ZIC PARIS FIELDS (commonly used)

FIELD NAME	Use by ZIC
CL	class
ORD	order
FAM	family
SUBFAM	subfamily
GEN	genus
SP	species
SPA	"cf." or "or"
VAR	variety - use to add domestic
SPEG	body region
SPENM	name of element
SPEPS	position
SPECNM	common name
SPEP	part
SPEAA	x-mend and f-frag
SPENA	artificat
IDR	i.d. by
IDREM	remarks related to identification
QTY	quantity
SEX	sex
SEXREM	sex remarks
AG	age
AGREM	age remarks
EXPT	condition
PATH	pathology
BURN	burning
TOOTH	tooth marks
CUT	cuts
WT	weight
LET	total length
STL	stratigraphic position
STREM	stratigraphic remarks
HD	horizontal datum
VD	vertical datum
CN	cat. no.
AN	ZIC site reference no.
ASSN	remarks
XR	reference to specimen in collection
ZBN	borden number (site no.)
ZNA	site name
ZNAA	alternative site name - Parks Canada
ZLOC	site location
ZPR	province
ZDAT	dates
ZCU	culture
ZFE	cultural features
ZREM	comments
ZLU	local reference numbers

Entry Rules for Upper and Lower Case and Punctuation

FIELD NAME	DESCRIPTION OF RULES
CL (class)	upper case for first letter and no punctuation
ORD (order)	upper case for first letter and no punctuation
FAM (family)	upper case for first letter and no punctuation
SUBFAM (subfamily)	upper case for first letter and no punctuation
GEN (genus)	upper case for first letter and no punctuation
SP (species)	lower case and no punctuation
SPECNM (common name)	lower case ie. lake trout only punctuation used is hyphen ie. blue-winged teal upper case for first letter of proper name ie. Atlantic cod SM small mammal MM medium mammal LM large mammal MLM medium large mammal SMM small medium mammal UM unidentified mammal

	SB small bird MB medium bird LB large bird MLB medium large bird SMB small medium bird UB unidentified bird SF small fish MF medium fish LF large fish UF unifentified fish CU class uncertain or unidentified class
IDR (I.D. by)	use upper case and no punctuation ie. DB
STL (providence field)	varies with each site
HD (providence field)	varies with each site
STREM (providence field)	varies with each site
VD (providence field)	varies with each site
AN (ZIC site reference no.)	integer
ZBN (borden number)	varies with each site ie. BcGr-1 where B(upper) c(lower) G(upper) r(lower) -(hyphen) 1(integer)
CN (cat. no.)	varies with each site
ZNAA (alternate site)	varies with each site ie. 25G 1H
SPA	lower case and period after cf ie. cf. or cf.;or
VAR (variety)	lower case ie. domestic
SPEG (region)	lower case and no period after abbreviation ie. pvg
SPEPS (position)	lower case and no period after abbreviation ie. ax
SPEP (part)	lower case except for L. or R. and names of teeth ie. 1P2 use period after abbreviation ie. mid. .5
AG (age)	lower case and no punctuation ie. of entries a a/ya j; >6 months
AGREM (age remarks)	lower or upper case and punctuation used
SEX	lower case and no punctuation
SEXREM (sex remarks)	lower or upper case and punctuation used
PATH (pathology)	lower case ie. oth use ";" to separate entries ie. fra;teeth but do not use ";" in the comment section ie. bu;mr;meat removal cut?, scars on shaft from hacking for butchery , do not use ";" in comments section ", : - " etc.
BURN (burning)	lower case ie. oth use ";" to separate entries ie. fra;teeth but do not use ";" in the comment section ie. bu;mr;meat removal cut?, scars on shaft from hacking for butchery , do not use ";" in comments section ", : - " etc.
CUT (cuts)	lower case ie. oth use ";" to separate entries ie. fra;teeth but do not use ";" in the comment section ie. bu;mr;meat removal cut?, scars on shaft from hacking for butchery , do not use ";" in comments section ", : - " etc.
SPENA (artifact)	lower case ie. oth use ";" to separate entries ie. fra;teeth but do not use ";" in the comment section ie. bu;mr;meat removal cut?, scars on shaft from hacking for butchery , do not use ";" in comments section ", : - " etc.
EXPT (condition)	lower case ie. oth use ";" to separate entries ie. fra;teeth but do not use ";" in the comment section ie. bu;mr;meat removal cut?, scars on shaft from hacking for butchery , do not use ";" in comments section ", : - " etc.
TOOTH (tooth marks)	lower case ie. oth use ";" to separate entries ie. fra;teeth but do not use ";" in the comment section ie. bu;mr;meat removal cut?, scars on shaft from hacking for butchery , do not use ";" in comments section ", : - " etc.
SPEAA (matched pieces)	lower case ie. oth use ";" to separate entries ie. fra;teeth but do not use ";" in the comment section ie. bu;mr;meat removal cut?, scars on shaft from hacking for butchery , do not use ";" in comments section ", : - " etc.
ZREM (comments)	upper or lower case, punctuation is used remarks if not down to species level
XR (cross reference to ZIC specimen)	upper or lower case, punctuation is used remarks if not down to species level
IDREM (remarks)	upper or lower case, punctuation is used remarks if not down to species level
ASSN (remarks) remarks on size to spe	upper or lower case, punctuation is used remarks if not down to species level
LET (total length)	integer or real number only

GENERAL

FIELD NAME	**DESCRIPTION**	**HANDWRITING**
ORD	taxonomic endings	
FAM	ORD:....forms	

SUBFAM	….a
GEN	….ines
	FAM: ….dae
	SUBFAM: .nae
	GEN: will vary but should have the name followed by "sp" on the cards
SPECNM	when the following are found in SPECNM (common name) enter domestic in VAR field
SPENM	field: dog, cat, cow, pig, horse, sheep, sheep;goat, chicken
VAR	enter common crow as SPECNM: crow
	common raven as SPECNM: raven
	however common merganser is entered as SPECNM: common merganser
	enter American eel as eel in SPECNM (common name)
	the complete common name has to be entered on both sides of the ";"
	ie. SPECNM: Canada goose;snow goose
	red-tailed hawk; rough-legged hawk
	river redhorse; copper redhorse
	blue-winged teal;green winged teal
	on card enter misc or unk as
	SPEC: unk
	SPEG: unk
	SPEPS: unk
	SPEP: frag.
SPENM	when multiple regions are circled on a card enter various in SPENM (element) field, leave SPl specm - when only ord is know, -only ord fam, subfam gen -only ord fam subfam - only ord fam, put unk in specnm ie. CL osteichthyes ord siluriformes fam fctaluridea specnm unk
SPEG	ie. SPENM: various
ZREM	ZREM: includes elements from tk, lb, and pvg regions
	when cf. appears in SPENM (element)
	ie. written on card - vertebra cf. c5 enter as
	SPENM: vert c
	ZREM: cf. vert c 5
AG	an approximate age may be represented as ya/a - meaning young adult or adult i/j meaning immature or juvenile
SPENM	where quantity is greater than 1, check that all descriptive fields are consistent; make separate cards when inconsistencies exist
QTY	ie: on card SPENM (element) : vert c
SPEPS	QTY: 20
BURN	CUT (cuts) : bu 5 mr 6
CUT	BURN (burning) : cl 5
SPEAA	4 cards are needed
ZREM	1 SPENM: vert c
	QTY: 5
	CUT: bu
	2 SPENM: vert c
	QTY: 6
	CUT: mr
	3 SPENM: vert c
	QTY: 5
	BURN: cl
	4 SPENM: vert c
	QTY: 4
	on card SPENM (element) : humerus
	QTY: 20
	SPEPS (position): 1 r
	2 cards are needed
	1 SPENM: humerus
	QTY: 1
	SPEPS: 1
	2 SPENM: humerus
	QTY: 1
	SPEPS: r
	recent breaks are not necessarily entered in ZREM (comments) and are entered as whole numbers in QTY field
	ie. 2/1 is entered as QTY: 1
	this only applies to recent breaks
	old (original) breaks are entered as number of pieces in QTY field ie: 2/1 becomes 2 and f-frag is entered in SPEAA (matched pieces) field
	when 2 bones fit together and have the same provenience, (which may be indicated by CN (cat. no.), HD (horizontal datum), or STL (stratigraphic position) etc.) f-frag is entered in SPEAA (matched pieces) fields
	ie: on one record dist. humerus shaft and dist. epi.
	SPENM: humerus
	QTY: 20
	SPEP: .5 and epi.
	SPEAA: f-frag
	ie: 2 records same CN (cat. no.)

	SPENM: radius
	SPEPS: r
	SPEAA: f-frag; fits with R. ulna, same cat. no.
	SPENM: ulna
	SPEPS: r
	SPEAA: f-frag; fits with R. radius, same cat. no.
	when 2 bones fit together and have different provenience, (which may be indicated by CN (cat. no.), HD (horizontal datum), or STL (stratigraphic position) etc.) x-mend is entered SPEAA (matched pieces)
	SPEAA: x-mend; fits with R.ulna cat. no. 1H13A16
	SPEAA: x-mend; fits with R. radius cat. no. 1H13C5
SPECNM	where 2 or 3 species appear on one card with a"/" or the word "or", enter the species separated by a ; on the card
SPA	and enter or in the SPA field
ASSN	ie: enter sheep/goat as SPECNM: sheep;goat
IDREM	SPA : or
	when cf. appears on the card enter cf. in SPA field
	ie: enter cf. sheep/goal as SPECNM: sheep;goat
	SPA L or;cf.
	entries in SPECNM (common name) such as blue-winged teal or white-tailed dear must include the hyphen and ed additive
	elk should be entered as wapiti in SPECNM (common name)
	if a bone can be identified down the speices use SPECNM (common name) field; any words relating to size that occur in either SPECNM (called taxon on card or ZREM (called comments o card) should be entered in ASSN field
	Ie. on card moose (large) enter as SPECNM: moose
	ASSN : large
	when the identification entry is ORD (order), FAM (family), SUBFAM (subfamily), or GEN (genus) level, any size-related words found in either taxon or comments on the card should be entered in IDREM field
	ie. written on card as large Artiodactyla enter as
	ORD: Artiodactyla
	Idrem: large artiodactyl
	ie. on card large mammal (cf. moose) enter as
	SPECNM: LM
	Idrem : cf. moose

Data Entry Guide for Mammals

FIELD NAME	**DESCRIPTION**
SPENM	for h SPEG (region) standard entry for element (SPENM) is skull, tooth or mandible
SPEG	if element is skull enter ax in SPEPS (position) field and enter L. or R. plus any further element breakdown in SPEP (part) field
SPEPS	ie SPENM skull
SPEP	SPEG h
	SPEPS ax
	SPEP L.maxilla
	SPENM mandible
	SPEG h
	SPEPS l
	if malar bone is found in element change to jugal and enter in SPEP (part) field. Enter skull in SPENM (element) field and ax in SPEPS (position field)
	if teeth are associated with skull or mandible enter skull w/ tooth or mandible w/ tooth in SPENM (element_ field
	tooth is entered in SPENM (element) field and the tooth name is entered in SPEP (part) field ie: uP1
	different kinds of teeth are entered in separate records
	it is not necessary to enter w.(whole) in SPEP (part) field when referring to tooth
	carnassial of mandible is entered in SPEP (part) as lM1
	carnassial of maxilla is entered in SPEP (part) as uM1
	sacrum is entered alone in SPENM (element) field and may have more information in SPEP (part) field ie: s 1
	enter horn core in SPEP (part), skull in SPENM (element)
	enter antler in SPEP (part), skull in SPENM (element)
	phalanx 2 digit II is entered in SPENM (element), hind or front is entered in SPEPS (position) ie: r;hind
	r; wing
	hyoid is entered in SPENM (element) and has a corresponding SPEG (region) of oth
	stylohoid is entered in SPEP (part)
	basihyoid is entered in SPEP (part)
	vert cd has a corresponding SPEC (region) of t
	sternum is entered in SPENM (element) field; sternebra and manubrium are entered in SPEP (part) field
	when innominate is entered in SPENM (element) the following example of information may be found in SPEP (part):
	ischium .5, ilium .6, pubis .4
	when two or more parts of the innominate (ilium, ishium, pubis) occur, enter innominate in SPENM and specify bond names in SPEP
	ie: SPENM innominate
	SPEP ishium and ilium
	ischium, ilium, or pubis are entered in SPENM when they occur individually
	acetabular triangle or acetabulum is entered in SPEP and innominate in SPENM
	when longbone fragment is found, enter unk in SPENM
	1b in SPEG
	longbone frag. in SPEP

Data Entry Guide for Amphibians

FIELD NAME	DESCRIPTION
SPENM	synsacrum is entered in SPENM field, not sacrum
	synsacrum + vert cd is a fused element and is entered in SPENM
	rib sternal is entered in SPENM
SPENM	eggshell is entered in SPENM (element) with corresponding SPEG (region) oth.
SPEG	innominate + synsacrum is a fused element and is entered in SPENM; corresponding SPEP (region) is pvg
SPEPS	vert cd has a corresponding SPEG (region) of t
SPEPS	where phalanx is entered in SPENM (element); foot or wing is entered in SPEPS (position) ie: SPEPS r; foot
	dentary and articular is entered in SPEP (part) ; mandible is entered in SPENM
	the only entries in SPENM with corresponding SPEG (region) of h are: skull, upper bill, quadrate, and mandible;
	any further element breakdown should be entered in SPEP (part)
	ie: SPENM skull
	SPEG h
	SPEPS ax
	SPENM upper bill
	SPEG h
	SPEPS ax
	SPEP premaxilla
	the tip of lower bill is entered in SPEP (part); mandible is entered in SPENM (element)
	furculum is entered in SPENM (element); SPEG (region) is ptg; SPEPS is ax; and R. or L. may be specified in SPEP (part)

Data Entry Guide of Fish

FIELD NAME	DESCRIPTION
SPENM	supraclavicula found in element is entered as supracleithrum in SPENM (element)
	pharyngeal plate is entered in SPENM not pharyngeal arch
	ptergiophore replaces spine anchor or anal fin support in SPENM (element)
	gill arch should be entered as branchial arch in SPENM (element)
	enter pharygeal plate is entered in SPENM; enter pharygeal plate dorsal in SPENM field
	enter postcleithrum first in SPENM field
SPENM	SPENM (element): weberian apparatus
SPEG	SPEG (region): tk
SPEPS	SPEPS (position): ax
SPEP	SPEP (part): vertebra or process
	when ramus is written in part change to process
	SPENM vert tk - these vertebrae are entered in SPEG (region) as tk
	vert cd - entered in SPEG (region) as tk
	vert atlus - entered in SPEG (region) as tk
	vert hypural - this vertebra is entered in SPEG (region) as t
	enter abdomial vertebra in SPENM (element) as vert tk
	dorsal and anal spine
	spine is entered in SPENM (element); tk is entered in SPEG;
	dorsal or anal is entered in SPEP (part); ax SPEPS (position)
	pectoral spine
	spine is entered in SPENM (element); ptg is entered in SPEG (region); pectoral is entered in SPEP (part); unk, L., or R. is entered in SPEPS (position)
	just spine written on the card as SPENM: spine
	SPEG: unk
	SPEPS: unk
	ptarygiophore is entered in SPNM (element) and unk in SPEG (region)
	skull/scute is entered in SPENM (element) and unk in SPEG (region)
	scute is entered in SPENM (element); tk in SPEG (region) if dermal or caudal is mention on card SPEP (part) is the proper field
	hyoid is entered in SPENM (element); h is entered in SPEG region
	scale is entered in SPENM (element); oth is entered in SPEG (region)
	if teeth are associated with dentary or maxilla enter dentary w/tooth or maxilla w/ tooth in SPENM (element)

SPENM FIELD BONES OF MAMMAL

HEAD (SPEG h)	TRUNK (SPEG tk)	PECTORAL GUIDE (SPEG ptg)	PELVIC GIRDLE (SPEG pvg)	LIMB (SPEG lb)	EXTREMITY (SPEG ex)	EXTREMILY (SPEG ex)	TAIL (SPEG	OTHER (SPEG oth)
skull	vert atlas cervical vertebra 1	scapula	ilium innominate (innominate some	humerus	mp metapodial	c i intermediate carpa	vert cd cau	hyoid
madible	vert axis cervical vertebra 2	clavicle	ischium innominate	radius	mc metacarpal	c a accessory carpal		baculum
tooth	vert c cervical vertebra		pubis innominate	ulna	mc 1	c r radial carpal		
	vert t thoracic vertebra			febur	mc 2	c 1		
	vert l lumber vertebra			fibula	mc 3	c 2		
	sacrum sternum			patella	mc 4	c 3		
	rib			tibia	mc 5	c 4		
					mc 2/5 metacarpal 2 or 5	c 2+3 carpal 2 and 3 (fused)		
					mt metatarsal	t tarsal		
					mt 1	t calcaneum		

SPENM (element) SKULL

SPEP (part)	SPEPS (position)
articular tubercles of temporal bone	l or r
auditory bulla	l or r
basisphenoid	
basioccipital or basilar part of occipita	l or r
ezternal acoustic meatus	l or r
foramen magnum	
frontal	l or r
interparietal	
intercornual protuberance	
jugal (sometimes called malar)	l or r
jugular process or paraoccipital proces	l or r
lacrimal	l or r
maxilla	l or r
muscular tubercles	l or r
nasal	l or r
occipital condyle	l or r
orbit	l or r
occipital bone	l or r
parietal bone	l or r
palatine	l or r
petrous bone	l or r
premaxilla	l or r
presphenoid	
pterygoid	l or r
sagittal crest	l or r
squamosal	l or r
supraorbital foramen	l or r
tympanic bulla	l or r
temporal (sometimes called mastoid)	l or r
zygomatic arch	l or r
zygomatic process of temporal bone	l or r
zygomatic	l or r

SPENM (element) MANDIBLE

SPEP (part)	SPEPS (position)
angular process	l or r
condyle	l or r
coronoid process	l or r
dentary	l or r
ramus (ascending ramus)	l or r
diastema	l or r
mental foramen	l or r
symphysis	

SPENM (element) TOOTH

part SPEP	position SPEPS
uI1	l or r
uI2	l or r
uI3	l or r
uI4	l or r
uC	l or r
uP1	l or r
uP2	l or r
uP3	l or r
uP4	l or r
uM1	l or r
uM2	l or r
uM3	l or r
udI1	l or r
to	l or r
udI4	l or r
udC	l or r
udP1	l or r
to	l or r
udP4	l or r

part SPEP	position SPEPS
lI1	l or r
lI2	l or r
lI3	l or r
lI4	l or r
lC	l or r
lP1	l or r
lP2	l or r
lP3	l or r
lP4	l or r
lM1	l or r
lM2	l or r
lM3	l or r
ldI1	l or r
to	l or r
ldI4	l or r
1dC	l or r
1dP1	l or r
to	l or r
1dP4	l or r

SPENM FIELD BONES OF BIRD

mt 2	t astragalus
mt 3	t c central tarsal
mt 4	t c+4 central and 4th tarsal (fused)
mt 5	t 1
mt 2/5 metatarsal 2 or 5	t 2
c carpal	t 3
c u ulna carpal	t 4
	t 1+2 tarsal 1 and 2 (fused)
	t 2+3 tarsal 2 and 3 (fused)
	t lm lateral malleolus
	sesamoid
	phalanx 1
	phalanx 2
	phalanx 3
	phalanx 1 digit I
	phalanx 1 digit II
	phalanx 1 digit III
	phalanx 1 digit IV
	phalanx 1 digit V
	phalanx 2 digit I
	phalanx 2 digit II
	phalanx 2 digit III
	phalanx 2 digit IV
	phalanx 2 digit V
	phalanx 3 digit I
	phalanx 3 digit II
	phalanx 3 digit III
	phalanx 3 digit IV
	phalanx 3 digit V

Abbreviations

u - upper
l - lower
I - incisor
c - canine
p - premolar
m- molar
d- deciduous (milk tooth)

NOTES

There are no deciduous molars
cheek tooth - (premolar or molar) can not tell the difference
tooth is entered in SPENM field
cheek is entered in SPEP field

HEAD (SPEG h)
skull
mandible
upper bill
quadrate

TRUNK (SPEG tk)
vert atlas cervical vertebra 1
vert axis cervical vertebra 2
vert c cervical vertebra
vert l lumber vertebra
vert t thoracic vertebra
synsacrum
sternum
rib
tracheal ring
syrinx

PECTORAL GIRDLE (SPEG ptg)
scapula
furculum
coracoid

PELVIC GIRDLE (SPEG pvg)
ischium innominate
ilium innominate
pubis innominate

LIMB (SPEG lb)
femur
humerus
tt tibiotarsus
fibula
radius
ulna
tendon ossified

EXTREMITIES (SPEG ex)
tmt tarsometatarsus
c r radial carpal
c u ulna carpal
cmc carpometacarpus
phalanx 1
phalanx 2
phalanx 3
phalanx 4
phalanx 5
digit I pollex
digit II
digit III
digit IV
claw ungal phalanx

TAIL (SPEG OTHER (SPEG oth)
vert cd
hyoid
pygostyle caudal vertebra

SPENM (element) FISH SKULL NOMENCLATURE (after Gregory, Mujib & others)

Neurocranium

Olfactory Region SPEG (region) h
supraethmoid-ethmoid
ethmoid (eth)
rostral (ros)
postrostral (poros)
mesethmoid (meth)
dermethmoid (deth)
quadrate + parethmoid
nasal (na)
adnasal (and)
vomer (vo)
septomaxilla
parethmoid (pareth)
parethmoid + prerontal

Orbital Region SPEG (region) h
sclerotic
lacrimal (la)
jugal (ju)
suborbital (so)
dermosphenotic (dsph)
supraorbital (suporb)
prefrontal (pf)
orbitosphenoid (orbsp)
alisphenoid (alsp)
frontal (fr)

Otic Region SPEG (region) h
sphenotic (sphot)
pterotic (pto)
parietal (pa)
prootic (prot)
opisthotic
exooccipital (exo)
epiotic (epiot)
supraoccipital (soc)
dermosupraoccipital (dsoc)
scale bone or tabular (tab)
post-temporal (ptm)
otolith

Basicranial RegionSPEG (region) h
basisphenoid (bas)
basioccipital (boc)
parasphenoid (pas)

Branchiocranium

Oromandibular Region SPEG (region)
palatine
premaxilla (pmx)
supramaxilla (smx)
maxilla (mx)
palatine (pl)
metapterygoid (mtp)
entopterygoid (entp)
pterygoid (ptr)
articular (art)
palatoquadrate
angular (an)
dermarticular
surangular
prearticular
coronoid
dentary (dn)
infradentary
quadrate (qu)
quadrate + preoperculum

Hyoid Region
Hyoid Arch - hyomandibular (hyo)
Hyoid Arch - symplectic (sym)
Hyoid Arch - interhyal (ihy)
Hyoid Arch - epihyal (ephy)
Hyoid Arch - ceratohyal (cerhy)
Hyoid Arch - hypohyal (hyphy)
Hyoid Arch - glossohyal
Hyoid Arch - basihyal (bshy)
Hyoid Arch - urohyal (urohy)
Opercular Series - operculum (op)
Opercular Series - subopercular (sop)
Opercular Series - preoperculum (pop)
Opercular Series - interoperculum (iop)
Opercular Series - branchiostegal rays (brstg)
Opercular Series - ceratohyal + epihyal

Branchial Arches SPEG (region) h
dorsal pharyngeal plate (dpp)
ventral pharyngeal (vpp)
epibrachial (epbr)
ceratobranchial (cerbr)
hypobranchial (cerbr)
basibranchial (bsbr)
gular plate (gu)
branchial arch

Pectoral & Pelvic Regions

SPEG (region) ptg
supracleithrum (scl)
cleithrum (clt)
postcleithrum (pcl)

SPEG (region) tk
pterygials (ptryg)
pterygiophore
fulcra

SPEG (region) pvg
basipterygium (basipt)

scapula (scap)	scute
clavicula	
coracoid (cor)	

SPENM FIELD BONES OF AMPHIBIAN

HEAD (SPEG h)	TRUNK (SPEG tk)	PECTORAL GIRDLE (SPEG ptg)	PELVIC GIRDLE (SPEG pvg)	LIMB (SPEG lb)	EXTREMITIES (SPEG ex)	TAIL (SPEG t)
mandible	vert atlas	scapula	ilium innominate	humerus	rarely found too small to	urostyle
skull	vert tk	clavicle	ischium innominate	radioulna		
	sternum	coracoid	pubis innominate	femur		
				tibiofibula		

SPENM FIELD TURTLE

HEAD (SPEG h)	TRUNK (SPEG tk)	PECTORAL GIRDLE (SPEG ptg)	PELVIC GIRLDE (SPEG pvg)	LIMB (SPEG lb)	EXTREMITIES (SPEG ex)	TAIL (SPEG	OTHER (SPEG oth)
skull	vert atlas cervical vertebra 1	scapula	ilium innominate	humerus	are rarely found too smal	vert cd cau	hyoid
mandible	vert axis cervical vertebra 2	coracoid	ischium innominate	radius			
	vert c cervical vertebra		pubis innominate	ulna			
	vert t thoracic vertebra			femur			
	vert l lumbra vertebra			tibia			
	sacrum			fibula			
	rib						

OTHER (SPEG oth)	SPEGS (position)
carapace	unk top shell
nuchal	ax sometimes written proneural on card
peripheral	l or r sometimes written marginal on card
peripheral 1	
to	
peripheral 11	
pygal	ax
neural	ax
neural 1	
to	
neural 8	
pleural	l or r sometimes written costal plate on card
pleural 1	
to	
pleural 8	
supraygal	ax
supraygal 1	
supraygal 2	
plastron	unk lower shell
epiplastron	l or r
entoplastron	ax
hyoplastron	l or r
hypopkastron	l or r
xiphiplastron	l or r
axillary notch	l or r
inguinal notch	l or r

EXAMPLES OF ENTRY IN SPENM FIELD

ABBREVIATION	DESCRIPTION
mc	metacarpal
mt	metatarsal
mp	metapodial
c	carpal
vert	vertebra
vert l	lumbar vertebra
vert t	thoracic vertebra
vert cd	caudal vertebra
vert tk	trunk vertebra
vert c ant	anterior cervical vertebra
c 2	second carpal
mc 3+4	third & fourth metcarpals (fused)
t c	central tarsal
t astragalus	astragalus
t calcaneum	calcaneum
cmc	carpometacarpus
tmt	tarsometatarsus
tt	tibiotarsus
phalanx 2 digit II	second phalanx second digit

skull w/ tooth	skull with tooth
sesamoid prox	proximal sesamoid
rib post	posterior rib