

ut. p. R lo
L
il
R usch
pe pub gn
remove il t
sex L usch t
if complete pub.
P
R s l
fe d
p
L s
d o
p
ti R s i gn
d hole n

Bie 45a
45b

93

0325
bnt
t

k
v=1

lamb
neo
natal

vq t n t n

Lamb - foetal - $\approx$ 2 mo.

04 43 2 $\checkmark$ goat hc tip; also very large mt & phal - see note. - not complete enough to study Boessneck's points.
1 ra ? hole, proximally.

04 56 1 hu tony k marks, all 7, which I only noticed under the magnifying glass.

04 57 1 M³ worn nearly flat, centre root to crown 19 mm. Other are, in maxilla, 29 mm.

04 54 1 ti and long bones generally; when marked gr, the marks could be from sharp stones. In this and often otherwise, though, the marks are only on the ends of bones.

04 55 1 $\checkmark$ sk definitely a hornless skull. Check

06 13 1 sk 3 ch marks, one breaking skull roughly down midline. small piece - $2\frac{1}{2}$ cm²

04 17 1 ~~sk~~ ra large SD $\approx$ 18.8 ? goat.

Bie 46

calc $R \vdash t \vdash 0 \vdash \mu$

astr R

mc d hole-aid

d

mt d ? govt fr

LS 101

3

axis 1-

lumb

148

GT
SH

probably
sh
1

mx			
----	--	--	--

t	ti	l	
---	----	---	--

hu i

- nd ii

fe

cpl

mc ii i i i i i

mp

1

1971

92
1 -

1413B
0

$$3 + 21 = 6 + 21 =$$
 $4 + 9 =$

Ble 4/a
117b

$\frac{1}{2}$

[illegible]

1	1	1
---	---	---

[illegible]

۱	۲	۳	۴	۵	۶	۷	۸	۹	۱۰	۱۱	۱۲	۱۳	۱۴	۱۵	۱۶	۱۷	۱۸	۱۹	۲۰	۲۱	۲۲	۲۳	۲۴	۲۵	۲۶	۲۷	۲۸	۲۹	۳۰	۳۱	۳۲	۳۳	۳۴	۳۵	۳۶	۳۷	۳۸	۳۹	۴۰	۴۱	۴۲	۴۳	۴۴	۴۵	۴۶	۴۷	۴۸	۴۹	۵۰	۵۱	۵۲	۵۳	۵۴	۵۵	۵۶	۵۷	۵۸	۵۹	۶۰	۶۱	۶۲	۶۳	۶۴	۶۵	۶۶	۶۷	۶۸	۶۹	۷۰	۷۱	۷۲	۷۳	۷۴	۷۵	۷۶	۷۷	۷۸	۷۹	۸۰	۸۱	۸۲	۸۳	۸۴	۸۵	۸۶	۸۷	۸۸	۸۹	۹۰	۹۱	۹۲	۹۳	۹۴	۹۵	۹۶	۹۷	۹۸	۹۹	۱۰۰
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

[illegible]

gn gn

b b -
| | |
distal
gn fused

oatlas/axis

04 43
51

98

Bie 47a
47b

Bie 47a
47b

[illegible]

12 ✓

17 ✓

4.

04 55 1 mt. complete, measured. the medial half is much more raised, dorsally, than usual.
04 54 1 phl almost certainly goat from size and shape. Checked by Juliet Jewell &
Philip Armitage BM(NH). It also agrees with ^(Fig.) Abb. 75 a & Abb 76 a, b & c
of Boessneck's Sheep Goat paper

B1048

SH/GT

BIE R. Med.

Roman Probable

	03	04	04	09	04	15	03
	26, 59, 61, 70, 72, 73 1 bone	46, 51, 21	32 and →	43	32, cont.	14, 11, 13, 15.	67, 68
sk		11		sheep #0 base of hc.	11111	11	
mx R			15		16	16 1	
L	13/4	16 13 16					
md R	15 12	15	13	12 ^c large. 15 15	5 F	1 1 1 3E 1	
L	13 16					1 1 13 1 12	note 1 1
dec p ³	<	<					
M ³		h h					
dec p ³							
M ₃		g g	g			g f	
P			(h) t	(H) t		t o t (+)	
I			t		t		
M	111	<<<< g	<<< g	g g g o	<<<< o	<< g g < g g	
	<g	g g g < o g	g g < g			< g < << 1	
mx frag		1		1			
md frag	1	111	11111	11111	1	7 111	11
sc	1	111	1111	1	111		
hu	11	1111	1111	1111	1111	1111	
ra	11111111	111111	111111	111111	111111	111111	
ul	1	1	1	1	1	1	
pe	1	1	1	1	1	1	
fe	11	111	111	111	111	111	
ti	111111	111111	111111	111111	111111	111111	
cpb/tol	1	1	1	1	1	1	
mc	1	1	1	1	1	1	
mt	1	1	1	1	1	1	
phal	1	1	1	1	1	1	
vert	1	1	1	1	1	1	
	45	70	51	43	42	109	366
fe	A B C		Bie 49a 49b				
Long Bone Fusion							
sc	t	t	t	t	t	t	
hu d	t t t o	t	t	t	t	t	
ra p	t	t	t	t	t	t	
phal 1	t	t	t	t	t	t	
" 2	t	t	t	t	t	t	
ti d	t	t t t	t	t	t t t	t t t t	
mc d	t	t	t	t	t	t	
mt d	t	t	t	t	t	t	
ul	t	t	t	t	t	t	
ra d	t o t	t	t	t	t	t	
fe p							



sc		t			t		
hu d		t t t o		t	t t	t t t t	
ra p		t		t t	t		
phal l	t	t t					
" 2		t					
ti d	t	t t t t	t	t	t t t	t t t t	
mc d		t	rep. o				
mt d					t t		
ul					#		
ra d		t o t	b	t			
fe p							
calc		t	t				
hu p							
fe d							
ibia p	t				t		

Biel 49a
49b

04 21 1 ra f distally ^{to ulna} but not through length of shaft
 " " 2 ?mt fragment, worked.
 15 14 1 hu shaft. The bone has a rough surface, post. part, above the condyles.
 15 14 2 hc ch right thru. ~~possib~~
 03 68 md. young - in comp. coll.

SHEEP

BIE Prob. Roman

Bie 50

Roman

Feature	LR	I	2	3	4	P ₂	3	4	M ₁	2	3	Stage	Pana. disease
04 43	R					/	w	e				4E	no
" "	R	/	/	/	/	w	w	e	g	f	c	29 4	slight
									□□	□□	E		fragment of p ₃ retained between P ₄ & M ₁ , slight alteration of bone buccal & lingual side, usual place.
mai-3 " "	L					w	w	g				5E	
04 56	R					w	w	e	g	f	d	32 4	no, but P ₄ embedded in M ₁ .
04 54	L					(g)	b	v				9 2	-
" "	b					□□	□□	□□				C	
" "	L					(w)	(w)	e	"			4 1	-
04 55	L					well worn w	□□	1/2				B	5E- possibly 6, even.

Medieval

04 47	R								g	f	b	30 4	
" "	L					(/)	(w)	l	g	c	3	23 3	
" "	R					E						D	
14 13	R					/	w	e	g	g	e	34 5	no
						□	□	□	□	□			
						B1e 51a 51b							

Roman probable

03 59	L					/	/	f	d	est 3	23e 3	"	
03 61	R					/	w	e	g	g	e	34 5	"
" "	L					/	w	j	k	g	g	39 6	"
03 70	R					(/)	(w)	h	e	E		13 2	"
04 21	R							f	g	g	e	34 5	"
" "	R					(w)	(w)	(e)	b			7 2	"
04 32	R					(/)	(w)	(h)	g	e	?V	24e 3E	"
" "	R					a	w	f	g	g	e	34 5	"
09 43	L								v			Payne-Coy C 2	
" "	L					w	w	g	g	g	f	35 F 5	no
" "	L					/	/	g	k ¹⁵	g	g	39 9 5	Probably periodontal disease on P ₃ , none P ₄ or M ₁ . Bone below P ₃ is 'drawn in' leaving a hollow c. 8x2mm. No foramen that I can see.

03	70	R	(v)	(w)	h	" ¹⁰ e	³ E	13	2	"
										
04	21	R			f	g	g	¹⁰ e	34	5
								¹⁰ e		
"	"	R	(w)	(v)	(e)	⁷ b			7	2
04	32	R	(v)	(w)	(h)	g	¹⁰ e	?V	24e	3E
"	"	R	a	w	f	g	g	¹⁰ e	34	5
09	43	L					V		Payne C 2-Cay	
"	"	L	w	w	g	g	g	f	35	F 5
"	"	L	/	/	g	k ¹⁵	g	g	39	G 5

Probably periodontal disease on P₃, none P₄ or M₁.
 Bone below P₃ is 'drawn in' leaving a hollow
 c. 8x2 mm. No foramen that I can see.
 ? radiograph.

04	32	R	w	w	f	g	g	¹⁰ e	34	F 5
15	14	L		w	l	g	e	³ E	25	D 3
"	"	L	w		Bie 51a 51b				-	-

1514	R		g		
" "	L		g	g	slight p.d.
" "	L		j		
" "	R	/ / h	j	g	g
1511	R	(w)(w)			-
1513	L	(w)(w)(f)	/		2E
" "	R	(/)(w)(h)	f		3E
1515	R	w	g	g	g (4or5)

OK/G. Mand.

CH/9T

BIE Mandibles

Re med

Bie 52

Roman								Medial	Probable Roman							
hc	curve outer bas. circ. bas diam max. min.															
sc	QLP	04 43	09 54							04 21	04 32	04 32	04 32			
		30.2	31.4							30.4	-		29.0			
	SLC	16.9	18.7							17.5	22.0	19.1	19.5			
	Neck Index	19	20.5							20.8			18			
hu ra	BT	04 53	04 56	04 54	04 55			05 24		04 51	04 51	04 21	09 43	04 32	04 32	15 14 ...
		26.6	27.0	25.8	27.5			27.4		30.2	26.5	24.8	27.7	26.8	c. 21	29.1, 28.0,
	QL	04 54								04 51		04 32	09 43			26.4
	Bp									178			159	04 32		
fe	Bd	26.5								32.7			29	32.5		
	SD									17.3	15.1		16.2			
	Bd									29.9	5 24.3	29.6	27.2 (wina not fixed)			
	QLC															
ti	SD															
	Bd	0 04 43	04 43	04 44	04 54	04 55	04 55									
	QL															
	Bp															
astr	SD			16.2 large												
	Bd	R 25.0	L 25.9	L 27.7	24.4	R 24.0	L 23.2									
	QLL	04 43	04 54													
calc		L 25.5	25.0													
	QLm	25.1	23.7													
	Bd	17.4	16.1													
	QL	04 43	04 43	04 54												
mc		R 52.5	R 60.2	53.9												
		04 55														
	QL															
	Bp	20.8														
mt	SD															
	Bd															
	QL	04 43		04 54												
	Bp	L 0.21	L 18.4	18.6	18.0											
1st phal.	SD	15.2			10.5											
	Bd				21.5											
	QLPe	04 43	04 43	04 43	04 54	04 54	goat 04 54									
	Bp	33.2	31.0	35.7	31	30.4	40.0									
b		11.2	11.5	12.3	10.4	11.3	13.7									

04 32 15 14

tibia Bd 25.6 27.0 28.0 25.7 25.5 25.3

BIE		Roman	Medieval	PIG	
		04 43, 44, 53, 56, 57, 54, 55	08 09 41 22, 52	06 13, 20	09 14 48 13. part part skel. skel.
sk	R	o o occ squ		o fro	par fro, par fro, nas squ, lac.
	both	par		o nas	las mal, squ occ. mal.
	L	occ mal mal			
max	R	16 pre	14/5		1 2 just
	L	14E16	14E		
md	R	14E1	13	13	
	L	1313			
T. Upr	I	t t			
	R				
	C	k			
	P				
	M ^{1,2}	p t t t			
	R				
	M ³	L stage 4 16			
Lwr	I	1 (1) t t			
	R	t t			
	C	L t t t t			
	P	p			
	M _{1,2}	t h			
	R				
	M ₃	L b t			
oc	R	i i			
	L	gn o			
	P				
	R	s k. many			
hu	d	t t t			
	P				
	L	s i i i			
	d	o			
	P	t t t			
R	s				
ra	d				
	P	t t t			
	L	s			
	d				
ulna	R	i i i			
	L	i			
	il	gn			
R	isch				
pe	pub	gnaking pig, ch c TI			
	L	isch t			
	pub				
	P				
R	s				
fe	d				
	P				
	L	s i i			
	d				
	P				

bk - broken. Pig canines usually are.

ok 43 1 put into comparative collection. small pelvis & humerus.

0454 1 L M², moderately worn, with anterior/buccal corner worn away to the root.

14 13 2 part skeletons sucking pig plus at least one more, plus an adult or subadult pig.
epiphyses mainly not recovered - only 2 - prox hu.
no β marks to be seen.

Bie 55

0952 gr
1 1
abo
D

$$5 + 15 = 20$$
$$\begin{array}{r} 5+7 \\ 12 \end{array}$$

? ? 0
0
0
5 cerv,
8 thor,
22 ribs.
could be
1 indiv.
3 sternal
vert.
8 + 2 skel = 10

Bie 56a
56b

09 22

1
gn

- gn -

1

14 27 9
Roman - chopped 2 gnawed c. 9
knife 2 burnt 0
Bre 56a
56b

rod - ? gnawed by a rodent.

04 43 1 me distal, unfused end splayed out. separated.

Plg

BIE Rd Med

Bie 57

BIE

PIq

Roman- Probable.

	03	04	04	09	15	03
	26, 59, 60, 61, 70, 72, 03, 60	51, 21	32	43	14, 11, 13, 15	67
sk	1 1 1 1 1	1 1 1 1	1 1 1 0	0 1	0 1	
mx R	1	13 1 ♂	1	1	1	
L		15E	1 ♂ 12	13E		
md R			1 ♂ 14	1 1	1 3	
L	12E 13			no teeth	12 12E	
dec p ³	R					
M ³	R					
dec p ³	R					
M ³	R					
I	11	att to	0 0 1	1 1		
P		1	1 0 1 1			
M		1	1			
C		C ₁ L ♂	C ₁ L ♂ C ₁ L ♂ C ₁ L ♂ C ₁ L ♂	C ₁ L ♂ C ₁ L ♂	C ₁ ♂	
mx frag			1			
md frag	11	11	111	1		
sc	11	gn	111 1	11 1 1	1 1	
hu	large	imm.	0 1 1	1 1 1		
ra	1	11	1			
ul	1	1	1 path.	1 1 1		
pe	1	1	1	1 1		
fe	1	comp. coll.	1			
ti (fib)	1	neonatal.	1 1 1 1 1 1	1 1 1 1 1 1	1 1 1 1	
cpl/tol	1	1	1 1	0		
mc	1 1	1	1			
mt	1	mp-1	1			
phal	1	1	1 1 1 1 0			
mp	1	1	1 1 1 1 0			

21

42

57

11

32

1

164

Bie 58a
58b

Long bone maturity

sc	p				
hu d	1				
ra p					
ph 2	tep				
ti d	0				
ph 1					
mp	ep				
calc	0				
ra d					
ul					

03 61 1 pe in comparative collection

04 32 1 pe alteration of bone and excess growth on whole acetabulum particularly on iliac part of acetabulum. Rather small.

Bq

BIE Prob. Roman

Bie 59

maxillae in pencil

define J
I
S
A

Feature	L	R	I	2	3	C	P	1	2	3	4	M	1	2	3	JISA Ham-stage	wh	Over-crowding?
Roman																		
04 43	L											f	b	E		I	3	
" "	R										d					S	4E	
" "	L	a																
" "	L										w	well worn					4E	
04 43														v.	worn	A	6	1st 2 cusp worn nearly to root.
" "	L							w	w	w	dentine just in wear.						4E	
04 43	R											c				I	3E	
04 57	R	light w	V													S	4E	
04 54	L							/	m	a	a	g	c				3	no
" "	L																	M ² unusual wear pattern.
04 55	R											/	1/2	C			2	
08 41	L										w	w	w	/			4E	no wear on M ² shows M ³ erupted, couldn't be in full wear, from wear on M ¹ & 2.

Medieval

04	47	R	g	c	1/2	3
"	"	R	v. worn	wr		(4 or) 5E
06	13	Lx	/	b	/	3

14 13 two sucking pigs

" " $\left\{ \begin{array}{l} R \\ L \end{array} \right. \begin{array}{l} (w) (w) \checkmark \\ (w) (w) \checkmark \\ R (1) (\frac{1}{2}) (1) (1) \text{? tiny} (\frac{1}{4}) (w) (d) E \\ L (1) (1) (1) (1) - (1) (w) (d) E \end{array} \left. \vphantom{\begin{array}{l} R \\ L \end{array}} \right\} 1$

" " $\left\{ \begin{array}{l} R - \\ L \\ L \end{array} \right. \begin{array}{l} \text{very worn} a \\ (e) a v \end{array} \left. \vphantom{\begin{array}{l} R - \\ L \\ L \end{array}} \right\} J 2 \text{ P4 worn into pulp cavity.}$

" " $\begin{array}{l} L \\ \\ \end{array} \begin{array}{l} w d / \\ \\ \end{array} \begin{array}{l} A^{est.} \\ hor 5 E \end{array}$

From teeth a Scapula, H

From teeth & scapula, there's a 2nd piglet. Stage 1.

A^{est.} 4 or 5 E

Bre 60a
60b

Roman probable.

03	59	L		(w)	(d)	/	J	2? or 1	
03	70	L				c	a	V	I 3, just.
03	72	R		♂	not well worn	w	w		A?
04	51	R					w	w	I 3
04	21	L	not a pair	♂ w	/	a	w	w	M 5E
"	"	R		♂ w	/	/	/		I?
04	32	L & R	/ / U)	w ♂	/				put in comparative collection. suture to premax open. " "

Bie 60a
60b

Roman probable.

03 59 L

(w) (d) /

J 2? or 1

03 70 L

c a v

I 3, just.

03 72 R

not a well worn
w w

A?

04 51 R

w w

31 3

04 21 L

not a pair

not a well worn
w w

M 5E

put in comparative collection.

" " R

not a well worn
w w

I?

set up to premax open. "

04 32 L R

/ / (1) w

/

marks of roots at dec a perm. I ziflear.

" " R

light
w E

2

" " R

a

4

" " R

Bie 60a
60b

broken c /

4E

" " plus R

loose Ms b

4

mai 3

over

		C	P	light	M	
04 32	L	♂ w	/ broken	w	w	Adult, not old.
" "	L		(i) (t) (t) (t)	a	2	
04 32	R			h	b.	4
" "	R			(i) b	v	2
15 14	L			d	g b ^{Est.} 1/2	3 unusual stages of eruption.
" "	L			g		
" "	R			(k) e a	3	
15 13	R			broken/broken	5E	roots present. looks mature.
" "	L			w worn w /	4E	

Bie 61

61d

SMY 318

BIE

Pig MEAS.

Roman

Medieval

R probable

M ₃ L					37.6	
B					15.4	
hu	04 54			14 13		
BT	L 29.1			30.2	15 13	
SC GLP					38.2	
SLC					27.5	
ra	04 54	04 54	04 55	04 52		
Bp	R 29.1	L 29.4	29.1	R 28.8		
ti	04 43				15 13	15 14
Bp						
SD					b	b
Bd	28.4				25.4	31.8
astr.	04 55				04 32	
GLL	L 44.4					
GLM	41.2				36.3	
calc						
GL						
mc III GL					03 70	
Bd					74.4	
" IV GL					16.5	
Bd						
mt III GL					04 32	
Bd					L 77.4	
" IV GL					15.6	
Bd						

BieG2

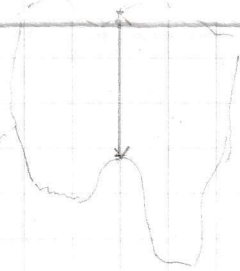
Feature de-
Bone ment L R B p
mni frag

Roman.

04	43	sc	R	t	about 1/2 there, modern breaks.
"	"	ra	s L	i	
"	"	ph 1	d	t	
"	"	t		i	cheek tooth, in 3 bits, broken one end, burnt the other.
"	"	t		t	" " , broken.
04	56	calc	L	gn	} 2 individuals, both gnawed, both have corpus missing - could be B, could be the gnawing.
"	"	calc	R	chgn	
					looks as if it might be immature.
04	54	mc	P R	t	
04	55	hu	sd L	t	Bd 63.9
"	55	hu	s R	i	not a pair, this one >
"	55	fe	distal end of s but of d L	t	
"	55	vert cerv.		o	not fused, full size by the look.

Medieval

04	47	t	M ₁ or 2 L	t	height 38.5 ^{thoroughly} adult, not aged.
06	13	antler			burnt, shed naturally. Bottom 1 cm of beam a time, not sawn.
06	20	t	P ₄	t	dd. height 19.5
"	"	t		i	
14	13	ph 2	} fit	t	ch - 1 think excavation damage.
"	"	ph 3		t	larger than I.A. & R.



Bre 63a
63b

Gl 42.5 Bp 51.6 Bd 47.4 SD 44.3
not measurable.

Probable R

04	21	tib	P ₃ d	t	GL 324, Bp 78, SD 37.8, Bd 64.4.
"	"	ph 1	d	i	
"	"	ph 3		i	
04	32	sc		i	
"	"	calc		i	
"	"	t		t	cheek t., well worn.
"	"	vert cerv.		t	
"	"	sc head	R	t	
"	"	mt ps	R	t	Bp 45.7, but neither
"	"	t	M ₃ L	t	very small. Ht 37
15	14	lower jaws		i	both sides. L. cheek tooth now R 167; apical ht of the vertical ramus 217

Teeth missing except ^{Right} P₃, ^{very} worn - so no internal dentine, height c. 10 mm.

"	"	ph 1 d	1
"	"	ph 3	1
04	32	sc	1
"	"	calc	1
"	"	t	t
"	"	vet cerv.	t
"	"	sc head R	t
"	"	mt ps R	t
"	"	t M ₃ L	t
15	14	lower jaws	1

check t., well worn.

Bp 45.7, (but neither

very small. Ht 37

both sides. L. cheek tooth row R 167; apical ht of the vertical ramus 217

Teeth missing except ^{Right} ~~at~~ P₃, ^{very} worn - so no internal dentine; height c. 10 mm.

There has been an abscess at the root of L M₁, resulting in a perforation (1 x 1½ cm) on the ^{lingual} ~~buccal~~ side and exostoses over a large area below.

PHOTO

15 14 humsd R t

Bd BT 69

Bre 63a
63b

over

horse.

15 14

ti sd

t

sd 72

Br 64

Roman

Feature	Bone zone	L	R	^P mni frag	
04 43	nd	L		1	P_2 P_3 enamel wear, M_1 worn into dentine on the tip, M_2 , P_3 M_1 L 19.6, B 7.6. some reduction of the bone lingual side below M_1 & 2, also roughening of bone below this area. PHOTO/DRAWING.
04 43	t	C ₁	L	1	enamel wear. small. probably same individual.
fox 04 43	ti	$\bar{a}$	L	1	slight. check fox ^{fox} Bd 18.4 SD 10.2
04 44	na	s	R	1	
04 54	atlas			1	small.
04 55	t	C ₂	R	1	enamel wear.

Medieval

04 47	sc		R	1	GLP 25.6 GLC 21.2
" "	mp	P _d		1	
" "	mp	P		1	
06 20	phal.	P _s d		1	check size fox.

Prob. Roman

04 21	hu	s _d	L	1	Bd 28.3 comp. collection.
04 32	ant scate		R	1	a pair. put in comp. collection.
" "	"		L	1	
" "	vert			8 fused	
" "	mp			1	
" "	ti	P _s d	R	1	GL 159 Bp 28.6 ^{msd} SD 10.2 Bd 19.5
" "	sc			1	put in comp. coll.
" "	ti	s _d	L	1	Bd 20.0
" "	mt	psd		5 fused	
" "	phal	psd		4 "	
15 14	hu	psd		1	GL 123 Bd 20.7
" "	ti	psd		1	GL 138 Bp 22.0 Bd 15.3
" "	ra	psd		1	GL 103 Bp 12.6 Bd 17.2 SD 7.9
15 15	md			1	P_1 & 2 broken, P_3 & 4 some dentine wear. M_1 some dentine wear. M_2 & 3 missing. M_1 L 23 B 9.3 cheek tooth row 79.

Size - all in middle of Harcourt's published ranges.