bone	over most of bone
humerus	carnivore gnawed	distal shaft	none	none	both prox and dist ends	over most of bone
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	proximal shaft	none	none	both prox and dist ends	none

humerus	carnivore gnawed	none	none	none	over most of bone	none
humerus	carnivore gnawed	none	none	none	proximal end	none
humerus	carnivore gnawed	none	none	none	over most of bone	none
humerus	carnivore gnawed	distal end	none	none	proximal shaft	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	none	none	none	distal end	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	over most of bone	none
humerus	carnivore gnawed	one end of non-long bone	none	none	none	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	distal end	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	one end of non-long bone	none	none	none	none
humerus	carnivore gnawed	one end of non-long bone	none	none	none	none
humerus	carnivore gnawed	one end of non-long bone	none	none	none	none
humerus	carnivore gnawed	one end of non-long bone	none	none	none	none
humerus	carnivore gnawed	one end of non-long bone	none	none	none	none
illium	carnivore gnawed	one end of non-long bone	none	none	over most of bone	none
illium	carnivore gnawed	one end of non-long bone	none	none	none	none
illium	carnivore gnawed	one end of non-long bone	none	none	none	none
illium	carnivore gnawed	none	none	none	one end of non-long bone	none
lumbar vert	carnivore gnawed	one end of non-long bone	none	none	none	none
lumbar vert	carnivore gnawed	one end of non-long bone	none	none	none	none
mandible	carnivore gnawed	none	none	none	both prox and dist ends	mandibular heal
mandible	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
mandible	carnivore gnawed	none	none	none	one end of non-long bone	none
mandible	carnivore gnawed	none	none	none	both prox and dist ends	none
mandible	carnivore gnawed	none	none	none	mandibular heal	none
mandible	carnivore gnawed	none	none	none	mandibular heal	none
mandible	carnivore gnawed	none	none	none	mandibular heal	none
mandible	carnivore gnawed	over most of bone	none	none	over most of bone	none
mandible	carnivore gnawed	none	none	none	over most of bone	none
mandible	carnivore gnawed	none	none	none	mandibular heal	none



















radius	carnivore gnawed	none	none	none	distal shaft	none
radius	carnivore gnawed	proximal end	none	none	none	none
radius	carnivore gnawed	distal shaft	none	none	distal end	none
radius	carnivore gnawed	distal end	none	none	distal end	none
radius	carnivore gnawed	none	none	none	distal shaft	none
radius	carnivore gnawed	distal shaft	none	none	distal end	none
radius	carnivore gnawed	none	none	none	distal shaft	none
radius	carnivore gnawed	none	none	none	distal shaft	none
radius	carnivore gnawed	none	none	none	distal shaft	none
radius	carnivore gnawed	proximal end	none	none	distal shaft	none
radius	carnivore gnawed	none	none	none	distal shaft	none
radius	carnivore gnawed	none	none	none	proximal shaft	none
radius	carnivore gnawed	none	none	none	proximal shaft	none
radius	carnivore gnawed	none	none	none	distal end	none
radius	carnivore gnawed	none	none	none	over most of bone	none
radius	carnivore gnawed	proximal end	none	none	distal shaft	none
radius	carnivore gnawed	distal shaft	none	none	distal shaft	none
radius	carnivore gnawed	proximal end	none	none	proximal shaft	none
radius	carnivore gnawed	proximal end	none	none	distal end	none
radius	carnivore gnawed	none	none	none	distal shaft	none
radius	carnivore gnawed	both prox and dis ends	none	none	distal end	none
radius	carnivore gnawed	distal end	none	none	proximal shaft	none
radius	carnivore gnawed	distal shaft	none	none	none	none
radius	carnivore gnawed	distal shaft	none	none	none	none
radius	carnivore gnawed	none	none	none	both prox and dist ends	none
radius	carnivore gnawed	proximal end	none	none	distal shaft	none
radius	carnivore gnawed	distal shaft	none	none	distal shaft	none
radius	carnivore gnawed	over most of bone	none	none	proximal shaft	none
radius	carnivore gnawed	none	none	none	distal shaft	none
radius	carnivore gnawed	none	none	none	proximal shaft	none
radius	carnivore gnawed	over most of bone	none	none	both prox and dist ends	none
radius	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
radius	carnivore gnawed	none	none	none	proximal end	none
radius	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
radius	carnivore gnawed	distal end	none	none	none	none
radius	carnivore gnawed	none	none	none	proximal shaft	none
radius	carnivore gnawed	none	none	none	proximal shaft	none
radius	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
radius	carnivore gnawed	proximal shaft	none	none	none	none
radius	carnivore gnawed	none	none	none	proximal shaft	none
radius	carnivore gnawed	none	none	none	both prox and dist ends	none
radius	carnivore gnawed	none	none	none	distal shaft	none
radius	carnivore gnawed	proximal shaft	none	none	distal shaft	none
radius	carnivore gnawed	distal shaft	none	none	none	none
radius	carnivore gnawed	none	none	none	both prox and dist ends	none



















sternum	carnivore gnawed	none	none	none	one end of non-long bone	none
sternum	carnivore gnawed	one end of non-long bone	none	none	none	none
sternum	carnivore gnawed	none	none	none	both prox and dist ends	none
thoracic vert	carnivore gnawed	one end of non-long bone	none	none	none	none
thoracic vert	carnivore gnawed	one end of non-long bone	none	none	none	none
thoracic vert	carnivore gnawed	one end of non-long bone	none	none	none	none
thoracic vert	carnivore gnawed	one end of non-long bone	none	none	none	none
thoracic vert	carnivore gnawed	one end of non-long bone	none	none	none	none
thoracic vert	carnivore gnawed	one end of non-long bone	none	none	none	none
thoracic vert	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	one end of non-long bone	none	none	over most of bone	none
thoracic vert	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	over most of bone	none	none	none	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	distal end	none
tibia	carnivore gnawed	none	none	none	proximal end	none
tibia	carnivore gnawed	distal shaft	none	none	none	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal end	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	distal shaft	none	none	distal end	none
tibia	carnivore gnawed	distal shaft	none	none	none	none
tibia	carnivore gnawed	proximal end	none	none	none	none
tibia	carnivore gnawed	distal shaft	none	none	none	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	both prox and dis ends	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	proximal shaft
tibia	carnivore gnawed	none	none	none	distal shaft	distal shaft
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none

tibia	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	over most of bone
tibia	carnivore gnawed	proximal end	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	distal end	none	none	proximal shaft	none
tibia	carnivore gnawed	distal shaft	none	none	distal shaft	none
tibia	carnivore gnawed	proximal end	none	none	none	none
tibia	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	proximal end	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	distal end	none	none	none	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal end	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	proximal end	none	none	none	none
tibia	carnivore gnawed	none	none	none	proximal shaft	proximal shaft
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	distal end	none	none	proximal shaft	none
tibia	carnivore gnawed	proximal shaft	none	none	none	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	over most of bone
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	distal shaft	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	proximal end	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	over most of bone	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	proximal shaft	none	none	proximal shaft	none

tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	distal shaft	none	none	none	none
tibia	carnivore gnawed	none	none	none	over most of bone	none
tibia	carnivore gnawed	proximal shaft	none	none	both prox and dist ends	none
tibia	carnivore gnawed	distal end	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	distal shaft	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
ulna	carnivore gnawed	distal end	none	none	none	none
ulna	carnivore gnawed	none	none	none	proximal end	none
ulna	carnivore gnawed	proximal end	none	none	proximal shaft	none
ulna	carnivore gnawed	proximal end	none	none	none	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	none	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	none	none	none	proximal end	none
ulna	carnivore gnawed	none	none	none	proximal end	none
ulna	carnivore gnawed	none	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	both prox and dist ends	none
ulna	carnivore gnawed	proximal end	none	none	none	none
ulna	carnivore gnawed	distal shaft	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	proximal end	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	none	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	distal shaft	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	none	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	proximal shaft	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	over most of bone	none
ulna	carnivore gnawed	proximal end	none	none	proximal end	none
ulna	carnivore gnawed	proximal shaft	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	distal shaft	none
ulna	carnivore gnawed	none	none	none	distal shaft	none
ulna	carnivore gnawed	none	none	none	distal shaft	none
ulna	carnivore gnawed	none	none	none	both prox and dist ends	none











## APPENDIX L: Brown Hyaena Project D-P 11 Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
atlas	none	none	none	over most of bone	none
carpo-metacarpus	none	none	none	none	over most of bone
femur	none	none	none	both prox and dist ends	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
lumbar vert	one end of non-long bone	none	none	none	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	both prox and dist ends	none
mandible	one end of non-long bone	none	none	both prox and dist ends	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
metapodial	none	none	none	both prox and dist ends	none
metapodial	none	none	none	proximal shaft	none
occipital condyle	one end of non-long bone	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none

skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	over most of bone	none
sternum	none	none	none	one end of non-long bone	none
tibia	none	none	none	distal shaft	none
tibia	distal end	none	none	none	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	proximal shaft	none
tibio-tarsus	none	none	none	distal shaft	none
ulna	proximal end	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	over most of bone
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	one end of non-long bone	none

## APPENDIX M: Brown Hyaena Project D-P 16 Bone Damage

Element	damage	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
atlas	carnivore gnawed	none	none	none	one end of non-long bone	none
atlas	carnivore gnawed	none	none	none	one end of non-long bone	none
atlas	carnivore gnawed	none	none	none	over most of bone	none
atlas	carnivore gnawed	none	none	none	over most of bone	none
atlas	carnivore gnawed	one end of non-long bone	none	none	over most of bone	none
axis	carnivore gnawed	none	none	none	both prox and dist ends	none
axis	carnivore gnawed	none	none	none	both prox and dist ends	none
axis	carnivore gnawed	none	none	none	both prox and dist ends	none
calcaneus	carnivore gnawed	none	none	none	one end of non-long bone	none
carpo-metacarpus	carnivore gnawed	none	none	none	distal shaft	none
coracoid	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none
femur	carnivore gnawed	distal end	none	none	none	none
femur	carnivore gnawed	none	none	none	distal shaft	none
femur	carnivore gnawed	none	none	none	distal shaft	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	distal shaft	none	none	distal end	none
femur	carnivore gnawed	none	none	none	proximal shaft	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none
femur	carnivore gnawed	distal shaft	none	none	both prox and dist ends	none
femur	carnivore gnawed	none	none	none	both prox and dist ends	none
femur	carnivore gnawed	distal end	none	none	none	none
femur	carnivore gnawed	proximal end	none	none	distal shaft	none
fibula	carnivore gnawed	both prox and dis ends	none	none	none	none
fibula	carnivore gnawed	none	none	none	distal shaft	none
fibula	carnivore gnawed	distal end	none	none	proximal shaft	none
fibula	carnivore gnawed	none	none	none	proximal shaft	none
fibula	carnivore gnawed	none	none	none	distal shaft	none
humerus	carnivore gnawed	distal end	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	proximal end	none	none	proximal shaft	none
humerus	carnivore gnawed	both prox and dis ends	none	none	distal end	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	distal end	none	none	distal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none

humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	proximal end	none	none	none	none
humerus	carnivore gnawed	proximal shaft	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	distal end	none	none	distal end	none
humerus	carnivore gnawed	proximal end	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	over most of bone	none
humerus	carnivore gnawed	both prox and dis ends	none	none	none	none
humerus	carnivore gnawed	none	none	none	over most of bone	none
humerus	carnivore gnawed	none	none	none	over most of bone	none
humerus	carnivore gnawed	none	none	none	proximal end	none
humerus	carnivore gnawed	none	none	none	proximal shaft	none
humerus	carnivore gnawed	none	none	none	both prox and dist ends	none
humerus	carnivore gnawed	none	none	none	distal shaft	none
illium	carnivore gnawed	one end of non-long bone	none	none	none	none
illium	carnivore gnawed	none	none	none	one end of non-long bone	none
illium	carnivore gnawed	none	none	none	none	none
illium	carnivore gnawed	none	none	none	one end of non-long bone	none
illium	carnivore gnawed	one end of non-long bone	none	none	none	none
illium	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
illium	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
illium	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
illium	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
illium	carnivore gnawed	one end of non-long bone	none	none	over most of bone	none
illium	carnivore gnawed	none	none	none	one end of non-long bone	none
illium	carnivore gnawed	over most of bone	none	none	one end of non-long bone	none
illium	carnivore gnawed	none	none	none	over most of bone	none
illium	carnivore gnawed	none	none	none	one end of non-long bone	none
illium	carnivore gnawed	none	none	none	one end of non-long bone	none
illium	carnivore gnawed	none	none	none	one end of non-long bone	none
ishium	carnivore gnawed	one end of non-long bone	none	none	none	none
ishium	carnivore gnawed	one end of non-long bone	none	none	one end of non-long bone	none
ishium	carnivore gnawed	none	none	none	one end of non-long bone	none
lumbar vert	carnivore gnawed	none	none	none	one end of non-long bone	none
lumbar vert	carnivore gnawed	none	none	none	one end of non-long bone	none
mandible	carnivore gnawed	none	none	none	mandibular heal	none
mandible	carnivore gnawed	none	none	none	mandibular heal	none
mandible	carnivore gnawed	none	none	none	both prox and dist ends	none
mandible	carnivore gnawed	none	none	none	mandibular heal	none
mandible	carnivore gnawed	over most of bone	none	none	none	none
mandible	carnivore gnawed	none	none	none	both prox and dist ends	none
mandible	rodent and carnivore gnawed	none	none	none	one end of non-long bone	none
mandible	carnivore gnawed	none	none	none	one end of non-long bone	none























skull fragment	carnivore gnawed	none	none	none	over most of bone	none
skull fragment	carnivore gnawed	none	none	none	over most of bone	none
skull fragment	carnivore gnawed	none	none	none	over most of bone	none
skull fragment	carnivore gnawed	none	none	none	over most of bone	none
skull fragment	carnivore gnawed	none	none	none	over most of bone	none
skull fragment	carnivore gnawed	none	none	none	over most of bone	none
sternum	carnivore gnawed	over most of bone	none	none	one end of non-long bone	none
sternum	carnivore gnawed	over most of bone	none	none	one end of non-long bone	none
sternum	carnivore gnawed	over most of bone	none	none	one end of non-long bone	none
sternum	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
thoracic vert	carnivore gnawed	none	none	none	one end of non-long bone	none
tibia	carnivore gnawed	both prox and dis ends	none	none	none	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	distal shaft	none	none	proximal shaft	none
tibia	carnivore gnawed	over most of bone	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	distal end	none	none	proximal shaft	proximal shaft
tibia	carnivore gnawed	proximal end	none	none	none	none
tibia	carnivore gnawed	none	none	none	proximal shaft	none
tibia	carnivore gnawed	none	none	none	distal shaft	none
tibia	carnivore gnawed	none	none	none	both prox and dist ends	none
tibia	carnivore gnawed	none	none	none	proximal end	none
ulna	carnivore gnawed	proximal end	none	none	both prox and dist ends	none
ulna	carnivore gnawed	proximal shaft	none	none	both prox and dist ends	none
ulna	carnivore gnawed	proximal end	none	none	none	none
ulna	carnivore gnawed	none	none	none	both prox and dist ends	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	none	none	none	over most of bone	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	none	none	none	over most of bone	none
ulna	carnivore gnawed	none	none	none	proximal shaft	none
ulna	carnivore gnawed	proximal shaft	none	none	both prox and dist ends	none
ulna	carnivore gnawed	proximal shaft	none	none	both prox and dist ends	none











zygomatic arch	carnivore gnawed	none	none	none	one end of non-long bone	none
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## APPENDIX N: Brown Hyaena Project D-P 18 Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
carpo-metacarpus	none	none	none	distal end	none
carpo-metacarpus	none	none	none	proximal shaft	none
carpo-metacarpus	none	none	none	distal shaft	none
carpo-metacarpus	none	none	none	distal shaft	none
carpo-metacarpus	none	none	none	distal shaft	none
coracoid	none	none	none	one end of non-long bone	none
coracoid	none	none	none	one end of non-long bone	none
coracoid	none	none	none	one end of non-long bone	none
coracoid	none	none	none	over most of bone	none
coracoid	none	none	none	over most of bone	none
coracoid	none	none	none	over most of bone	none
coracoid	none	none	none	over most of bone	none
coracoid	none	none	none	over most of bone	over most of bone
coracoid	none	none	none	over most of bone	over most of bone
coracoid	one end of non-long bone	none	none	over most of bone	none
coracoid	one end of non-long bone	none	none	over most of bone	none
disk joints	none	none	none	over most of bone	none
disk joints	none	none	none	over most of bone	none
femur	distal shaft	none	none	distal end	none
femur	none	none	none	none	over most of bone
femur	distal end	none	none	none	none
femur	none	none	none	distal shaft	none
femur	none	none	none	distal shaft	none
femur	proximal end	none	none	proximal end	none
femur	none	none	none	proximal shaft	none
femur	distal shaft	none	none	proximal shaft	none
femur	none	none	none	proximal end	none
femur	none	none	none	proximal shaft	none
femur	none	none	none	both prox and dist ends	over most of bone
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	over most of bone
femur	none	none	none	over most of bone	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	proximal end	none	none	proximal end	none
femur	proximal end	none	none	proximal shaft	none
femur	proximal shaft	none	none	none	none
fibula	none	none	none	proximal shaft	none

fibula	none	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	distal end	none	none	over most of bone	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal shaft	none	none	both prox and dist ends	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	proximal end	none	none	distal shaft	none
humerus	distal end	none	none	both prox and dist ends	none
humerus	proximal end	none	none	proximal end	none
humerus	proximal end	none	none	distal shaft	none
humerus	both prox and dis ends	none	none	both prox and dist ends	over most of bone
humerus	none	none	none	over most of bone	none
humerus	distal shaft	none	none	distal shaft	none
humerus	distal end	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	none	none
mandible	none	none	none	one end of non-long bone	none
mandible	one end of non-long bone	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	both prox and dist ends	none
mandibular hinge	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none

maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	none	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
metacarpal	proximal end	none	none	proximal shaft	none
metapodial	one end of non-long bone	none	none	none	none
metapodial	none	none	none	distal shaft	none
metapodial	distal shaft	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	proximal end	none
metapodial	none	none	none	over most of bone	none
metapodial	none	none	none	distal shaft	none
occipital condyle	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	over most of bone	none	none	over most of bone	none
phalanx 2	proximal end	none	none	none	none
phalanx 2	none	none	none	proximal shaft	none
phalanx 2	none	none	none	proximal shaft	none
phalanx 2	none	none	none	proximal shaft	none
radius	proximal shaft	none	none	none	none
radius	none	none	none	distal shaft	none
radius	proximal shaft	none	none	proximal shaft	none









rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	over most of bone
sacrum	none	none	none	over most of bone	none
sacrum	none	none	none	over most of bone	none
sacrum	none	none	none	one end of non-long bone	none
sacrum	none	none	none	over most of bone	none
sacrum	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	distal shaft	none
scapula	none	none	none	distal shaft	none
scapula	proximal end	none	none	over most of bone	none
scapula	proximal shaft	none	none	distal shaft	none
scapula	none	none	none	distal shaft	none
scapula	none	none	none	both prox and dist ends	none
scapula	none	none	none	distal shaft	none
scapula	none	none	none	distal shaft	none
scapula	distal shaft	none	none	distal shaft	none
scapula	none	none	none	distal shaft	none
scapula	none	none	none	distal end	none
scapula	proximal shaft	none	none	distal shaft	none
scapula	none	none	none	over most of bone	none
scapula	proximal end	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	proximal shaft	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	distal shaft	none
scapula	none	none	none	distal shaft	none
skull	one end of non-long bone	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none











skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	one end of non-long bone	none
sternum	none	none	none	one end of non-long bone	none
sternum	none	none	none	one end of non-long bone	none
tarso metatarsus	none	none	none	proximal shaft	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	none	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	none	none
thoracic vert	one end of non-long bone	none	none	none	none
thoracic vert	one end of non-long bone	none	none	none	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	over most of bone	none
tibia	proximal shaft	none	none	over most of bone	over most of bone
tibia	none	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	proximal end	none	none	distal shaft	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	both prox and dist ends	none

tibia	proximal end	none	none	over most of bone	none
tibia	proximal end	none	none	proximal end	none
tibia	none	none	none	distal shaft	none
tibio-tarsus	both prox and dis ends	none	none	none	none
tibio-tarsus	none	none	none	proximal end	none
tibio-tarsus	none	none	none	proximal shaft	none
tibio-tarsus	proximal end	none	none	distal shaft	none
tibio-tarsus	none	none	none	proximal shaft	none
tibio-tarsus	distal end	none	none	distal shaft	none
tibio-tarsus	distal end	none	none	proximal shaft	none
tibio-tarsus	proximal end	none	none	distal shaft	none
ulna	none	none	none	both prox and dist ends	over most of bone
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	distal shaft	none
ulna	distal shaft	none	none	proximal shaft	none
ulna	distal shaft	none	none	distal shaft	none
ulna	none	none	none	over most of bone	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	over most of bone	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	over most of bone	none
ulna	proximal end	none	none	distal end	none
ulna	proximal end	none	none	distal shaft	none



unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	proximal shaft	none
unidentified fragment	proximal end	none	none	none	none
unidentified fragment	proximal end	none	none	none	none
unidentified fragment	none	none	none	none	over most of bone
unidentified fragment	none	none	none	proximal end	none
unidentified fragment	over most of bone	none	none	proximal end	over most of bone
unidentified fragment	none	none	none	proximal shaft	none
unidentified fragment	distal end	none	none	distal shaft	none
unidentified fragment	none	none	none	distal shaft	none
unidentified fragment	distal end	none	none	distal shaft	none
unidentified fragment	proximal end	none	none	distal shaft	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	proximal end	none	none	proximal end	none
unidentified fragment	none	none	none	both prox and dist ends	none
vertebra	one end of non-long bone	none	none	none	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	none	none
vertebra	one end of non-long bone	none	none	none	none
vertebra	one end of non-long bone	none	none	none	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none





vertebra	over most of bone	none	none	none	none
vertebra	one end of non-long bone	none	none	none	none

## APPENDIX O: Brown Hyaena Project D-SPG 1 Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
astragalus	one end of non-long bone	none	none	none	none
astragalus	one end of non-long bone	none	none	none	none
astragalus	one end of non-long bone	none	none	none	none
atlas	none	none	none	one end of non-long bone	none
axis	one end of non-long bone	none	none	one end of non-long bone	none
axis	none	none	none	one end of non-long bone	none
carpo-metacarpus	none	none	none	one end of non-long bone	none
coracoid	proximal end	none	none	none	none
coracoid	none	none	none	one end of non-long bone	none
femur	over most of bone	none	none	none	none
femur	over most of bone	none	none	distal shaft	none
femur	distal end	none	none	none	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	distal shaft	none
femur	none	none	none	distal shaft	none
femur	distal end	none	none	over most of bone	none
femur	distal end	none	none	distal shaft	none
femur	none	none	none	distal shaft	none
femur	none	none	none	distal shaft	none
femur	none	none	none	proximal shaft	none
femur	none	none	none	proximal shaft	none
femur	over most of bone	none	none	none	none
femur	none	none	none	proximal shaft	none
femur	proximal end	none	none	none	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	both prox and dis ends	none	none	none	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
fibula	distal end	none	none	none	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	proximal shaft	none

humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	distal end	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	both prox and dis ends	none	none	none	none
humerus	both prox and dis ends	none	none	none	none
humerus	distal end	none	none	proximal shaft	none
humerus	both prox and dis ends	none	none	proximal shaft	none
humerus	distal end	none	none	none	none
humerus	distal end	none	none	proximal shaft	none
humerus	proximal end	none	none	none	none
humerus	distal end	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	both prox and dis ends	none	none	both prox and dist ends	none
humerus	distal end	none	none	distal shaft	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	proximal end	none	none	none	none
humerus	distal end	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	distal end	none	none	both prox and dist ends	none
humerus	distal end	none	none	proximal end	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	over most of bone	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	distal shaft	none
humerus	both prox and dis ends	none	none	proximal end	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	distal end	none	none	proximal shaft	none
humerus	proximal shaft	none	none	proximal shaft	none
humerus	none	none	none	proximal end	none
humerus	proximal end	none	none	none	none

humerus	none	none	none	proximal shaft	none
humerus	distal end	none	none	proximal shaft	none
humerus	distal shaft	none	none	proximal shaft	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	proximal shaft	none
humerus	none	none	none	over most of bone	none
illium	none	none	none	one end of non-long bone	none
illium	none	none	none	one end of non-long bone	none
illium	none	none	none	one end of non-long bone	none
illium	none	none	none	one end of non-long bone	none
illium	none	none	none	one end of non-long bone	none
illium	one end of non-long bone	none	none	none	none
illium	none	none	none	one end of non-long bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	none	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	one end of non-long bone	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	one end of non-long bone	none	none	both prox and dist ends	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	mandibular heal	none

mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	one end of non-long bone	none
mandible	one end of non-long bone	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	one end of non-long bone	none
mandible	one end of non-long bone	none	none	one end of non-long bone	none
mandible	over most of bone	none	none	both prox and dist ends	none
mandible	none	none	none	one end of non-long bone	none
mandible	one end of non-long bone	none	none	none	none
mandible	one end of non-long bone	none	none	one end of non-long bone	none
mandible	one end of non-long bone	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandibular hinge	none	none	none	one end of non-long bone	none
mandibular hinge	one end of non-long bone	none	none	one end of non-long bone	none
mandibular hinge	none	none	none	one end of non-long bone	none
mandibular hinge	none	none	none	over most of bone	none
mandibular hinge	none	none	none	over most of bone	none
mandibular hinge	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	none	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	none	none

maxilla	none	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	none	none
maxilla	one end of non-long bone	none	none	none	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
metapodial	none	none	none	one end of non-long bone	none
metapodial	none	none	none	one end of non-long bone	none
metapodial	none	none	none	one end of non-long bone	none
metapodial	none	none	none	one end of non-long bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 1	none	none	none	one end of non-long bone	none
phalanx 2	none	none	none	one end of non-long bone	none
phalanx 2	none	none	none	one end of non-long bone	none
radius	none	none	none	distal shaft	none
radius	distal end	none	none	none	none
radius	proximal shaft	none	none	none	none
radius	both prox and dis ends	none	none	none	none
radius	none	none	none	distal end	none
radius	distal end	none	none	distal end	none
radius	distal shaft	none	none	distal end	none

radius	none	none	none	proximal end	none
radius	distal shaft	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	both prox and dis ends	none	none	none	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal end	none
radius	none	none	none	proximal end	none
radius	distal end	none	none	proximal shaft	none
radius	none	none	none	over most of bone	none
radius	proximal shaft	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	distal end	none	none	over most of bone	none
radius	none	none	none	proximal shaft	none
radius	both prox and dis ends	none	none	none	none
radius	none	none	none	distal shaft	none
radius	proximal shaft	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	distal end	none	none	distal end	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	none	none
radius	proximal end	none	none	none	none
radius	both prox and dis ends	none	none	none	none
radius	distal end	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	proximal end	none	none	proximal shaft	none
radius	distal end	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	distal shaft	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	over most of bone	none
radius/ulna fused	proximal end	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none





























skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
sternum	none	none	none	one end of non-long bone	none
sternum	none	none	none	one end of non-long bone	none
tarso metatarsus	over most of bone	none	none	none	none
tibia	distal end	none	none	proximal end	none
tibia	distal end	none	none	none	none
tibia	none	none	none	proximal shaft	none
tibia	proximal end	none	none	none	none
tibia	both prox and dis ends	none	none	none	none
tibia	both prox and dis ends	none	none	both prox and dist ends	none
tibia	none	none	none	proximal end	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	distal shaft	none
tibia	distal end	none	none	none	none
tibia	proximal end	none	none	none	none

tibia	distal end	none	none	none	none
tibia	over most of bone	none	none	both prox and dist ends	none
tibia	none	none	none	proximal end	none
tibia	both prox and dis ends	none	none	none	none
tibia	proximal end	none	none	proximal end	none
tibia	proximal end	none	none	distal shaft	none
tibia	none	none	none	distal end	none
tibia	proximal end	none	none	none	none
tibia	none	none	none	distal shaft	none
tibia	distal shaft	none	none	proximal end	none
tibia	both prox and dis ends	none	none	none	none
tibia	proximal end	none	none	none	none
tibia	over most of bone	none	none	both prox and dist ends	none
tibia	both prox and dis ends	none	none	both prox and dist ends	none
tibia	proximal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	proximal shaft	none	none	proximal end	none
tibia	proximal end	none	none	distal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	distal end	none	none	proximal shaft	none
tibia	distal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	over most of bone	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	proximal end	none
tibia	none	none	none	both prox and dist ends	none
tibia	proximal end	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	proximal end	none
tibia	none	none	none	proximal end	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal end	none
tibia	none	none	none	distal shaft	none
tibia	over most of bone	none	none	both prox and dist ends	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	both prox and dist ends	none

tibio-tarsus	none	none	none	proximal shaft	none
tibio-tarsus	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	proximal shaft	none	none	proximal end	none
ulna	none	none	none	proximal shaft	none
ulna	proximal end	none	none	none	none
ulna	proximal end	none	none	none	none
ulna	distal end	none	none	none	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	proximal shaft	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	proximal end	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
ulna	distal end	none	none	proximal shaft	none





unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
vertebra	one end of non-long bone	none	none	over most of bone	none
vertebra	one end of non-long bone	none	none	none	none
vertebra	one end of non-long bone	none	none	none	none
vertebra	one end of non-long bone	none	none	none	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none

## APPENDIX P: Brown Hyaena Project D-BB 1 Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
atlas	none	none	none	one end of non-long bone	none
atlas	none	none	none	over most of bone	none
atlas	none	none	none	over most of bone	none
atlas	one end of non-long bone	none	none	one end of non-long bone	none
axis	none	none	none	over most of bone	none
axis	none	none	none	one end of non-long bone	none
coracoid	none	none	none	one end of non-long bone	none
coracoid	none	none	none	proximal shaft	none
disk joints	none	none	none	one end of non-long bone	none
disk joints	none	none	none	one end of non-long bone	none
femur	distal end	none	none	proximal shaft	none
femur	distal end	none	none	none	none
femur	none	none	none	proximal end	none
femur	distal end	none	none	distal shaft	none
femur	distal end	none	none	proximal shaft	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	over most of bone	none
femur	none	none	none	proximal shaft	none
femur	distal end	none	none	proximal shaft	none
femur	proximal shaft	none	none	proximal shaft	none
femur	proximal end	none	none	none	none
femur	over most of bone	none	none	none	none
femur	both prox and dis ends	none	none	none	none
femur	none	none	none	proximal end	none
femur	proximal shaft	none	none	distal shaft	none
femur	none	none	none	both prox and dist ends	none
femur	both prox and dis ends	none	none	none	none
femur	proximal end	none	none	proximal end	none
femur	none	none	none	distal shaft	none
femur	none	none	none	proximal shaft	none
femur	none	none	none	distal shaft	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	over most of bone
femur	distal end	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none

femur	none	none	none	both prox and dist ends	none
femur	proximal end	none	none	none	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	distal end	none	none	none	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal end	none
fibula	over most of bone	none	none	both prox and dist ends	none
fibula	over most of bone	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
horn/antler	one end of non-long bone	none	none	none	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	one end of non-long bone
horn/antler	none	none	none	both prox and dist ends	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	both prox and dist ends	none
horn/antler	none	none	none	one end of non-long bone	none
horn/antler	none	none	none	one end of non-long bone	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	proximal shaft	none
humerus	proximal end	none	none	none	none
humerus	both prox and dis ends	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	over most of bone	none
humerus	both prox and dis ends	none	none	none	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	proximal shaft	none	none	none	none
humerus	proximal shaft	none	none	none	none

humerus	proximal shaft	none	none	none	none
humerus	proximal shaft	none	none	none	none
humerus	both prox and dis ends	none	none	none	none
humerus	over most of bone	none	none	none	none
humerus	proximal end	none	none	distal end	none
humerus	distal end	none	none	proximal shaft	none
humerus	both prox and dis ends	none	none	none	none
humerus	distal end	none	none	proximal shaft	none
humerus	both prox and dis ends	none	none	none	none
humerus	distal end	none	none	proximal shaft	none
humerus	distal end	none	none	proximal end	none
humerus	both prox and dis ends	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal shaft	none	none	proximal shaft	none
humerus	none	none	none	distal end	none
humerus	none	none	none	proximal shaft	none
humerus	proximal end	none	none	proximal end	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	distal end	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	one end of non-long bone	none	none	none	none
humerus	one end of non-long bone	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none

humerus	distal end	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	one end of non-long bone	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	distal shaft	none
illium	none	none	none	one end of non-long bone	none
illium	one end of non-long bone	none	none	over most of bone	none
illium	none	none	none	over most of bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	both prox and dist ends	over most of bone
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	one end of non-long bone	none	none	both prox and dist ends	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none

mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	one end of non-long bone	none	none	none	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandibular hinge	none	none	none	one end of non-long bone	none
mandibular hinge	none	none	none	one end of non-long bone	none
mandibular hinge	none	none	none	one end of non-long bone	none
mandibular hinge	none	none	none	one end of non-long bone	none
mandibular hinge	none	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none

maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
metacarpal	none	none	none	distal shaft	none
metacarpal	none	none	none	proximal shaft	proximal shaft
metacarpal	none	none	none	distal shaft	none
metacarpal	none	none	none	over most of bone	none
metapodial	none	none	none	both prox and dist ends	none
metapodial	none	none	none	both prox and dist ends	none
metapodial	none	none	none	both prox and dist ends	none
metapodial	none	none	none	both prox and dist ends	none
metapodial	none	none	none	both prox and dist ends	none
metapodial	none	none	none	both prox and dist ends	none
metapodial	none	none	none	one end of non-long bone	over most of bone
metapodial	one end of non-long bone	none	none	none	over most of bone
metapodial	one end of non-long bone	none	none	none	none
metapodial	none	none	none	one end of non-long bone	none
metapodial	none	none	none	one end of non-long bone	none
metapodial	one end of non-long bone	none	none	one end of non-long bone	none
metapodial	none	none	none	both prox and dist ends	none
metatarsal	none	none	none	distal shaft	none
metatarsal	none	none	none	distal shaft	none
metatarsal	none	none	none	none	over most of bone
metatarsal	none	none	none	distal shaft	none
metatarsal	none	none	none	one end of non-long bone	none
occipital condyle	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none

pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	over most of bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	over most of bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
phalanx 1	none	none	none	proximal end	none
phalanx 1	proximal end	none	none	none	none
radius	distal end	none	none	none	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	distal end	none	none	none	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	proximal end	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	proximal shaft	none
radius	distal end	none	none	none	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	proximal end	none	none	distal shaft	none
radius	distal end	none	none	none	none
radius	one end of non-long bone	none	none	none	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none















skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	over most of bone	none
sternum	none	none	none	one end of non-long bone	none
sternum	none	none	none	one end of non-long bone	none
sternum	none	none	none	one end of non-long bone	none
sternum	one end of non-long bone	none	none	none	none
sternum	none	none	none	one end of non-long bone	none
tarso metatarsus	distal end	none	none	none	none
tarso metatarsus	none	none	none	both prox and dist ends	none
tarso metatarsus	none	none	none	both prox and dist ends	over most of bone
tarso metatarsus	none	none	none	both prox and dist ends	none
tarso metatarsus	distal shaft	none	none	both prox and dist ends	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none

thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
tibia	distal end	none	none	proximal end	none
tibia	proximal end	none	none	distal shaft	none
tibia	both prox and dis ends	none	none	distal end	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	proximal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	distal shaft	none	none	proximal shaft	none
tibia	proximal end	none	none	none	none
tibia	none	none	none	distal shaft	none
tibia	both prox and dis ends	none	none	none	none
tibia	none	none	none	proximal shaft	none
tibia	proximal end	none	none	distal shaft	none
tibia	proximal end	none	none	none	none
tibia	proximal end	none	none	distal shaft	none
tibia	proximal end	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	proximal end	none	none	none	none
tibia	none	none	none	proximal shaft	none
tibia	proximal end	none	none	none	none
tibia	distal end	none	none	proximal shaft	none
tibia	both prox and dis ends	none	none	none	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	proximal end	none	none	distal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal end	none
tibia	none	none	none	proximal end	proximal shaft
tibia	none	none	none	both prox and dist ends	proximal shaft
tibia	distal end	none	none	none	none
tibia	none	none	none	both prox and dist ends	none
tibia	distal end	none	none	proximal shaft	none
tibia	none	none	none	proximal end	none



tibia	none	none	none	proximal end	none
tibia	proximal shaft	none	none	proximal end	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	proximal end	none	none	over most of bone	none
tibia	none	none	none	proximal shaft	none
tibio-tarsus	distal end	none	none	none	none
tibio-tarsus	none	none	none	distal shaft	none
tibio-tarsus	none	none	none	none	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	proximal end	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal shaft	none
ulna	proximal shaft	none	none	both prox and dist ends	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	distal shaft	none
ulna	proximal end	none	none	distal shaft	none
ulna	none	none	none	both prox and dist ends	distal shaft
ulna	none	none	none	both prox and dist ends	over most of bone
ulna	proximal shaft	none	none	none	none
ulna	none	none	none	distal shaft	none
ulna	proximal shaft	none	none	both prox and dist ends	none
ulna	distal end	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	none
ulna	distal end	none	none	proximal shaft	none
ulna	proximal end	none	none	none	none
ulna	proximal shaft	none	none	both prox and dist ends	none
ulna	over most of bone	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	proximal end	none	none	distal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	over most of bone	none
ulna	none	none	none	none	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none









## APPENDIX Q: Skinner Collection Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
astragalus	over most of bone	none	none	none	none
astragalus	none	none	none	proximal end	none
atlas	none	none	none	one end of non-long bone	none
atlas	none	none	none	over most of bone	none
atlas	none	none	none	both prox and dist ends	none
atlas	none	none	none	both prox and dist ends	none
atlas	none	none	none	one end of non-long bone	none
atlas	none	none	none	over most of bone	none
atlas	none	none	none	over most of bone	none
atlas	none	none	none	both prox and dist ends	none
atlas	none	none	none	both prox and dist ends	none
axis	one end of non-long bone	none	none	one end of non-long bone	none
axis	over most of bone	none	none	over most of bone	none
axis	one end of non-long bone	none	none	none	none
axis	one end of non-long bone	none	none	one end of non-long bone	none
axis	none	none	none	one end of non-long bone	none
axis	none	none	none	over most of bone	none
axis	none	none	none	one end of non-long bone	none
calcaneus	proximal end	none	none	none	none
calcaneus	over most of bone	none	none	none	none
calcaneus	none	none	none	proximal end	none
calcaneus	proximal end	none	none	none	none
calcaneus	proximal end	none	none	none	none
calcaneus	none	none	none	none	proximal shaft
calcaneus	proximal end	none	none	none	none
carpal	none	none	none	distal end	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	none	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	over most of bone	none
caudal vert	one end of non-long bone	none	none	none	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	none	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none

caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	over most of bone	none
caudal vert	none	none	none	over most of bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	one end of non-long bone	none	none	none	none
cervical vert	none	none	none	both prox and dist ends	none
cervical vert	one end of non-long bone	none	none	none	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
femur	distal end	none	none	none	none
femur	proximal end	none	none	none	none
femur	distal shaft	none	none	distal shaft	none
femur	proximal shaft	none	none	none	over most of bone
femur	none	none	none	proximal end	none
femur	distal end	none	none	distal end	distal end
femur	none	none	none	proximal end	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	proximal shaft	none
femur	distal shaft	none	none	none	both prox and dist ends
femur	none	none	none	proximal shaft	proximal shaft
femur	none	none	none	proximal end	none
femur	none	none	none	none	over most of bone
femur	distal shaft	none	none	none	none
femur	distal shaft	none	none	none	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	proximal end	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	proximal shaft
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	both prox and dist ends
femur	none	none	none	distal end	none
fibula	none	none	none	distal shaft	none
fibula	proximal end	none	none	distal shaft	both prox and dist ends
fibula	none	none	none	proximal shaft	none

fibula	none	none	none	distal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	distal shaft	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	proximal shaft	none	none	none	none
fibula	none	none	none	both prox and dist ends	over most of bone
fibula	none	none	none	both prox and dist ends	over most of bone
fibula	none	none	none	distal shaft	none
fibula	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	both prox and dis ends	none	none	both prox and dist ends	over most of bone
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	proximal end	none	none	none	none
humerus	distal end	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	distal end	none	none	none	none
humerus	distal end	none	none	both prox and dist ends	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal end	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal end	none
humerus	distal end	none	none	proximal end	none
humerus	none	none	none	proximal end	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	none	proximal end



humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	proximal end	none
humerus	proximal shaft	none	none	proximal end	none
humerus	proximal end	none	none	none	none
humerus	proximal shaft	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	distal end	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	proximal shaft	none	none	proximal end	none
humerus	none	none	none	distal end	none
humerus	proximal shaft	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	both prox and dis ends	none	none	none	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	over most of bone	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	distal end	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	distal end	none	none	both prox and dist ends	none
humerus	proximal shaft	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	both prox and dist ends	distal shaft
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	distal end	none	none	distal end	none
humerus	none	none	none	distal end	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	distal shaft	none
humerus	proximal end	none	none	over most of bone	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	proximal end	none
humerus	proximal end	none	none	distal shaft	none
humerus	distal end	none	none	none	none
humerus	none	none	none	distal shaft	none

humerus	none	none	none	proximal end	none
humerus	proximal end	none	none	proximal end	none
humerus	none	none	none	proximal end	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	none	over most of bone
humerus	none	none	none	both prox and dist ends	over most of bone
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	proximal end	none	none	none	none
humerus	proximal shaft	none	none	proximal end	none
humerus	none	none	none	both prox and dist ends	none
illium	none	none	none	one end of non-long bone	none
illium	one end of non-long bone	none	none	over most of bone	none
illium	over most of bone	none	none	none	none
illium	none	none	none	one end of non-long bone	none
illium	none	none	none	one end of non-long bone	none
illium	none	none	none	over most of bone	none
illium	proximal end	none	none	proximal end	none
illium	none	none	none	both prox and dist ends	none
ishium	over most of bone	none	none	one end of non-long bone	none
ishium	none	none	none	over most of bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	over most of bone	none	none	none	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	over most of bone	none

lumbar vert	none	none	none	both prox and dist ends	none
lumbar vert	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	none	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	one end of non-long bone	none	none	both prox and dist ends	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	mandibular heal	none	none	none	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none

mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	over most of bone
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	distal end	none
mandible	none	none	none	proximal shaft	none
mandibular hinge	none	none	none	proximal shaft	none
maxilla	none	none	none	both prox and dist ends	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	none	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none

maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	both prox and dist ends	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	both prox and dist ends	none
maxilla	none	none	none	both prox and dist ends	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	both prox and dist ends	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	both prox and dist ends	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	both prox and dist ends	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
metapodial	none	none	none	proximal shaft	none
metapodial	none	none	none	none	distal shaft
metapodial	proximal shaft	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	proximal shaft	none	none	distal end	none
metapodial	none	none	none	proximal end	none
metapodial	distal end	none	none	none	distal shaft
metapodial	proximal shaft	none	none	distal shaft	none
metapodial	proximal end	none	none	none	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	over most of bone	none	none	distal shaft	none
metapodial	distal end	none	none	none	over most of bone
metapodial	none	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	proximal end	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none

metapodial	distal shaft	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	over most of bone	none	none	both prox and dist ends	none
metapodial	none	none	none	proximal end	none
metapodial	none	none	none	distal shaft	none
metatarsal	none	none	none	proximal shaft	proximal shaft
metatarsal	none	none	none	none	over most of bone
metatarsal	none	none	none	proximal shaft	none
metatarsal	none	none	none	distal shaft	none
metatarsal	none	none	none	both prox and dist ends	none
metatarsal	none	none	none	distal shaft	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	one end of non-long bone	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	one end of non-long bone	none
occipital condyle	over most of bone	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	one end of non-long bone	none	none	over most of bone	none
occipital condyle	none	none	none	one end of non-long bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	both prox and dist ends	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	one end of non-long bone	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	one end of non-long bone	none
occipital condyle	none	none	none	one end of non-long bone	none
occipital condyle	none	none	none	over most of bone	none

pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	proximal end	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	one end of non-long bone
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	over most of bone	none
pelvis (acetabulum)	over most of bone	none	none	both prox and dist ends	none
pelvis (acetabulum)	one end of non-long bone	none	none	over most of bone	one end of non-long bone
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
phalanx 1	both prox and dis ends	none	none	none	distal shaft
phalanx 1	none	none	none	distal shaft	none

phalanx 1	none	none	none	distal shaft	none
phalanx 1	proximal end	none	none	proximal shaft	none
phalanx 1	none	none	none	distal shaft	none
phalanx 1	distal shaft	none	none	none	none
phalanx 1	proximal end	none	none	none	none
phalanx 1	none	none	none	proximal end	none
phalanx 1	over most of bone	none	none	none	none
phalanx 1	none	none	none	proximal shaft	none
phalanx 1	distal end	none	none	proximal shaft	none
phalanx 2	none	none	none	none	proximal shaft
phalanx 2	over most of bone	none	none	proximal end	none
phalanx 2	distal end	none	none	none	none
phalanx 2	none	none	none	proximal end	none
phalanx 2	none	none	none	distal end	none
phalanx 2	none	none	none	both prox and dist ends	none
phalanx 2	none	none	none	proximal shaft	none
phalanx 2	none	none	none	both prox and dist ends	none
phalanx 2	none	none	none	proximal shaft	none
phalanx 2	none	none	none	distal shaft	none
phalanx 2	over most of bone	none	none	none	none
phalanx 2	none	none	none	distal shaft	none
phalanx 3	none	none	none	proximal end	none
phalanx 3	none	none	none	both prox and dist ends	none
phalanx 3	none	none	none	distal shaft	none
phalanx 3	none	none	none	distal shaft	none
phalanx 3	none	none	none	distal shaft	none
phalanx 3	none	none	none	distal end	none
phalanx 3	none	none	none	proximal end	none
phalanx 3	none	none	none	proximal shaft	none
pubis	none	none	none	one end of non-long bone	none
pubis	none	none	none	one end of non-long bone	none
pubis	none	none	none	over most of bone	none
pubis	none	none	none	both prox and dist ends	distal end
radius	none	none	none	distal shaft	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	proximal end	none	none	none	none
radius	distal shaft	none	none	distal shaft	distal shaft
radius	none	none	none	distal shaft	none
radius	proximal end	none	none	none	none
radius	none	none	none	distal shaft	none
radius	distal shaft	none	none	distal shaft	none
radius	none	none	none	distal shaft	none



radius	none	none	none	distal shaft	over most of bone
radius	none	none	none	distal shaft	distal shaft
radius	none	none	none	distal end	none
radius	none	none	none	distal end	distal end
radius	none	none	none	distal end	none
radius	distal shaft	none	none	both prox and dist ends	none
radius	none	none	none	distal end	none
radius	none	none	none	distal end	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	proximal shaft
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	distal shaft	none	none	distal end	none
radius	none	none	none	none	none
radius	distal shaft	none	none	both prox and dist ends	none
radius	none	none	none	distal end	none
radius	over most of bone	none	none	proximal shaft	over most of bone
radius	proximal shaft	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	distal end	none	none	none	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	distal end	none	none	none	none
radius	none	none	none	distal shaft	none
radius	proximal shaft	none	none	none	none
radius	none	none	none	distal shaft	none
radius	both prox and dis ends	none	none	distal end	none
radius	proximal end	none	none	none	none
radius	none	none	none	distal end	over most of bone
radius	none	none	none	distal end	distal shaft
radius	none	none	none	proximal end	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	proximal end	none	none	none	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal end	none
radius	none	none	none	both prox and dist ends	over most of bone
radius	none	none	none	over most of bone	none

radius	proximal end	none	none	both prox and dist ends	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	distal end	none
radius	none	none	none	both prox and dist ends	none
radius	proximal shaft	none	none	none	none
radius	proximal shaft	none	none	proximal shaft	none
radius	distal end	none	none	none	none
radius	proximal end	none	none	none	none
radius	none	none	none	proximal shaft	none
radius	distal end	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	proximal end	none	none	none	none
radius	distal end	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none



rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none



rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none



rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	one end of non-long bone	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none



rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	one end of non-long bone
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	one end of non-long bone
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	one end of non-long bone
rib	one end of non-long bone	none	none	one end of non-long bone	one end of non-long bone
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none

rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	none	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	one end of non-long bone
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none

rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	none	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	over most of bone

rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	one end of non-long bone
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
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rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	one end of non-long bone

rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none



rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	over most of bone
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none

rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	none	one end of non-long bone
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	over most of bone	none	none	both prox and dist ends	none
rib	over most of bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	one end of non-long bone
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
sacrum	one end of non-long bone	none	none	both prox and dist ends	none
sacrum	none	none	none	over most of bone	none
sacrum	none	none	none	over most of bone	none
sacrum	none	none	none	one end of non-long bone	none
sacrum	none	none	none	over most of bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	proximal end	none	none	both prox and dist ends	none
scapula	none	none	none	one end of non-long bone	none



scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	both prox and dist ends	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	over most of bone
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	over most of bone	none	none	one end of non-long bone	none
scapula	over most of bone	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	over most of bone	none	none	none	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	distal end	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	distal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	over most of bone	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	both prox and dis ends	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	both prox and dist ends	none
scapula	distal end	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none

scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	both prox and dist ends	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	over most of bone	none	none	none	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	both prox and dist ends	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	proximal end	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none



scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	proximal end	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
sesamoid	none	none	none	both prox and dist ends	none
sesamoid	none	none	none	both prox and dist ends	none
skull	none	none	none	over most of bone	none
skull	over most of bone	none	none	none	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	none	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none































skull fragment	none	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	none	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	none	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	none	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	one end of non-long bone
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	both prox and dist ends	none
sternum	none	none	none	one end of non-long bone	none
sternum	proximal end	none	none	none	none
sternum	one end of non-long bone	none	none	none	none
sternum	distal end	none	none	none	none
sternum	over most of bone	none	none	none	none
sternum	none	none	none	proximal shaft	none
sternum	none	none	none	distal shaft	none
sternum	none	none	none	distal shaft	none
sternum	proximal end	none	none	distal end	none
sternum	distal end	none	none	distal end	none
sternum	proximal end	none	none	none	none
sternum	none	none	none	distal end	none
sternum	one end of non-long bone	none	none	none	none
sternum	one end of non-long bone	none	none	one end of non-long bone	none
tarsal	proximal shaft	none	none	none	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	none	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none

thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	over most of bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	none	none	none	none	none
thoracic vert	none	none	none	over most of bone	none
tibia	distal shaft	none	none	distal shaft	distal shaft
tibia	distal shaft	none	none	both prox and dist ends	distal shaft
tibia	proximal shaft	none	none	none	none
tibia	none	none	none	proximal shaft	proximal shaft
tibia	over most of bone	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	proximal shaft	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	distal shaft	none
tibia	distal shaft	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	none	both prox and dist ends
tibia	none	none	none	distal shaft	none
tibia	proximal shaft	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	proximal shaft
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	distal shaft	none	none	proximal shaft	none
tibia	distal shaft	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	distal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	proximal shaft	none	none	proximal shaft	none
tibia	proximal shaft	none	none	both prox and dist ends	none
tibia	distal shaft	none	none	distal shaft	none

tibia	proximal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	none	none
tibia	both prox and dis ends	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	distal end	none	none	proximal shaft	none
tibia	proximal shaft	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	proximal end	none	none	none	none
tibia	none	none	none	distal shaft	none
tibia	both prox and dis ends	none	none	distal end	none
tibia	proximal end	none	none	none	none
tibia	proximal shaft	none	none	distal end	none
tibia	none	none	none	both prox and dist ends	none
tibia	both prox and dis ends	none	none	both prox and dist ends	distal shaft
tibia	distal shaft	none	none	distal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	distal shaft	none	none	both prox and dist ends	none
tibia	distal shaft	none	none	none	none
tibia	distal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	proximal end	none	none	proximal shaft	none
tibia	none	none	none	distal shaft	none
tibia	proximal end	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	distal shaft
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	distal end
tibia	distal shaft	none	none	both prox and dist ends	distal shaft
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibio-tarsus	distal end	none	none	one end of non-long bone	none
tibio-tarsus	distal end	none	none	proximal shaft	none
tibio-tarsus	distal end	none	none	proximal shaft	none
tibio-tarsus	none	none	none	distal shaft	none
tibio-tarsus	none	none	none	proximal shaft	none
tibio-tarsus	none	none	none	both prox and dist ends	none
tooth fragments	one end of non-long bone	none	none	one end of non-long bone	none
ulna	distal end	none	none	both prox and dist ends	over most of bone

ulna	none	none	none	none	over most of bone
ulna	none	none	none	proximal end	proximal shaft
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	over most of bone
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	none	none
ulna	proximal shaft	none	none	both prox and dist ends	none
ulna	none	none	none	over most of bone	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	distal shaft	distal shaft
ulna	none	none	none	both prox and dist ends	distal end
ulna	none	none	none	proximal end	none
ulna	over most of bone	none	none	none	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	over most of bone
ulna	none	none	none	both prox and dist ends	none
ulna	distal shaft	none	none	distal shaft	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	over most of bone	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	distal shaft	none
ulna	proximal end	none	none	both prox and dist ends	none
ulna	proximal end	none	none	both prox and dist ends	none
ulna	both prox and dis ends	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	proximal end	none
ulna	proximal end	none	none	proximal end	none
ulna	none	none	none	proximal shaft	none
ulna	proximal shaft	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	proximal end	none

ulna	none	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	proximal end	none	none	none	proximal end
ulna	both prox and dis ends	none	none	none	none
ulna	both prox and dis ends	none	none	distal shaft	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	proximal shaft
ulna	none	none	none	both prox and dist ends	none
ulna	distal shaft	none	none	distal shaft	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	proximal shaft	none
unidentified fragment	none	none	none	proximal shaft	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	distal shaft	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	unknown
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	proximal shaft	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	over most of bone
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none



unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	one end of non-long bone	none	none	one end of non-long bone	none
unidentified fragment	one end of non-long bone	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	distal shaft	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	one end of non-long bone	none	none	none	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	one end of non-long bone	none	none	none	none
unidentified fragment	none	none	none	distal shaft	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	proximal end	none	none	none	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	distal shaft	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	one end of non-long bone
unidentified fragment	none	none	none	over most of bone	none



unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	both prox and dist ends	over most of bone
unidentified fragment	one end of non-long bone	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	one end of non-long bone	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	over most of bone	none
unknown tooth	one end of non-long bone	none	none	none	none
unknown tooth	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	none	none	none	none	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	over most of bone	none
vertebra	one end of non-long bone	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	none	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	none	none
vertebra	none	none	none	over most of bone	none

vertebra	one end of non-long bone	none	none	none	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	over most of bone	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations/location
astragalus	over most of bone	none	none	none	none
astragalus	none	none	none	proximal end	none
atlas	none	none	none	one end of non-long bone	none
atlas	none	none	none	over most of bone	none
atlas	none	none	none	both prox and dist ends	none
atlas	none	none	none	both prox and dist ends	none
atlas	none	none	none	one end of non-long bone	none
atlas	none	none	none	over most of bone	none
atlas	none	none	none	over most of bone	none
atlas	none	none	none	both prox and dist ends	none
atlas	none	none	none	both prox and dist ends	none
axis	one end of non-long bone	none	none	one end of non-long bone	none
axis	over most of bone	none	none	over most of bone	none
axis	one end of non-long bone	none	none	none	none
axis	one end of non-long bone	none	none	one end of non-long bone	none
axis	none	none	none	one end of non-long bone	none
axis	none	none	none	over most of bone	none
axis	none	none	none	one end of non-long bone	none
calcaneus	proximal end	none	none	none	none

calcaneus	over most of bone	none	none	none	none
calcaneus	none	none	none	proximal end	none
calcaneus	proximal end	none	none	none	none
calcaneus	proximal end	none	none	none	none
calcaneus	none	none	none	none	proximal shaft
calcaneus	proximal end	none	none	none	none
carpal	none	none	none	distal end	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	none	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	over most of bone	none
caudal vert	one end of non-long bone	none	none	none	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	over most of bone	none
caudal vert	none	none	none	over most of bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	none	none	none	one end of non-long bone	none
caudal vert	one end of non-long bone	none	none	none	none
caudal vert	none	none	none	both prox and dist ends	none
caudal vert	one end of non-long bone	none	none	none	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	one end of non-long bone	none	none	none	none
cervical vert	none	none	none	both prox and dist ends	none
cervical vert	one end of non-long bone	none	none	none	none
cervical vert	none	none	none	one end of non-long bone	none
cervical vert	none	none	none	one end of non-long bone	none
femur	distal end	none	none	none	none
femur	proximal end	none	none	none	none
femur	distal shaft	none	none	distal shaft	none
femur	proximal shaft	none	none	none	over most of bone
femur	none	none	none	proximal end	none
femur	distal end	none	none	distal end	distal end
femur	none	none	none	proximal end	none
femur	none	none	none	both prox and dist ends	none

femur	none	none	none	proximal shaft	none
femur	distal shaft	none	none	none	both prox and dist ends
femur	none	none	none	proximal shaft	proximal shaft
femur	none	none	none	proximal end	none
femur	none	none	none	none	over most of bone
femur	distal shaft	none	none	none	none
femur	distal shaft	none	none	none	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	proximal end	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	proximal shaft
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	none
femur	none	none	none	both prox and dist ends	both prox and dist ends
femur	none	none	none	distal end	none
fibula	none	none	none	distal shaft	none
fibula	proximal end	none	none	distal shaft	both prox and dist ends
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	distal shaft	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	distal shaft	none
fibula	none	none	none	proximal shaft	none
fibula	proximal shaft	none	none	none	none
fibula	none	none	none	both prox and dist ends	over most of bone
fibula	none	none	none	both prox and dist ends	over most of bone
fibula	none	none	none	distal shaft	none
fibula	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	both prox and dis ends	none	none	both prox and dist ends	over most of bone
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	proximal end	none	none	none	none

humerus	distal end	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	distal end	none	none	none	none
humerus	distal end	none	none	both prox and dist ends	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal end	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal end	none
humerus	distal end	none	none	proximal end	none
humerus	none	none	none	proximal end	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	none	proximal end
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	none	none	none	proximal end	none
humerus	proximal shaft	none	none	proximal end	none
humerus	proximal end	none	none	none	none
humerus	proximal shaft	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	distal end	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	proximal shaft	none	none	proximal end	none
humerus	none	none	none	distal end	none
humerus	proximal shaft	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	both prox and dis ends	none	none	none	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	over most of bone	none	none	distal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	distal end	none	none	none	none

humerus	proximal end	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	distal end	none	none	both prox and dist ends	none
humerus	proximal shaft	none	none	none	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	both prox and dist ends	distal shaft
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	proximal shaft	none
humerus	distal end	none	none	distal end	none
humerus	none	none	none	distal end	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	distal shaft	none
humerus	proximal end	none	none	over most of bone	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	none	none
humerus	proximal end	none	none	proximal end	none
humerus	proximal end	none	none	distal shaft	none
humerus	distal end	none	none	none	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	proximal end	none
humerus	proximal end	none	none	proximal end	none
humerus	none	none	none	proximal end	none
humerus	none	none	none	distal shaft	none
humerus	none	none	none	none	over most of bone
humerus	none	none	none	both prox and dist ends	over most of bone
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	none	none	none	both prox and dist ends	none
humerus	proximal end	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	over most of bone	none
humerus	none	none	none	both prox and dist ends	none
humerus	none	none	none	proximal shaft	none
humerus	proximal end	none	none	none	none
humerus	proximal shaft	none	none	proximal end	none
humerus	none	none	none	both prox and dist ends	none
illium	none	none	none	one end of non-long bone	none
illium	one end of non-long bone	none	none	over most of bone	none
illium	over most of bone	none	none	none	none
illium	none	none	none	one end of non-long bone	none
illium	none	none	none	one end of non-long bone	none
illium	none	none	none	over most of bone	none

illium	proximal end	none	none	proximal end	none
illium	none	none	none	both prox and dist ends	none
ishium	over most of bone	none	none	one end of non-long bone	none
ishium	none	none	none	over most of bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	over most of bone	none	none	none	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	one end of non-long bone	none	none	one end of non-long bone	none
lumbar vert	none	none	none	one end of non-long bone	none
lumbar vert	none	none	none	over most of bone	none
lumbar vert	none	none	none	both prox and dist ends	none
lumbar vert	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	none	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	one end of non-long bone	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	one end of non-long bone	none	none	both prox and dist ends	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none

mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	mandibular heal	none
mandible	mandibular heal	none	none	none	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	mandibular heal	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	one end of non-long bone	none
mandible	none	none	none	over most of bone	over most of bone
mandible	none	none	none	both prox and dist ends	none
mandible	none	none	none	distal end	none
mandible	none	none	none	proximal shaft	none
mandibular hinge	none	none	none	proximal shaft	none
maxilla	none	none	none	both prox and dist ends	none
maxilla	none	none	none	over most of bone	none
maxilla	one end of non-long bone	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	one end of non-long bone	none
maxilla	none	none	none	one end of non-long bone	none





metapodial	none	none	none	proximal shaft	none
metapodial	none	none	none	none	distal shaft
metapodial	proximal shaft	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	proximal shaft	none	none	distal end	none
metapodial	none	none	none	proximal end	none
metapodial	distal end	none	none	none	distal shaft
metapodial	proximal shaft	none	none	distal shaft	none
metapodial	proximal end	none	none	none	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	over most of bone	none	none	distal shaft	none
metapodial	distal end	none	none	none	over most of bone
metapodial	none	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	proximal end	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	distal shaft	none	none	proximal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	distal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	none	none	none	proximal shaft	none
metapodial	over most of bone	none	none	both prox and dist ends	none
metapodial	none	none	none	proximal end	none
metapodial	none	none	none	distal shaft	none
metatarsal	none	none	none	proximal shaft	proximal shaft
metatarsal	none	none	none	none	over most of bone
metatarsal	none	none	none	proximal shaft	none
metatarsal	none	none	none	distal shaft	none
metatarsal	none	none	none	both prox and dist ends	none
metatarsal	none	none	none	distal shaft	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	one end of non-long bone	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	one end of non-long bone	none
occipital condyle	over most of bone	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none

occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	one end of non-long bone	none	none	over most of bone	none
occipital condyle	none	none	none	one end of non-long bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	both prox and dist ends	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	one end of non-long bone	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	none	none	none	over most of bone	none
occipital condyle	one end of non-long bone	none	none	one end of non-long bone	none
occipital condyle	none	none	none	one end of non-long bone	none
occipital condyle	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	proximal end	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	one end of non-long bone
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none

pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	both prox and dist ends	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	over most of bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	over most of bone	none
pelvis (acetabulum)	over most of bone	none	none	both prox and dist ends	none
pelvis (acetabulum)	one end of non-long bone	none	none	over most of bone	one end of non-long bone
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	one end of non-long bone	none	none	one end of non-long bone	none
pelvis (acetabulum)	none	none	none	one end of non-long bone	none
phalanx 1	both prox and dis ends	none	none	none	distal shaft
phalanx 1	none	none	none	distal shaft	none
phalanx 1	none	none	none	distal shaft	none
phalanx 1	proximal end	none	none	proximal shaft	none
phalanx 1	none	none	none	distal shaft	none
phalanx 1	distal shaft	none	none	none	none
phalanx 1	proximal end	none	none	none	none
phalanx 1	none	none	none	proximal end	none
phalanx 1	over most of bone	none	none	none	none
phalanx 1	none	none	none	proximal shaft	none
phalanx 1	distal end	none	none	proximal shaft	none
phalanx 2	none	none	none	none	proximal shaft
phalanx 2	over most of bone	none	none	proximal end	none
phalanx 2	distal end	none	none	none	none
phalanx 2	none	none	none	proximal end	none
phalanx 2	none	none	none	distal end	none
phalanx 2	none	none	none	both prox and dist ends	none
phalanx 2	none	none	none	proximal shaft	none
phalanx 2	none	none	none	both prox and dist ends	none
phalanx 2	none	none	none	proximal shaft	none
phalanx 2	none	none	none	distal shaft	none
phalanx 2	over most of bone	none	none	none	none
phalanx 2	none	none	none	distal shaft	none
phalanx 3	none	none	none	proximal end	none
phalanx 3	none	none	none	both prox and dist ends	none
phalanx 3	none	none	none	distal shaft	none

phalanx 3	none	none	none	distal shaft	none
phalanx 3	none	none	none	distal shaft	none
phalanx 3	none	none	none	distal end	none
phalanx 3	none	none	none	proximal end	none
phalanx 3	none	none	none	proximal shaft	none
pubis	none	none	none	one end of non-long bone	none
pubis	none	none	none	one end of non-long bone	none
pubis	none	none	none	over most of bone	none
pubis	none	none	none	both prox and dist ends	distal end
radius	none	none	none	distal shaft	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	proximal end	none	none	none	none
radius	distal shaft	none	none	distal shaft	distal shaft
radius	none	none	none	distal shaft	none
radius	proximal end	none	none	none	none
radius	none	none	none	distal shaft	none
radius	distal shaft	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	over most of bone
radius	none	none	none	distal shaft	distal shaft
radius	none	none	none	distal end	none
radius	none	none	none	distal end	distal end
radius	none	none	none	distal end	none
radius	distal shaft	none	none	both prox and dist ends	none
radius	none	none	none	distal end	none
radius	none	none	none	distal end	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	proximal shaft
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	distal shaft	none	none	distal end	none
radius	none	none	none	none	none
radius	distal shaft	none	none	both prox and dist ends	none
radius	none	none	none	distal end	none
radius	over most of bone	none	none	proximal shaft	over most of bone
radius	proximal shaft	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none

radius	distal end	none	none	none	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	distal end	none	none	none	none
radius	none	none	none	distal shaft	none
radius	proximal shaft	none	none	none	none
radius	none	none	none	distal shaft	none
radius	both prox and dis ends	none	none	distal end	none
radius	proximal end	none	none	none	none
radius	none	none	none	distal end	over most of bone
radius	none	none	none	distal end	distal shaft
radius	none	none	none	proximal end	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	proximal shaft	none
radius	proximal end	none	none	none	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal end	none
radius	none	none	none	both prox and dist ends	over most of bone
radius	none	none	none	over most of bone	none
radius	proximal end	none	none	both prox and dist ends	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	both prox and dist ends	none
radius	none	none	none	distal end	none
radius	none	none	none	both prox and dist ends	none
radius	proximal shaft	none	none	none	none
radius	proximal shaft	none	none	proximal shaft	none
radius	distal end	none	none	none	none
radius	proximal end	none	none	none	none
radius	none	none	none	proximal shaft	none
radius	distal end	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	distal shaft	none
radius	none	none	none	proximal shaft	none
radius	none	none	none	distal shaft	none
radius	proximal end	none	none	none	none
radius	distal end	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none







rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none

rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none



rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none

rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none

rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	one end of non-long bone
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	none	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none

rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	one end of non-long bone
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	none	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none





rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	one end of non-long bone
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	none	none
rib	none	none	none	both prox and dist ends	none



rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	one end of non-long bone	none	none	both prox and dist ends	over most of bone
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none

rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	none	one end of non-long bone
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	none	none	none	over most of bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	none
rib	over most of bone	none	none	both prox and dist ends	none
rib	over most of bone	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none

rib	none	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	both prox and dist ends	none
rib	one end of non-long bone	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	one end of non-long bone	one end of non-long bone
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	both prox and dist ends	none
rib	none	none	none	none	none
rib	none	none	none	one end of non-long bone	none
rib	none	none	none	both prox and dist ends	none
sacrum	one end of non-long bone	none	none	both prox and dist ends	none
sacrum	none	none	none	over most of bone	none
sacrum	none	none	none	over most of bone	none
sacrum	none	none	none	one end of non-long bone	none
sacrum	none	none	none	over most of bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	proximal end	none	none	both prox and dist ends	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	both prox and dist ends	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	over most of bone
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	over most of bone	none	none	one end of non-long bone	none
scapula	over most of bone	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	over most of bone	none	none	none	none

scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	distal end	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	distal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	over most of bone	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	both prox and dis ends	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	both prox and dist ends	none
scapula	distal end	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	both prox and dist ends	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none

scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	over most of bone	none	none	none	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	both prox and dist ends	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	proximal end	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	proximal end	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	both prox and dist ends	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	over most of bone	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none

scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	proximal end	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	proximal end	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	one end of non-long bone	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	one end of non-long bone	none
scapula	none	none	none	over most of bone	none
scapula	proximal end	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
scapula	none	none	none	over most of bone	none
sesamoid	none	none	none	both prox and dist ends	none
sesamoid	none	none	none	both prox and dist ends	none
skull	none	none	none	over most of bone	none
skull	over most of bone	none	none	none	none
skull fragment	none	none	none	over most of bone	none































skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	both prox and dist ends	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	both prox and dist ends	none
skull fragment	none	none	none	over most of bone	none
skull fragment	over most of bone	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	both prox and dist ends	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	one end of non-long bone	none	none	none	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	none	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	one end of non-long bone	none	none	none	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	one end of non-long bone
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	one end of non-long bone	none
skull fragment	none	none	none	over most of bone	one end of non-long bone
skull fragment	none	none	none	over most of bone	none
skull fragment	none	none	none	both prox and dist ends	none
sternum	none	none	none	one end of non-long bone	none
sternum	proximal end	none	none	none	none

sternum	one end of non-long bone	none	none	none	none
sternum	distal end	none	none	none	none
sternum	over most of bone	none	none	none	none
sternum	none	none	none	proximal shaft	none
sternum	none	none	none	distal shaft	none
sternum	none	none	none	distal shaft	none
sternum	proximal end	none	none	distal end	none
sternum	distal end	none	none	distal end	none
sternum	proximal end	none	none	none	none
sternum	none	none	none	distal end	none
sternum	one end of non-long bone	none	none	none	none
sternum	one end of non-long bone	none	none	one end of non-long bone	none
tarsal	proximal shaft	none	none	none	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	none	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	over most of bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	over most of bone	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	none	none	none	one end of non-long bone	none
thoracic vert	one end of non-long bone	none	none	one end of non-long bone	none
thoracic vert	none	none	none	none	none
thoracic vert	none	none	none	over most of bone	none
tibia	distal shaft	none	none	distal shaft	distal shaft
tibia	distal shaft	none	none	both prox and dist ends	distal shaft
tibia	proximal shaft	none	none	none	none
tibia	none	none	none	proximal shaft	proximal shaft
tibia	over most of bone	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	proximal shaft	none	none	proximal shaft	none

tibia	none	none	none	proximal shaft	none
tibia	none	none	none	distal shaft	none
tibia	distal shaft	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	none	both prox and dist ends
tibia	none	none	none	distal shaft	none
tibia	proximal shaft	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	proximal shaft
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	distal shaft	none	none	proximal shaft	none
tibia	distal shaft	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	distal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	distal shaft	none
tibia	proximal shaft	none	none	proximal shaft	none
tibia	proximal shaft	none	none	both prox and dist ends	none
tibia	distal shaft	none	none	distal shaft	none
tibia	proximal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	none	none
tibia	both prox and dis ends	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	distal end	none	none	proximal shaft	none
tibia	proximal shaft	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	proximal end	none	none	none	none
tibia	none	none	none	distal shaft	none
tibia	both prox and dis ends	none	none	distal end	none
tibia	proximal end	none	none	none	none
tibia	proximal shaft	none	none	distal end	none
tibia	none	none	none	both prox and dist ends	none
tibia	both prox and dis ends	none	none	both prox and dist ends	distal shaft
tibia	distal shaft	none	none	distal shaft	none
tibia	none	none	none	both prox and dist ends	none
tibia	distal shaft	none	none	both prox and dist ends	none
tibia	distal shaft	none	none	none	none
tibia	distal shaft	none	none	both prox and dist ends	none
tibia	none	none	none	distal shaft	none



tibia	proximal end	none	none	proximal shaft	none
tibia	none	none	none	distal shaft	none
tibia	proximal end	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	distal shaft
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	both prox and dist ends	distal end
tibia	distal shaft	none	none	both prox and dist ends	distal shaft
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	over most of bone	none
tibia	none	none	none	both prox and dist ends	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia	none	none	none	proximal shaft	none
tibia-tarsus	distal end	none	none	one end of non-long bone	none
tibio-tarsus	distal end	none	none	proximal shaft	none
tibio-tarsus	distal end	none	none	proximal shaft	none
tibio-tarsus	none	none	none	distal shaft	none
tibio-tarsus	none	none	none	proximal shaft	none
tibio-tarsus	none	none	none	both prox and dist ends	none
tooth fragments	one end of non-long bone	none	none	one end of non-long bone	none
ulna	distal end	none	none	both prox and dist ends	over most of bone
ulna	none	none	none	none	over most of bone
ulna	none	none	none	proximal end	proximal shaft
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	distal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	over most of bone
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	none	none
ulna	proximal shaft	none	none	both prox and dist ends	none
ulna	none	none	none	over most of bone	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	distal shaft	distal shaft
ulna	none	none	none	both prox and dist ends	distal end
ulna	none	none	none	proximal end	none
ulna	over most of bone	none	none	none	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none

ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	over most of bone
ulna	none	none	none	both prox and dist ends	none
ulna	distal shaft	none	none	distal shaft	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	over most of bone	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	distal shaft	none
ulna	proximal end	none	none	both prox and dist ends	none
ulna	proximal end	none	none	both prox and dist ends	none
ulna	both prox and dis ends	none	none	both prox and dist ends	none
ulna	none	none	none	both prox and dist ends	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	proximal end	none
ulna	proximal end	none	none	proximal end	none
ulna	none	none	none	proximal shaft	none
ulna	proximal shaft	none	none	both prox and dist ends	none
ulna	none	none	none	proximal end	none
ulna	proximal end	none	none	proximal end	none
ulna	none	none	none	proximal end	none
ulna	none	none	none	both prox and dist ends	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	proximal end	none	none	none	proximal end
ulna	both prox and dis ends	none	none	none	none
ulna	both prox and dis ends	none	none	distal shaft	none
ulna	proximal shaft	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	proximal shaft	proximal shaft
ulna	none	none	none	both prox and dist ends	none
ulna	distal shaft	none	none	distal shaft	none
ulna	proximal end	none	none	none	none
ulna	none	none	none	proximal shaft	none
ulna	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none





unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	one end of non-long bone	none	none	none	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	over most of bone	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	one end of non-long bone	none	none	none	none
unidentified fragment	none	none	none	distal shaft	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	proximal end	none	none	none	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	distal shaft	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	one end of non-long bone
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	none	none
unidentified fragment	none	none	none	both prox and dist ends	over most of bone
unidentified fragment	one end of non-long bone	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	over most of bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	one end of non-long bone	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	both prox and dist ends	none
unidentified fragment	none	none	none	one end of non-long bone	none
unidentified fragment	none	none	none	over most of bone	none
unknown tooth	one end of non-long bone	none	none	none	none
unknown tooth	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	none	none	none	none	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none

vertebra	none	none	none	over most of bone	none
vertebra	one end of non-long bone	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	one end of non-long bone	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	none	none
vertebra	none	none	none	over most of bone	none
vertebra	one end of non-long bone	none	none	none	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	one end of non-long bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	over most of bone	none	none	over most of bone	none
vertebra	none	none	none	over most of bone	none
vertebra	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	both prox and dist ends	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none
zygomatic arch	none	none	none	one end of non-long bone	none

zygomatic arch	none	none	none	one end of non-long bone	none
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## APPENDIX R: Gladysvale Bone Damage

Element	punctates/location	scouring/location	acid etching/location	crenulated edges/location	striations
humerus	none	none	none	both prox and dist ends	over most of bone
humerus	proximal end	none	none	over most of bone	over most of bone
mandible	none	none	none	over most of bone	none
mandible	none	none	none	over most of bone	none
mandible	none	none	none	distal end	none
mandible	mandibular heal	none	none	mandibular heal	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	over most of bone	none
maxilla	none	none	none	proximal end	none
pelvis (acetabulum)	none	none	none	over most of bone	none
radius	none	none	none	distal shaft	none
skull	over most of bone	none	none	distal end	none
skull	distal end	none	none	none	none
tibia	none	none	none	proximal end	over most of bone
tibia	none	none	none	both prox and dist ends	over most of bone
tibia	none	none	none	over most of bone	over most of bone