

Tables S1–S29. Dimensions (in millimetres) of skull, mandible, dentition and postcranial bones of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus* (data taken from references in brackets).

Table S1. Skull dimensions of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: H, height; L, length; Max, maximum; Min, minimum; W, width.

	L nasal notch	Postorbital W	L nasal notch-orbit	L nasal tip-orbit	Occipital dorsal W	Min. fronto-parietal W	Occipital Height	H above P2	H above P4–M1
# 8096	–	71.0	–	–	130.1	46.2	160	–	–
# 8661	244.0	–	135.0	383.3	–	–	–	180.0	(178.0)
<i>S. etruscus</i>									
Min/Max/	138/209.5/1	79/126/10	90/123/10	236/327/2	101/174/1	34/60.5/	117/153/13	124/178/1	127/202/1
Mean [29]	91.7	1.1	5.47	98.4	40.7	47.5	0.6	59.5	65.0
Senèze [31]		104.8			143.6	52.9	128.2		
<i>S. hundsheimensis</i>									
Min/Max/	217.5/289/2	107/145/1	81/122/99	313/400/3	132/175/1	35/88/58	139/191.5/1	156/234/2	150/243/2
Mean [29]	52.6	23.8	5	51.3	54.6	.9	62.3	01.4	07.8
Isernia 33035 [31]		173.7			187.2	60.3			
Cava Redicicoli [5]					137	67	150		
Hundsheim [34]					153	61			202
Untermassfeld [38]	242.0	(111)	99.0	316.0	–	35.0	–		222
<i>S. hemitoechus</i>									
Min/Max/	231/280/24	107/138/1	95.5/143/1	283/385/3	101/160/1	18/70/46	141/186/15	160/228/1	172/225/1
Mean [29]	8.6	21.1	15.3	44.2	30.9	.3	8.6	89.8	89.7
Campagna Romana [43]					139.0	40.0	165.0		
Neumark	290.3	173.0	129.4	412.9	160.0	147.3	171.5	223.2	246.0
Nord [12]	292.5		131.0	415.6				232.9	246.0

Table S2. Mandibular dimensions of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*. Abbreviations: APD, anteroposterior diameter; asc.r., ascending ramus (APD measured at occlusal level); cor.ap., coronoid apophysis; H, height; h.r., horizontal ramus; L, length, Max, maximum; Min, minimum; Symph., symphysis.

	H h.r. m1-2	H h.r. m2-3	H h.r. behind m3	TD h.r. p4-m1	L Symph.	APD asc.r.	TD condyle	H condyle	H cor.ap.
# 8096		86.6	84.8	50.0	108.2		86.67	(180)	
# 8661	79.1	81.5				148.9	94.2	251.7	(270)
<i>S. etruscus</i>									
Min/Max/Mean [29]	65.0/91.0/82.8	70.0/96.5/85.8	79.0/105/90.8	41.0/60.0/48.9	94/123/110.3	115/152/143	77.5/107/90.5	182/243/218.7	254/268/261
Senèze [31]									
Min/Max/Mean	88.0/77.9/82.0	89.5/92.3/91.1	91.5/93.8/92.9	46.9/47.4/47.1	97.30		89.1/89.7/89.5	241/242/241.5	
<i>S. hundsheimensis</i>									
Min/Max/Mean [29]	78.0/105/89.8	78.0/104/90.6	79.0/108/94.3	42.0/62.5/51.3	91/126/108.1	128/169/153.8	78.0/100/92.6	230/292/249.8	285
Isernia [31]									
Min/Max/Mean	80.4/93.4/86.3	81.6/91.4/88.1	92.3/92.6/92.5	48.7	107.2		86.1		
Ponte Galeria [6, 78]	86.0	84.0	86.0	52.0	98.0				
Hundsheim [34]			60.0		103.0		79.0	178.0	
<i>S. hemitoechus</i>									
Min/Max/Mean [29]	75.0/115/95.0		79.0/124/100.8	44.0/71.0/56.3				232/276/250.5	
Neumark Nord [12]	108.5	104.5	108.9		138.4	177.8	114.3	293.3	
	106.3	104.6	108.5			179.0	114.3	297.9	

Table S3. Dimensions of the upper dentition of *S. hundsheimensis* from Cova del Rinoceront compared with some other remains of *Stephanorhinus*. Abbreviations: L, maximum length; EM3, length of the ectometaloph of M3; Max, maximum; Min, minimum; W, maximum width. *Deciduous tooth (DP4).

	LP2	WP2	LP3	WP3	LP4	WP4	
# 8096			>30.0	-	41.5	53.2	
# 8661					59.7*	58.0*	
<i>S. etruscus</i>							
Min/Max/Mea	32.5/35.0/33.	33.0/40.5/37.	41.0/43.5/42.	43.5/52.5/49.	42.0/49.0/46.4	52.5/57.5/55.	
n [29]	7	1	0	1		1	
Senèze [31]							
Min/Max/Mea	23.7/30.2/28.	34.7/35.2/35.	34.2/35.1/34.	45.1/46.3/45.	35.0/39.7/37.1	48.1/49.4/48.	
n	1	0	7	7		8	
<i>S. hundsheimensi</i>							
Min/Max/Mea	33.0/45.0/37.		38.0/47.5/42.	45.0/58.0/51.	43.5/54.0/47.5	47.5/61.5/55.	
n [29]	4		6	4		9	
Vallonnet [31]							
Min/Max/Mea	32.3/35.1/33.	37.8/38.7/38.	36.3/42.4/39.	47.8/51.6/49.	37.7/43.9/41.5	50.4/60.2/55.	
n	7	2	0	3		5	
Isernia [31]							
Min/Max/Mea	29.5/39.6/34.	36.0/45.2/40.	34.9/45.0/41.	49.7/55.4/52.	39.8/49.9/43.4	52.9/57.9/56.	
n	4	6	0	6		1	
<i>S. hemitoechus</i>							
Min/Max/Mea			34.0/49.0/41.	43.0/57.0/48.		50.0/61.5/55.	
n [29]			8	2	37.0/51.0/44.5	0	
Caune de	29.0/38.0/33.	27.0/44.0/36.					
l'Arago [31]	6	0					
Min/Max/Mea			36.3/41.0/38.	51.9/54.8/53.	42.7/52.5/47.4	60.5/61.5/61.	
n			6	4		0	
	LM1	WM1	LM2	WM2	LM3	WM3	EM3
# 8096			-	(60)	55.3	55.0	60.3
<i>S. etruscus</i>							
Min/Max/Mea	45.0/54.0/49.	50.5/57.5/54.	49.0/53.0/51.	53.0/57.5/55.	44.0/47.5/46.	51.0/53.0/51.	52.5/54.0/53.
n [29]	6	8	4	7	1	8	3
Senèze [31]							
Min/Max/Mea	41.9/45.3/43.	50.5/52.1/51.	48.5/51.9/50.	-/-/-	49.5/52.9/51.	42.9/43.9/43.	53.8/55.8/54.
n	6	3	0		8	2	4
<i>S. hundsheimensi</i>							
Min/Max/Mea	47.5/60.0/53.	44.5/63.5/56.	49.5/62.0/55.	52.0/63.0/58.	40.5/53.5/47.	43.0/60.0/51.	45.0/64.0/54.
n [29]	3	2	1	5	2	5	2
Vallonnet [31]							
Min/Max/Mea	47.0/54.8/50.	51.6/58.5/54.	46.8/55.3/51.	54.0/60.1/56.	50.0/55.0/52.	39.1/49.8/47.	50.7/55.4/53.
n	5	9	8	7	2	2	3
Isernia [31]							
Min/Max/Mea	46.7/53.0/50.	57.0/61.9/59.	53.0/56.4/54.	60.6/67.4/62.	45.5/55.2/50.	44.6/56.4/48.	52.4/60.4/56.
n	6	9	6	5	3	6	1
<i>S. hemitoechus</i>							
Min/Max/Mea	48.0/63.5/54.	52.5/65.0/58.	54.5/66.5/59.	56.0/70.0/62.	41.5/64.0/53.	41.0/61.5/53.	52.5/74.0/62.
n [29]	7	3	9	0	0	3	7
Caune de							
l'Arago [31]							
Min/Max/Mea	49.9/55.5/52.	58.8/62.8/60.	50.9/57.2/54.	60.8/66.9/63.	52.8/65.8/59.	46.1/59.2/52.	58.7/73.2/65.
n	5	8	8	6	9	4	9

Table S4. Dimensions of the lower dentition of *S. hundsheimensis* from Cova del Rinoceront compared with some other remains of *Stephanorhinus*. Abbreviations: L, maximal length; Max, maximum; Min, minimum; W, maximal width.

	Lp2	Wp2	Lp3	Wp3	Lp4	Wp4
# 8096	27.6	20.4	38.7	27.2		
# 8661	26.7	16.4	32.6	20.9	35.6	24.0
<i>S. etruscus</i>						
Min/Max/Mean [29]	29/31/30.4	17/22/19.4	37.5	23.0		
Senèze [31]						
Min/Max/Mean	25.7/27.3/26.5	17.4 /17.8 /17.6	31.2/38.6/33.6	25.0/28.6/26.2	34.4/35.0/34.9	29.3/30.6/29.9
<i>S. hundsheimensis</i>						
Min/Max/Mean [29]	30.0/33.0/31.3	17.0/22.5/20.3	35.0/38.5/36.5	22.5/26.0/24.6	38.0/49.5/42.8	24.0/31.0/27.3
Vallonnet [31]						
Min/Max/Mean	27.4/32.2/29.2	18.5/19.1/19.0	31.2/35.6/33.5	23.2/26.3/24.9	34.0/37.0/35.7	26.4/30.0/26.4
Isernia [31]						
Min/Max/Mean	25.2/30.4/28.0	19.5/21.0/20.1	32.7/37.5/34.3	22.0/28.4/24.7	36.7/40.2/38.3	21.2/32.7/27.1
<i>S. hemitoechus</i>						
Min/Max/Mean [29]	26.5/34.0/30.2	15.0/21.0/18.8	33.0/46.0/38.5	22.5/30.0/24.9	36.0/48.5/43.8	24.0/31.0/28.4
Caune de l'Arago [31]	24.5/32.3/28.8	15.3/21.4/18.4	31.6/36.8/34.8	24.7/28.3/26.0	35.1/42.0/38.7	28.4/31.8/30.3
Min/Max/Mean						
	Lm1	Wm1	Lm2	Wm2	Lm3	Wm3
# 8096					48.5	31.1
# 8661	42.4	27.5	47.0	27.9		
<i>S. etruscus</i>						
Min/Max/Mean [29]	36.0/50.0/43.7	26.5/32.0/29.0	40.0/54.0/48.4	27.5/34.0/30.2	43.0/52.0/48.1	27.0/31.0/29.1
Senèze [31]						
Min/Max/Mean	40.8/45.3/42.5	25.5/30.5/28.3	41.6/43.2/42.6	28.5/29.5/29.0	42.6/43.2/42.9	27.6/28.7/28.2
<i>S. hundsheimensis</i>						
Min/Max/Mean [29]	40.0/56.0/45.5	26.0/37.0/29.9	42.0/54.0/49.3	28.0/35.0/31.0	45.0/60.5/51.0	25.5/34.0/30.0
Vallonnet [31]						
Min/Max/Mean	38.2/47.3/42.4	25.5/31.2/28.7	40.2/47.2/44.5	26.0/32.3/29.6	45.1/45.7/45.3	26.5/28.5/27.8
Isernia [31]						
Min/Max/Mean	40.1/48.0/43.6	28.0/38.6/31.5	41.3/50.1/46.9	29.4/36.6/31.6	40.8/51.6/45.7	27.3/31.3/29.0
<i>S. hemitoechus</i>						
Min/Max/Mean [29]	38.5/56.5/49.1	26.0/32.5/29.3	42.5/60.5/52.8	25.5/34.0/30.7	48.0/71.5/57.1	27.0/34.5/31.1
Caune de l'Arago [31]	40.4/47.8/43.7	26.3/33.4/30.8	46.2/53.2/50.1	25.8/35.5/31.3	46.8/55.1/51.2	27.1/33.7/30.9
Min/Max/Mean						

Table S5. Dimensions of the humerus of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; Delt. tub., deltoid tuberosity; prox., proximal; Max, maximum; Min, minimum; TD, transversal diameter.

	Length	Prox. TD	Prox. APD	TD Delt. tub.	TD diaphysis	APD diaphysis	Distal TD	Distal APD
# 8096	378.0	158.0	162.0	140.0	68.0	61.0	126.0	105.0
<i>S. etruscus</i>								
Min/Max/Mean	336/427/387	125/202/142.	117/155/143.	96.0/135/116.	62.0/70.0/65.	54.0/72.0/63.	110/137/122.8	83.5/114/101.
[29]	.7	8	6	4	0	5		8
Valdarno [31]	384.0	133.0	160.0	123.0	59.0		122.0	
Senèze [31]	386.0	158.0	131.8	131.4	65.3	62.2	126.1	106.2
<i>S. hundsheimensis</i>								
Min/Max/Mean	363/393/382	135/150/141.	141/146/155.		50.0/70.0/59.	55.0/77.0/64.	118.0/145.0/1	94.0/116.5/10
[29]	.2	6	3	129.0	9	3	28.7	6.4
Vallonnet [31]								
Min/Max/Med				114.1	64.6/68.5/65.	51.9/66.5/58.	126.9/128.4/1	101.4/104.6/1
[31]					5	9	27.7	03.2
Soleilhac [31]	380.0	193.4	137.0	117.9	58.3	59.6	120.0	106.7
	382.0	133.7	159.0		59.0	56.3	116.9	
Hundsheim [34]	445.0	185.0	155.0		67.5	60.0	134.0	115.0
<i>S. hemitoechus</i>								
Min/Max/Mean	341/425/394	129/182/160.	128/153/143.	117/150/138.	58/79/68.4	64/83/74.5	117.5/158/140	91/122/107.3
[29]	.7	9	8	2			.6	
Valle Radice [11]	416.9	180.2	155.0	146.3	65.6	72.5	144.3	116.0
	410.5	178.5	148.3	134.1	63.8	68.2	138.6	113.0
Melpignano [10]	385.0	162.0	135.0	141.0	61.0	63.0	142.0	110.0

Table S6. Dimensions of the femur of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: ep., epiphysis; Max, maximum; Min, minimum; TD, transversal diameter.

	Length	Proximal TD	Proximal APD	TD 3rd trochanter	TD diaphysis	APD diaphysis	Distal TD	Distal APD
# 8661							(120)	
# 8096	431.0	194.0	80.8	131.0	69.0	49.8	-	127.4
<i>S. etruscus</i>								
Min/Max/Me an [29]	406/474/441.9	145/187/163.4	66.0/83.0/76.5	101/140.5/121.5	48.0/69.0/59.6	47.0/65.5/53.9	115.0/135.0/124.1	125/161/143.7
Upper Valdarno [31]								
Min/Max/Me an	442/450/446.3	150/169/159.3	66.0/82.0/71.5	109/136/121.7	50.0/65.0/58.3		115.0/131.0/122.3	119/150/139.0
Senèze [31]	457.0	154.0	75.5	138.0	68.8	49.0	129.2	138.9
	443.0	157.0	76.3		67.8	50.5	129.1	132.0
<i>S. hundsheimensis</i>								
Min/Max/Me an [29]	406/472/439.1	158/186/173.2	72.0/88.0/79.9	107/142/125.4	49.0/72.0/62.0	45.0/61.5/52.4	116.0/140.5/126.3	139.5/163/149.6
Hundsheim [34]	495.0	184.0	89.0		74.0	54.0	142.0	134.0
Untermassfeld [49]	496.0		90.0		69.0	52.5	141.5	161.0
	507.5		86.8		74.4	53.3	143.0	162.0
	490.8		86.0		63.0	62.1	144.2	164.3
<i>S. hemitoechus</i>								
Min/Max/Me an [29]	434/503/461.8	180/211/190.4	80.5/94.0/88.8	123/163/140.0	63.0/79.0/70.2	50.0/65.0/56.9	124.0/149.0/135.5	121/172/155.3
Caune de l'Arago [31]							124.4/151.3/134.9	178.3

Table S7. Dimensions of the radius of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; art., articulation; Max., maximum; Min., minimum; TD, transversal diameter.

	Length	Proximal TD	Proximal APD	TD diaphysis	APD diaphysis	Distal TD	Distal APD	TD Distal art.	APD Distal art.
# 8096	370.0	90.3	60.9	50.8	36.6	90.0	61.8	77.0	37.4
<i>S. etruscus</i>									
Min/Max/Mean [29]	342/415/37 3.5	77.5/94/86. 1	50.5/65/57. 5	40/56/47.6	30/42/36.0	79/93.5/86. 9	49/63/57.4	73.5/76.5/7 4.8	38.5/41/39. 8
<i>S. hundsheimensis</i>									
Min/Max/Mean [29]	358/404/38 0	80.0/112/97 .6	57.0/80.0/6 6.0	45.0/64.0/5 2.6	33.0/53.0/3 9.9	86.0/102/94 .0	54.0/65.5/5 9.5	75.0/83/77. 9	43.0/47.0/4 5.3
Vallonnet [31]	374/380/37	85.9/95.4/9	58.7/69.6/6	44.9/51.5/4	33.2/35.5/3	92.2/93.0/9	56.1/60.9/5	72.4/79.6/7	47.2/52.5/4
Min/Max/Mean	7	1.9	3.4	8.9	4.6	2.6	8.6	6.4	9.4
Hundsheim [34]	400.0	103.5	67.5	51.0	4.0	100.5	59.0		
	399.0	99.5	68.0	50.0	34.0	109.8	69.6	84.0	48.5
Voigtstedt [45]	398.5	99.3	68.0	49.5	36.5	106.5	69.0	84.0	48.0
	393.0	98.8	68.5	52.8	33.5	107.5	67.8	89.8	48.2
<i>S. hemitoechus</i>									
Min/Max/Med [29]	341/399/37 1.7	88.5/105/95 .6	59.0/69.5/6 3.8	49.0/60.0/5 5.1	34.0/46.5/3 8.3	91.5/111/10 2.9	59.0/72.0/6 4.6	77.0/80.0/7 8.8	44.5/45.0/4 4.8
Villavieja [3]	(387.6)	91.3	63.8	48.9	37.4	>84			
Los Rosales [3]	371.0	110.7	77.0	61.0	35.2	116.6	69.0	95.2	

Table S8. Dimensions of the tibia of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; Prox., proximal; Max, maximum; Min, minimum; TD, transversal diameter.

	Length	Proximal TD	Proximal APD	TD diaphysis	APD diaphysis	Distal TD	Distal APD
# 8661		(110)	(105)				
# 8096	325.0	115.0	126.1	57.5	53.6	113.0	73.0
<i>S. etruscus</i>							
Min/Max/Mean [29]	334/389/357.0	101.0/115.0/109.5	95.0/117.5/107.4	43.0/61.5/53.0	43.0/63.0/51.3	80.0/105.0/90.7	58.0/72.0/64.3
Senèze [31]	378.0	114.2	109.6	55.5	50.5	87.3	72.7
	378.0	114.6	110.9	55.8	48.0	94.3	73.3
<i>S. hundsheimensis</i>							
Min/Max/Mean [29]	343/394.5/369.7	103.0/123.5/113.4	100.0/126.0/111.6	46.0/68.0/56.9	43.0/65.5/52.3	81.0/103.5/92.8	60.5/73.0/67.4
Hundsheim [34]	398.0	125.0	132.0	60.0	61.0	110.0	74.0
Soleilhac [31]							
Min/Max/Mean	358/360/359.0	109.2/117.0/114.0	112.8/115.3/114.1	50.6/51.9/51.2	46.2/49.6/47.9	90.5/92.4/91.4	61.4/64.4/63.3
Vallonet [31]				51.4/56.3/54.6	48.3/48.5/48.4	84.1/91.7/88.1	60.8/69.0/63.6
Pietrafitta [31]	363.0	111.0	116.0	50.3/55.5/52.9	35.3/48.0/41.7	87.8/105.0/96.4	57.0
Untermassfeld [49]	402.5	123.0	126.5	56.9	52.4	105.8	75.3
	401.7	133.8	127.0	64.0	56.5	112.1	77.2
	395.5	132.0	133.3	57.0	49.1	111.2	72.5
	413.3	120.3		58.0	51.0	104.3	72.8
Voigtstedt [45]	390.5	128.5	123.0	60.0	50.8	105.5	72.8
	392.0	130.0	123.5	60.0	51.5	102.5	73.0
	397.8	122.5	125.8	56.8	50.8	103.8	76.8
	397.5	121.0	124.9	56.0	50.6	103.0	75.5
<i>S. hemitoechus</i>							
Min/Max/Mean [29]	321/400/358.9	101/137.5/121.3	100/130/123.6	52.0/70.0/60.0	47.0/63.0/55.5	85.0/114.0/98.4	57.0/87.0/73.1
Lunel-Viel [31]	355.0			53.2/55.7/54.9	50.4/53.5/51.8	96.4/97.2/96.8	62.2/71.0/66.1
Melpignano [10]	318.0	102.0	105.0	49.0	41.0	80.0	63.0
Alfaguara [3]	330.5	97.4	(78.0)	49.0	44.4	80.3	58.3

Table S9. Dimensions of the scaphoid of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; art., articulation; prox., proximal; Max, maximum; Min, minimum; TD, transversal diameter.

	Length	Width	Height	TD Prox. art.	APD Prox. art.	TD Distal art.	APD Distal art.
# 8096	77.4	58.2	67.3	48.9	44.2	61.0	28.1
<i>S. etruscus</i>							
Min/Max/Mean [29]	67.0/82.5/73.2	41.0/51.0/46.5	52.5/65.0/57.9	42.0/48.0/45.7	40.0/49.0/45.8	55.0/65.0/61.3	25.0/31.0/27.6
Valdarno [60]	72.0/79.0/73.9	44.0/52.0/48.7	54.0/62.0/56.9	31.0/35.0/33.9	36.0/50.0/44.9	49.0/55.0/52.2	25.0/28.0/27.1
<i>S. hundsheimensis</i>							
Min/Max/Mean [29]	65.0/82.5/77.0	42.0/55.5/48.3	55.0/68.5/60.9	41.0/59.0/49.7	39.0/51.0/45.4	57.5/68.0/62.6	25.0/34.0/28.8
Vallonnet [31]	64.7/71.0/68.8	44.3/55.2/49.9	53.2/66.2/57.8	44.2/47.4/46.2	47.4/50.8/49.1	60.3/65.2/62.7	27.1/24.9/26.0
Untermassfeld [49]	72.8/84.0/78.5	51.6/60.2/55.7	54.3/73.6/66.4	46.2/52.0/49.7	49.0/56.0/53.6	62.5/76.0/70.1	28.5/35.3/32.4
<i>S. hemitoechus</i>							
Min/Max/Mean [29]	71.5/86/78.1	43.5/56.5/50.4	62.5/75/68.8	43/63/51.1	44/54/47.9	55/72/65.1	26.5/36/29.7
Lunel Viel [79]	77.8	52.0	61.4	51.8	(47)	56.5	27.5
Cova del Gegant [60]	68.0	(45.0)	54.9	40.0	—	59.5	29.0
Atapuerca [3]	70.6		(60)	43.7	40		
Valle Radice [11]	82.8	55.7	64.5	53.5	52.0	59.5	36.5
	83.2	55.0	58.6	52.4	51.2	56.5	35.8

Table S10. Dimensions of the semilunate of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: Max, maximum; Min, minimum.

	Length	Width	Height	Anatomical Height
# 8096	68.0	47.5	50.2	43.3
<i>S. etruscus</i>				
Min/Max/Mean [29]	56.0/68.0/62.2	35.0/52.5/44.3	43.5/51.5/48.0	51.5/52.0/51.7
Min/Max/Mean [30]	59.0/70.0/62.0	43.0/51.0/46.6	43.0/49.0/45.8	46.0/ 50.0/48.0
<i>S. hundsheimensis</i>				
Min/Max/Mean [29]	60.0/74.0/67.4	42.0/52.5/48.0	43.5/56.5/49.5	43.5/58.0/50.5
	73.6	48.0	53.7	54.1
Isernia [31]	62.8	43.8	45.3	46.0
Soleilhac [31]	62.3	44.2	44.6	45.9
	73.5		55.8	
Voigtstedt [45]	72.8		51.0	
Untermassfeld [49]				
Min/Max/Mean	65.5/69.6/67.5		47.8/56.5/53.3	
<i>S. hemitoechus</i>				
Min/Max/Mean [29]	65/75/70.0	48/59/52.1	46/55/50.3	45/48/46.5
	71.0	48.4	51.7	47.9
Valle Radice [11]	69.2	56.2	56.6	53.5
	71.4	48.7	48.3	48.1
La Cova del Gegant [79]	68	49	48	
Atapuerca [45]	66	48.2	47	48.5

Table S11. Dimensions of the pyramidal of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; Max, maximum; Min, minimum; TD, transversal diameter.

	APD	TD	Height
# 8096	38.4	49.9	53.6
<i>S. etruscus</i>			
Min/Max/Mean [29]	32.0/40.0/36.0	41.0/56.5/49.9	42.0/55.0/49.2
Min/Max/Mean [31]	31.0/36.0/34.0	44.0/49.0/46.2	47.0/50.0/48.4
<i>S. hundsheimensis</i>			
Min/Max/Mean [29]	31.5/40.0/36.5	49.0/56.5/53.4	45.0/54.0/50.3
Vallonet [31]	35.8	46.9	43.3
	37.9	52.0	48.4
Soleilhac [31]	39.6	45.6	48.6
	35.7	50.6	47.4
	35.2	51.7	50.4
Isernia [46]	39.5	62.5	49
		51.0	54.3
Voigtstedt [45]		49.6	54.8
Untermassfeld [49]			
Min/Max/Mean		41.0/54.0/47.4	41.2/56.8/48.8
<i>S. hemitoechus</i>			
Min/Max/Mean [29]	35.5/46.0/40.6	47.0/60.0/52.9	48.0/63.0/55.1
	44.1	57.8	50.7
Caune de l' Arago [31]	45.6	61.5	55.8
	46.2	50.6	59.6
Valle Radice [11]	46.1	49.5	52.2
La Cova del Gegant [60]	41.0	43.0	47.0
Atapuerca [3]	34.4	44.9	47.0

Table S12. Dimensions of the pisiform of *S. hundsheimensis* from Cova del Rinoceront compared with some other remains of *Stephanorhinus*.

Abbreviations: Max, maximum; Min, minimum.

	Length	Width	Height
# 8096	61.3	33.1	25.7
<i>S. etruscus</i>			
Min/Max/Mean [29]	58.0/60.0/59.0	25.0/27.0/26.1	35.5/40.5/38.2
<i>S. hundsheimensis</i>			
Min/Max/Mean [29]	46.0/68.5/60.7	22.0/29.0/26.4	35.0/46.0/39.8
Isernia [60]	68.8	42.5	30.0
Soleilhac [31]	56.8	37.9	25.0
Süssenborn [48]	72.4	49.7	
	71.8	38.2	
Voigtstedt [45]	63.5	42.6	
	65.5	43.3	
Untermassfeld [49]			
Min/Max/Mean	55.2/68.3/64.7	25.8/31.8/29.2	
<i>S. hemitoechus</i>			
Min/Max/Mean [29]	59.0/66.0/62.9	23.0/28.0/26.0	36.0/42.0/39.9
Caune de l'Arago [31]			
Min/Max/Mean	58.5/63.6/64.7	35.5/42.1/38.4	20.8/22.7/21.8
Valle Radice [11]	62.2	32.0	27.0
La Cova del Gegant [60]	54.0	24.0	37.0

Table S13. Dimensions of the trapezoid of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: Max, maximum; Min, minimum.

	Length	Width	Height
# 8096	36.8	27.0	28.2
<i>S. etruscus</i>			
Min/Max/Mean [29]	35.0/40.0/37.9	22.0/32.0/27.5	25.5/36.0/30.4
	37.5	26.1	32.0
Pietrafitta [61]	38.1	25.5	30.0
	35.8	25.2	33.4
Crespià [61]	32.0	21.4	28.1
<i>S. hundsheimensis</i>			
Min/Max/Mean [29]	37.5/45.0/41.1	25.0/28.0/26.4	33.5/37.5/35.4
Vallonnet [31]	46.4	28.4	34.2
Isernia [31]	40.1	26.5	31.5
<i>S. hemitoechus</i>			
Min/Max/Mean [29]	32.0/42.5/38.4	25.0/32.0/28.3	25.0/37.0/31.0
Caune de l'Arago [31]			
Min/Max/Mean	32.5/41.3/37.7	23.9/28.2/26.0	24.2/29.7/28.4
	35.8	27.1	27.7
Orgnac 3 [31]	37.5	26.0	28.2
Valle Radice [11]	41.7	31.7	34.5
La Cova del Gegant [60]	35.5	26.0	29.0

Table S14. Dimensions of the magnum of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: H, height; Max, maximum; Min, minimum.

	Length	Width	Max. Height
# 8096 right	90.9	45.0	64.0
left		43.0	58.6
<i>S. etruscus</i>			
Min/Max/Mean [29]	77.0/89.0/83.3	38.0/48.5/44.1	54.0/66.0/58.6
Senèze [31]	84.2	46.2	
<i>S. hundsheimensis</i>			
Min/Max/Mean [29]	79.0/95.0/88.5	40.0/50.0/45.7	56.0/65.5/60.8
Soleilhac [31]	86.1	46.4	58.5
Isernia [31]		49.2	63.8
	99.1	48.5	69.0
	85.0	52.0	65.3
Untermasfeld [49]	87.2	48.6	64.5
	102.5	49.7	73.6
	95.4	49.4	63.5
<i>S. hemitoechus</i>			
Min/Max/Mean [29]	75.5/91.0/83.6	35.0/50.0/42.5	55.0/65.0/59.6
Caune de l'Arago [31]	75.2	44.7	57.4
Valle Radice [78]	94.6	48.0	65.3
La Cova del Gegant [60]	83.0	44.0	58.0
Lezetxiki [3]	88.6	42.2	63.2

Table S15. Dimensions of the unciform of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: Max, maximum; Min, minimum.

	Max. Length	Anatomical Length	Width	Height
# 8096	87.2	71.7	65.7	51.3
<i>S. etruscus</i>				
Min/Max/Mean [29]	75.0/87.5/81.9	53.0/67.0/59.5	55.5/73.0/60.7	44.0/52.0/46.7
Senèze [31]	79.6	61.8	60.8	46.4
	80.5	62.8	61.2	43.4
<i>S. hundsheimensis</i>				
Min/Max/Mean [29]	78.0/94.0/84.8	55.0/71.5/63.7	60.0/70.0/65.7	46.0/55.0/51.9
Soleilhac [31]	88.5	72.0	59.2	46.9
Isernia [46]	90.3	64.7	64.3	53.2
	88.5	72.0	68.0	52.5
<i>S. hemitoechus</i>				
Min/Max/Mean [29]	73.5/92.0/86.4	52.5/76.0/63.8	58.0/76.0/67.1	47.0/55.0/51.4
			67.4	51.9
Caune de l'Arago [31]			62.5	47.1
			66.2	51.3
Melpignano [10]	84	58	65	48
La Cova del Gegant [60]	85.5	58.5	62	59
Atapuerca [3]	73.8	59.4	59.6	46

Table S16. Dimensions of the Mc II of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; Art., articulation; diaph., diaphysis; L, length; Max, maximum; Min, minimum; prox, proximal; TD, transversal diameter.

	Length	Prox. TD	Prox. APD	Diaphysis TD	Diaphysis APD	Max. Distal TD	Distal Art. TD	Distal Art. APD	100 × TDdiaph/L
# 8096	167.8	37.8	38.9	34.6	23.4	40.6	37.6	41.1	20.9
<i>S. etruscus</i>									
Min/Max/Mean [29]	162/186/176	27/47/39.3	34/46.5/40.7	24/38/32.5	17/28/22.6	38/48/42.6	30/45.5/38.2	36/41/37.9	
Upper Valdarno [31]	166.0	44.0	32.0	31.0	19.0	39.0	31.0	37.0	18.7
	173.0	43.0	39.0	33.0		40.0	33.0	37.0	19.1
<i>S. hundsheimensis</i>									
Min/Max/Mean [29]	174/194/181.6	39.5/49/44.5	37/45.5/42.9	30/41/35.6	20/28/23.3	42/49/45.2	34/43/38.6	36/41/39.5	
Hundsheim [34]	190.0	44.0	48.0	39.0	20.0	40.0		43.5	20.5
Soleilhac [31]	179.0	47.1	39.3	33.7	21.3	42.4	35.6	40.2	18.7
	192.0	41.8	42.2	35.2	20.5	44.1	40.4	38.6	18.3
Isernia [31]	174.6	44.0	36.7	34.2	21.7		37.9		19.5
Untermassfeld [49]	189.2	55.8	45.5	39.6	25.4	50.2	39.5	45.5	20.9
	175.1	44.0	44.9	31.9	24.3	42.2	33.8	40.4	18.2
	184.1	50.7	46.8	39.7	27.0	50.5	42.9	45.5	21.5
Voigtstedt [45]	196.1	48.0	41.8	35.5		46.2	38.0		18.1
	(198)	49.3	41.2	40.5		48.5	41.8		
<i>S. hemitoechus</i>									
Min/Max/Mean [29]	153/169/162.4	32.0/49.0/41.5	36.0/47.0/41.8	30.0/42.0/36.9	20.0/30.0/25.0	39.0/50.0/44.0	34.0/46.0/40.2	35.5/45.5/40.2	
Lunel-Viel [79]	165.5	45.0	39.5	36.3		45.0	34.0	42.5	21.9
La Cova del Gegant [60]		41.4	35.0	38.0	23.2				
Pinilla del Valle [3]	164.7	36.7	45.8	38.5	22.7	41.7	36.4	42.6	23.3
	165.0	38.0	44.3	33.6	21.8	42.3	35.5	40.5	20.3
Melpignano [10]	130.0	33.0	33.0	28.0	17.0	33.0	27.0	35.0	21.5

Table S17. Dimensions of the Mc III of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*. Abbreviations: APD, anteroposterior diameter; Art., articulation; diaph., diaphysis; L, length; Max, maximum; Min, minimum; prox, proximal; TD, transversal diameter.

	Length	Prox. TD	Prox. APD	Diaphysis TD	Diaphysis APD	Max. Distal TD	Distal Art. TD	Distal Art. APD	100 × TD diaph /L
# 8096 left	196.8	53.6	46.4	51.0	18.3	62.2	49.3	45.0	25.9
right						61.3	49.1	43.0	
<i>S. etruscus</i>									
Min/Max/	192/220.5/20	48.5/58.0/	42.0/51.0/	45.0/53.5/	18.0/24.5/	49.0/61.0/	43.0/50.0/	35.0/43.0/	
Mean [29]	1.5	53.5	45.8	48.8	20.7	56.5	46.2	40.5	
Puebla de Valverde [21]	197	52.5	45.5	48.5	20.5	54.5	45.5	40.0	24.6
Valdarno [35]									
Min/Max/	189/200/195.	49.0/58.0/	39.0/45.0/	44.0/49.0/	17.0/20.0/	54.0/59.0/		39.0/42.0/	
Mean	7	52.7	42.8	46.8	19.0	56.3		40.3	
Senèze [31]	191.0	56.5	48.9	45.5	21.9	58.2	48.2	41.0	23.8
<i>S. hundsheimensis</i>									
Min/Max/	188.5/221/20	51.0/63.0/	42.0/51.5/	46.0/58.0/	18.5/24.0/	52.5/65.5/	43.0/54.5/	39.0/46.5/	
Mean [29]	4.7	55.1	46.9	51.1	21.3	59.3	48.2	43.3	
Hundsheim [34]	215.0	62.0	52.0	52.5	24.0	50.5		51.0	24.4
Vallonnet [31]									
Min/Max/	199.7/203.1/2	46.6/54.4/	44.1/45.3/	47.3/47.8/	19.4/20.6/	58.0/58.2/	46.8/46.8/	41.8/45.2/	
Mean	01.4	51.6	44.5	47.6	20	58.1	46.6	43.5	
Soleilhac [31]	198	53.4	48.2	45.6	19.9	54.6	45.5	42.5	23.0
	218	55.0		52.1	20.5	59.2	52.2		23.8
<i>S. Untermassfeld</i> [49]									
Min/Max/	200.5/221.6/2	54.7/66.3/	49.4/58.8/	45.1/53.6/	20.5/24.4/	52.0/64.6/	47.2/55.5/	42.5/49.2/	
Mean	10.4	59.3	53.2	50.3	22.9	58.1	51.8	46.4	
Voigtstedt [45]	221.1	62.4	52.0	55.5		70.2	50.8		25.1
<i>S. hemitoechus</i>									
Min/Max/	175/203/191.	53.5/65/59	42.5/57/50	42.5/57/52	19/26.5/21	52/66/59.4	48.5/56/51	43/50.5/45	
Mean [29]	8	.2	.3	.2	.5		.9	.4	
Cova del Gegant [60]	185.5	54.5	46.5	47.5	18.5	(50.5)	47.5	41.6	25.6
Pinilla del Valle [3]	201.5	61.8	50.6	52.7	21.1	58.2	53.0	49.7	26.1
Atapuerca [3]	188.3		43.8	46.7	21.4	(53.2)			24.8

Table S18. Dimensions of the Mc IV of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*. Abbreviations: APD, anteroposterior diameter; Max, maximum; Min, minimum; Prox., proximal; TD, transversal diameter.

	Prox. TD	Prox. APD
# 8096	44.1	44.0
<i>S. etruscus</i>		
Min/Max/Mean [29]	40.0/45.5/42.0	32.0/40.0/35.3
Senèze [31]	39.2	37.5
<i>S. hundsheimensis</i>		
Min/Max/Mean [29]	38.0/48.0/44.7	32.0/48.0/39.0
Hundsheim [34]	51.0	45.5
Mosbach [23]		
Min/Max/Mean	42.8/44.0/43.3	38.5/44.0/41.6
Untermassfeld [23]		
Min/Max/Mean	37.8/45.5/42.0	41.2/48.4/43.7
Vallonnet [31]	39.5	37.5
	41.9	40.5
	41.8	44.3
Isernia [46]	42.0	44.0
	45.5	44.5
	45.8	48.0
Voigtstedt [49]	51.4	49.5
Süssenborn [35]	43.7	46.0
<i>S. hemitoechus</i>		
Min/Max/Mean [29]	40 / 52.5 / 46.18	33.5 / 42 / 39.71
Caune de l'Arago [31]	45.44	37.60
Lunel-Viel [79]	44.8	41.0
	42.7	43.2
Valle Radice [11]	49.6	48.1
	47.4	44.8
Cova del Gegant [60]	42.5	33.0

Table S19. Dimensions of the astragalus of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; Art., articulation; Max, maximum; Min, minimum; TD, transversal diameter.

	TD	Height	Medial APD	TD Distal Art.	APD Distal Art.	TD trochlea	TD Max. Distal
# 8096	84.8	75.4	64.5	64.5	34.1	57.0	70.8
<i>S. etruscus</i>							
Min/Max/Mean [29]	73.0/88/80.9	71.0/84.0/77.0	47.0/58.0/53.5	57.0/75.0/65.6	36.0/45.5/40.6	49.0/62.0/55.4	60.0/78.0/69.9
Senèze [31]	85.2	77.1	57.1	64.1	43.2	55.9	64.1
	84.7	76.1	55.1	65.5	43.1	57.4	65.5
<i>S. hundsheimensis</i>							
Min/Max/Mean [29]	76.0/107/86.0	67.0/89.0/79.9	46.0/68.0/55.7	59.5/85.0/71.6	35.0/52.0/41.2	52.0/71.0/60.4	61.0/83.0/73.7
Hundsheim [34]		80.0					
Vallonnet [31]							
Min/Max/Mean	75.6/87.6/80.3	74.0/82.5/78.1	47.4/51.8/49.4	65.9/66.7/66.3	38.0	57.5/59.5/55.8	67.0/69.4/68.6
Isernia [31]							
Min/Max/Mean	86.1/98.2/93.5	77.0/80.9/78.3	54.3/55.8/55.1	73.5/79.2/75.5	40.8/45.8/43.3	54.0-51.3-52.7	73.3-70.3-68.8
Cagnes sur Mer [31]	78.6	71.2	49.4	66.8	40.5	53.9	68.1
Durfort [31]	87.5	78.8	55.1	69.9	41.7	57.5	73.5
<i>S. hemitoechus</i>							
Min/Max/Mean [29]	72.5/95/85.1	72/94/81.5	48/67/57.3	60.5/80/68.1	34/55/43.9	46/68/59.0	63.5/82/73.1
Melpignano [10]	81.0	72.0	52.0	64.0	43.0	53.0	68.0
	80.0	71.0	46.0	55.0	36.0	50.0	60.0
Atapuerca [3]	78.8	74.0	48.0	63.3	40.8	46.0	68.6
Alfaguara [3]	70.0	66.0	44.7	55.6	36.5	50.0	58.3
	88.7	85.0	56.2	67.0	44.7	58.0	72.0
Pinilla del Valle [3]	84.7	83.4	55.2	69.0	43.8	50.0	73.0
	(85)	84.0	53.6	71.0	43.0	57.0	72.8

Table S20. Dimensions of the calcaneus of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; Max, maximum; Min, minimum; Post., posterior; Sust., sustentaculum; TD, transversal diameter.

APD 'beak' taken at the level of the anterior border of the ectal facet [1,2].

	Height	APD Tuber	TD tuber	APD 'beak'	TD Sust.	Min. Post. TD
# 8096	(109.6)	65.8	47.5	(60.0)	(78.7)	39.5
<i>S. etruscus</i>						
Min/Max/Mean [29]	109/130/118.7	57.5/71.0/63.6	39.0/49.0/43.7	54.0/70.0/59.9	60.0/75.0/67.6	31.0/39.0/35.0
Senèze [31]	121.4	62.7	44.4	56.0	72.8	37.7
	120.9	62.0	46.2	54.5	73.1	39.2
<i>S. hundsheimensis</i>						
Min/Max/Mean [29]	110/131/118.8	55.5/77.0/67.9	43.0/58.0/48.6	54 / 68 / 60.36	64 / 80 / 72.83	32.5 / 44 / 38.15
Hundsheim [34]	132.4	82.0	45.0			
	114.2	72.0				
Soleilhac [31]	112.7	67.1	48.1	53.1	71.5	40.0
	132.0	68.6	56.5	63.0	85.5	47.7
Isernia [31]	133.3	71.2	56.8	66.7	77.1	45.0
<i>S. hemitoechus</i>						
Min/Max/Mean [29]	104 / 139 / 120.43	54 / 74 / 62.83	42 / 60 / 50.16	56 / 75 / 66.54	66 / 85 / 75.18	36 / 46.5 / 39.82
Lunel-Viel						
Min/Max/Mean [31]	107.6/115.5/111.5	58.0/63.8/60.6	40.4/47.0/44.1		75.2/83.6/79.4	35.0/41.3/37.6
	114.0	53.0	43.0	60.0	65.0	31.0
Melpignano [10]	110.0	59.0	49.0	62.0	70.0	38.0
Atapuerca [3]	114.0	56.0	39.3	58.6	62.4	31.5
Alfaguara [3]	105.0		40.3		56.3	32.5
Cueva del Congosto [3]	120.9	(60.9)	50.0	68.0	79.0	36.5

Table S21. Dimensions of the cuboid of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*. Abbreviations: APD, anteroposterior diameter; Art., articulation; Max, maximum; Min, minimum; TD, transversal diameter.

	APD	TD	Height	TD Prox. Art.	APD Prox. Art.	Anterior Height
# 8096	55.0 54.2	44.9 43.5	52.1 (45.0)	40.1 (44.5)	36.2 39.1	35.6 36.9
<i>S. etruscus</i>						
Min/Max/Mean [29]	53.0/67.0/58.5	36.0/48.0/41.3	50.0/62.0/55.6	34.5/43.0/40.1	34.0/47.0/39.8	36.0/42.5/39.8
Valdarno [35]	56.0/61.0/57.7	36.0/47.0/41.7	48.0/60.0/52.3	32.0/42.0/38.0	35.0/41.0/37.5	36.0/42.0/39.2
Min/Max/Mean Pietrafitta [31]	64.5	43.9	50.8	44.2	40.6	39.6
<i>S. hundsheimensis</i>						
Min/Max/Mean [29]	55.5/70/63.2	37/44/40.9	51/70.5/57.4	38.5/43/41.5	36/48/42.4	36/43/40.6
Hundsheim [34]	76.0 60.9	45.0 36.3	43.4 55.3	40.8	41.5	40.0
Soleilhac [31]	59.2 57.4 67.6	36.8 41.3 43.0	53.0 52.4 62.0	38.5 37.1 41.7	42.9 43.5 47.6	39.8 37.0 41.5
Isernia [31]	65.2 65.5	44.5 41.9	64.2 62.6	40.7 43.1	45.0 45.3	41.8 42.4
Untermassfeld [49]						
Min/Max/Mean	60.4/73.1/67.0	44.4/56.3/48.5	54.3/64.9/58.8	44.7/52.2/47.7	40.5/52.5/45.7	
Voigtstedt [45]	71.2	62.0	65.5	51.1	54.5	
<i>S. hemitoechus</i>						
Min/Max/Mean [29]	55/71/61.2	38/53/44.4	54/67/62.6	38/46/42.7	33/42/36.9	39/44.5/41.8
Caune de l'Arago [31]	64.6	38.1	55.8	40.7	41.0	42.2
Orgnac 3 [31]	55.4 57.7	38.2 37.7	56.4	33.6	37.5 37.5	41.5 40.7
Pinilla del Valle [3]	58.5 58.0	40.5 44.2	51.0 51.0	37.8 39.5	41.6 44.3	39.0 36.8
Alfaguara [3]	50	35	52	35	32.5	34.8

Table S22. Dimensions of the navicular of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*. Abbreviations: APD, anteroposterior diameter; Max, maximum; Min, minimum; TD, transversal diameter.

	APD	TD	Height
# 8096	57.7 58.0	43.9 44.4	29.4 29.8
<i>S. etruscus</i>			
Min/Max/Mean [29]	52.0/61.0/55.4	37.0/49.0/43.7	24.5/33.0/29.9
Senèze [31]	56.1 55.8	42.3 42.3	30.1 29.5
<i>S. hundsheimensis</i>			
Min/Max/Mean [29]	53.0/63.0/58.0	37.0/55.0/46.2	24.5/34.0/29.6
	55.0	40.8	29.0
Soleilhac [31]	56.4 54.9	38.0 40.0	25.8 28.4
	54.0	45.5	28.4
Pietrafita [31]	62.0	44.0	27.0
Hundsheim [34]	63.6	48.7	33.0
Voigtstedt [45]	63.2 64.2	49.2 52.0	32.7 33.4
<i>S. hemitoechus</i>			
Min/Max/Mean [29]	58.0/67.0/62.4	42.0/56.0/48.9	26.5/36.5/31.6
Caune de l'Arago [31]			
Min/Max/Mean	61.2/61.8/61.5	41.7/46.3/43.6	28.3/31.1/29.7
Mars [31]	61.3	47.4	27.4

Table S23. Dimensions of the ectocuneiform of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*. Abbreviations: APD, anteroposterior diameter; Max, maximum; Min, minimum; TD, transversal diameter.

	APD	TD	Height
# 8096 right	45.7	42.5	28.5
left	47.4	42.4	28.0
<i>S. etruscus</i>			
Min/Max/Mean [29]	37.0/50.5/44.6	36.0/46.0/41.0	22.5/31.0/26.2
Upper Valdarno [31]			
Min/Max/Mean	42.0/47.0/45.0	36.0/42.0/39.8	23.0/27.0/24.7
	44.7	43.7	25.3
Senèze [31]	44.4	42.8	25.6
<i>S. hundsheimensis</i>			
Min/Max/Mean [29]	42.5/51/46.9	41/47/43.7	22.5/30/26.1
	47.3	41.2	21.8
Soleilhac [31]	53.0	47.1	27.2
Isernia [31]	48.7	44.6	25.2
	44.7	37.2	23.9
Pietrafita [31]	43.2	38.2	25.0
Hundsheim [34]	49.8	47.0	32.3
	47.4	45.8	29.9
	49.8	49.5	27.2
Untermassfeld [49]	51.8	49.2	26.7
	48.7	46.0	26.4
	46.2	44.5	26.0
<i>S. hemitoechus</i>			
Min/Max/Mean [29]	42.5/51.5/47.6	41.5/48.0/45.4	22.5/30.5/26.3
Caune del' Arago [31]	39.6/46.9/42.9	40.1/43.5/41.6	19.7/25.4/23.1
Mars [31]	50.2	47.8	26.5

Table S24. Dimensions of the mesocuneiform of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*. Abbreviations: APD, anteroposterior diameter; Max, maximum; Min, minimum; TD, transversal diameter.

	APD	TD	Height
# 8096	(32.0)	20.2	16.8
<i>S. etruscus</i>			
Min/Max/Mean [29]	27/33/29.8	16/21/19.1	14.5/25/18.9
	32.0	20.6	18.0
Senèze [31]	33.8	20.4	18.2
<i>S. hundsheimensis</i>			
Min/Max/Mean [29]	27/36.5/32.94	18/22/20.13	14/19/17.25
Hundsheim [34]	32.0	17.5	17.2
	33.4	20.7	18.5
	35.9	20.9	17.0
Untermassfeld [49]	36.5	22.0	18.4
	36.6	21.2	16.2
<i>S. hemitoechus</i>			
Min/Max/Mean [29]	27.0/33.0/30.3	19.0/25.0/22.0	14.5/18.0/16.5
Caune de l'Arago [31]			
Min/Max/Mean	28.2/36.7/31.5	18.9/24.1/21.1	12.8/18.6/15.4
Orgnac [31]	31.0	19.1	14.5

Table S25. Dimensions of the entocuneiform of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*. Abbreviations: APD, anteroposterior diameter; Max, maximum; Min, minimum; TD, transversal diameter.

	Length	TD	APD
# 8096	65.2	28.1	18.9
<i>S. etruscus</i>			
Min/Max/Mean [29]	53.0/73.0/64.2	28.0/36.0/31.7	16.0/22.0/19.1
Senèze [31]	65.2	30.9	15.9
	66.7	32.3	19.6
Upper Valdarno [31]	46.0	29.0	19.0
	44.0	30.0	20.0
<i>S. hundsheimensis</i>			
Min/Max/Mean [29]	57.0/68.5/62.9	26.0/33.5/30.4	16.0/23.5/21.0
Soleilhac [31]	57.2	25.4	14.8
	56.3	24.4	14.6
Pietrafita [31]	60.5	29.0	20.0
Hundsheim [34]	72.6	39.0	22.0
	74.2	21.7	21.0
Untermassfeld [49]	71.7	26.5	25.5
	69.1	29.2	18.6
<i>S. hemitoechus</i>			
Min/Max/Mean [29]	61.0/72.0/68.0	32.5/38.0/35.3	21.0
Caune de l'Arago [31]	68.2	24.5	19.4

Table S26. Dimensions of the Mt II of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; Art., articulation; diaph., diaphysis; L, length; Max, maximum; Min, minimum; Prox, proximal; TD, transversal diameter.

	Length	Prox. TD	Prox. APD	TD Diaphysis	APD Diaphysis	TD Max. Distal	TD Distal Art.	APD Distal Art.	100 × TDdiaph/ L
# 8096 right	151.7	27.9	41.1	23.7	27.2	33.5	35.0	32.3	15.6
# 8096 left	153.2	28.2	40.1	24.1	26.5	36.5	32.9	31.9	15.7
# 8661			(44.4)	20.0	30.0				
<i>S. etruscus</i>									
Min/Max/Mean	145/162/15	21.0/31.0/2	32.5/42.0/3	22.5/29.0/2	21.0/27.5/2	34.0/41.0/3	32.0/39.0/3	31.0/35.0/32.	
[29]	5.4	7.1	7.9	5.9	4.4	7.1	5.2	9	
Senèze [31]	157.0	26.1	41.3	26.7	25.4	34.0	30.7	35.7	17.0
	157.0	25.8	41.4	26.0	25.4	35.6	29.3	35.4	16.5
Upper Valdarno									
[31]	149/179/15	25.0/42.0/3	32.0/39.0/3	20.0/30.0/2	21.0/29.0/2	34.0/44.0/3		34.0/44.0/36.	
Min/Max/Mean	7.4	1.5	5.2	5.6	3.5	7.5		3	
<i>S. hundsheimensis</i>									
Min/Max/Mean	151/171/16	26.0/32.0/2	38.0/46.0/4	23/32		33.5/41.5/3	35.5/41.5/3	28.5/35/31.2	
[29]	0.2	8.3	1.5	5/27.2	20/28/23.8	7.2	7.7		
Vallonnet [31]	153.1	29.8	37.3	23.4	20.8				15.3
	153.2	34.0	36.3	29.1	19.7				18.9
Isernia [31]	158.7	39.8	43.8	34.8	23.8	42.6	35.5	40.8	21.9
Pietrafitta [31]	150.5	28.0	36.5	25.5	24.0	36.8	34.2	37.2	16.9
Voigtstedt [45]	173.2	33.6	44.2	22.6		37.0	33.6		13.0
	173.5	33.5	44.0	23.2		37.5	33.5		13.3
Hundsheim [34]	170.0	37.0	45.5	30.0	26.0	39.0	35.0	45.0	17.6
Untermassfeld [49]	161.0		45.8	26.9	23.5	38.4	34.7	41.5	16.7
	171.4	33.0	45.5	27.4	25.1	36.0	32.4	39.0	16.0
	167.2	34.5	46.0	26.7	26.1	36.1	35.0	41.3	16.0
	172.5	33.2	40.5			34.3	32.0	34.0	
<i>S. hemitoechus</i>									
Min/Max/Mean	137/158/14	28/34.5/31.	38.5/45/42.	25.5/33/29.		33/41/37.0	34/40.5/37.	29.5/39/34.3	
[29]	8.8	0	0	6	22/29/24.5		6		
Neumark Nord [12]	153.2	33.3	46.6			39.8		41.3	
	163.6	34.8	48.0			40.0		40.9	
Lunel Viel [14]	144.5	38.2		26.4		34.2			18.3
	(144)	41.2	35.1	27.0		31.3			
Alfaguara [3]	136.2	21.3	31.0	19.7	22.0	29.0			14.5

Table S27. Dimensions of the Mt III of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; Art., articulation; diaph., diaphysis; L, length; Max, maximum; Min, minimum; Prox, proximal; TD, transversal diameter.

	Length	Prox. TD	Prox. APD	Diaphysis TD	Diaphysis APD	Max. TD	Distal TD	Distal Art. APD	100 × TDdiaph/L
# 8096 right	167.1	47.5	39.9	41.0	20.1	49.5	46.6	40.0	24.5
left	165.1	46.4	42.4	39.4	20.2	50.6	45.4	39.6	23.9
# 8661 right		50.1		45.5	20.1				
left		47.5	41.0						
<i>S. etruscus</i>									
Min/Max/Mean [29]	165/187/175.9	43.0/56.0/48.5	38.0/47.0/41.9	33.5/45.0/40.2	21.5/25.0/22.9	48.0/59.0/53.5	39.0/46.0/42.5	32.0/40.0/36.7	
Senèze [31]	174.0	51.8	47.5	41.4	23.2	54.4	44.7	37.0	23.8
	176.0	51.1	48.8	41.1	23.3	54.0	44.9	37.3	23.4
<i>S. hundsheimensis</i>									
Min/Max/Mean [29]	167/197/186.6	37.0/54.5/50.8	39.5/47.5/43.5	33.0/46.0/40.0	20.0/29.0/24.5	46.0/59.5/52.8	39.0/48.0/43.5	33.5/43.0/38.5	
Soleilhac [31]		48.4	40.9	37.5	22.7				
Isernia [31]	209.1	61.5	48.7	53.8	21.3	46.4	50.4		25.7
Hundsheim [34]	197.0	58.0	36.0	45.7	25.6	61.0	49.0	46.4	23.2
Untermassfeld [49]	178.8/203.6/192.1	51.2/57.2/54.2	43.9/53.4/48.6	40.2/43.9/41.8	23.0/28.4/25.1	53.6/60.8/56.8	45.0/49.7/47.4	38.9/43.0/40.4	
Min/Max/Mean [45]	92.9	3	0.5	8	5.1	5.9	7.4	1.2	
Voigtstedt [45]	199.5	56.6	49.8	42.6		60.3	44.7		21.4
<i>S. hemitoechus</i>									
Min/Max/Mean [29]	152/178/167.6	42/54.5/49.0	37/47/41.8	38/48/43.8	17.5/24/21.1	46/57.5/52.2	38.5/51/46.1	32.5/45/39.3	
Orgnac 3 [31]	152.9	42.1	38.6	40.1	17.9		38.6	33.8	26.2
Mars [31]	167.0	52.3	47.0	43.2	20.6	52.4	47.7	41.0	25.9
Alfaguara [3]	150.3	39.2	35.0	35.6	20.0	44.4	36.8	32.5	23.7
Atapuerca [3]	171.2	48.0	42.7	37.5	23.2	50.8	40.6	37.0	21.9
Lezetxiki [3]	178.0	51.3	42.5	44.3	22.0	55.2	47.7	39.3	24.9

Table S28. Dimensions of the Mt IV of *S. hundsheimensis* from Cova del Rinoceront compared with other remains of *Stephanorhinus*.

Abbreviations: APD, anteroposterior diameter; diaph., diaphysis; L, length; Max, maximum; Min, minimum; Prox, proximal; TD, transversal diameter.

	Length	Prox. TD	Prox. APD	Diaphysis TD	Diaphysis APD	Max. Distal TD	Distal Art. TD	Distal Art. APD	100 × TDdiaph/L
# 8096 right	145.1		32.9	28.0	22.3	33.0	28.2	36.6	15.7
left	146.6	46.0	42.6	23.7	26.8	30.9	28.9	36.0	19.3
<i>S. etruscus</i>									
Min/Max/Mean	145/162/155.4	21.0/31.0/27.	32.5/42.0/3	22.5/29.0/2	21.0/27.5/24.	34.0/41.0/3	31.0/35.0/	32.0/39.0/3	
[29]		1	7.9	5.9	4	7.1	32.9	5.2	
Senèze [31]	151.0	40.9	35.4	28.3	23.3	32.3	30.2	35.4	18.7
<i>S. hundsheimensis</i>									
Min/Max/Mean	152.5/166.5/1	36.5/46.0/40.	33.5/43.5/3	22.0/35.5/2	19.0/30.0/25.	29.0/35.0/3	28.5/38.0/	35.0/40.0/3	
[29]	61.3	2	8.3	7.3	2	2.0	31.6	7.9	
Hundsheim [34]	169.4	45.5	45.0	31.0	24.0	38.7	36.5	41.2	18.8
Solheilac [31]	165.0	38.1	37.3	30.3	20.3	31.1	30.0	38.3	18.4
Vallonet [31]		39.4	35.0	26.4	21.3				
Pietrafitta [31]	153.0	43.3	35.8	28.0	22.4	35.5		40.0	18.3
Untermassfeld [49]	170.8	44.4	39.7	30.0	27.8	39.5	36.8	42.7	17.6
	175.3	47.2	40.2	30.9	22.6	37.7	38.0	42.1	17.6
	165.2	43.3	42.7	31.5	35.5	38.1	38.7	40.7	19.1
	160.3	41.0	36.9	31.5	20.0	37.7	34.6	40.0	19.7
Voigtstedt [45]	173.3	41.7	38.2	22.8		36.4	34.5		13.2
	173.5	41.5		22.5		36.5	34.6		13.0
<i>S. hemitoechus</i>									
Min/Max/Mean	136/169.5/150	33.5/48/41.4	33.5/46.5/4	20/34.5/27.	22/31/26.9	27/39/32.7	27/37.5/33	32.5/43/37.	
[29]	.4		0.4	3			.2	1	
Melpignano [10]	136	(36)	(37)	24.0	25.0	28.0	26.0	35.0	17.6
Neumark Nord [12]	163.8	51.6	52.1			39.4		43.0	
	162.9	51.2	51.8			39.1		43.6	
Atapuerca [45]	150.6	33.0	37.0	28.3	19.0	27.0	26.0	34.2	18.8
	143.3	40.3	34.0	28.0	18.6	29.2	28.2	36.2	19.5

Table S29. Dimensions of the central and lateral phalanges of *S. hundsheimensis* from Cova del Rinoceront.

Abbreviations: APD, anteroposterior diameter; Art., articulation; Prox, proximal; TD, transversal diameter.

1st central phalanx	Length	TD Prox. Art.	APD Prox. Art.	TD Distal Art.	APD Distal Art.
# 8096	43.5	41.5	24.6	40.0	21.4
	45.4	42.5	25.1	40.2	22.4
2nd central phalanx					
# 8661	37.0	39.3	24.0	45	20
# 8096	36.2	40.6	21.8	44.9	19.9
	33.2	40.7	20.7	43.3	20.0
	32.8		24.5	44.9	19.2
3rd central phalanx					
# 8096	65.9	46.6	17.3		
1st lateral phalanx					
# 8661	38.9	24.8	25.7	28.9	24.5
	36.9	23.6	24.9	30.0	25.5
	39.6	30.9	28.4	30.0	25.5
	36.0	30.1	25.5	36.2	30.0
	37.5	26.7	26.0	33.2	25.7
	40.2	27.4	26.8	32.6	24.3
2nd lateral phalanx					
# 8661	32.0	37.0	22.7	28.5	23.1
	27.0	33.0		27.5	22.0
	26.0	29.8	22.9	27.4	21.9
	25.8	28.6	21.6	25.9	20.0
	28.1	32.0	22.6	23.5	21.1
3rd lateral phalanx					
# 8096	51.4	33.5	21.1		
	60.2	40.5	22.8		
	(50)	38.1	18.1		

References

29. Guérin, C. Les Rhinocerotidae (Mammalia-Perissodactyla) du Miocene Terminal au Pléistocène supérieur d'Europe Occidentale comparación avec les especes actuelles. *Doc. Lab. Géol. Lyon* **1980**, 79, 1–1185.
31. Lacombat, F. Les rhinocéros fossiles des sites préhistoriques de l'Europe méditerranéenne et du Massif Central, Paléontologie et implications bichronologiques. *British Archaeol. Reports, Intern. Series* **2005**, 1419, 1–175.
5. Pandolfi, L.; Marra, F. Rhinocerotidae (Mammalia, Perissodactyla) from the chrono-stratigraphically constrained Pleistocene deposits of the urban area of Rome (Central Italy). *Geobios* **2015**, 699: 1–64.
34. Toulà, F. Das Nashorn von Hundsheim Rhinoceros (*Ceratorhinus* Osborn) *Hundsheimensis* nov. form. Mit Ausführung über die Verhältnisse von elf Schädeln von *Rhinoceros* (*Ceratorhinus*) *sumatrensis*. *Abh. KK Geol. Reich.* **1902**, 19(1): 1–92.
38. Kotowski, A.; Stefaniak, K.; Kahlke, R.-D. A rhinocerotid skull from the Early Pleistocene site of Untermassfeld. In *The Pleistocene of Untermassfeld near Meiningen (Thüringen, Germany)*, Part 4; Kahlke, R.-D., Ed.; Römisch-Germanisches Zentralmuseum, Mainz, Germany, 2020; Part 4, pp. 273–1294.
43. Pandolfi, L.; Gaeta, M.; Petronio, C. The skull of *Stephanorhinus hemitoechus* (Mammalia, Rhinocerotidae) from the Middle Pleistocene of Campagna Romana (Rome, central Italy): biochronological and paleobiogeographic implications. *Bull. Geosciences* **2013**, 88(1), 51–62.
12. Van der Made, J. The rhinos from the Middle Pleistocene of Neumark-Nord (Saxony-Anhalt). *Veröffentlich. Land. Denkm. Archäol.* **2010**, 62, 433–527.
78. Petronio, C. Una mandibola di rinoceronte di Ponte Galeria. *Atti Soc. Sci. Nat.* **1988**, 129(2–3): 173–178.
11. Pandolfi, L.; Tagliacozzo, A. *Stephanorhinus hemitoechus* (Mammalia, Rhinocerotidae) from the Late Pleistocene of Valle Radice (Sora, Central Italy) and re-evaluation of the morphometric variability of the species in Europe. *Geobios* **2015**, 48, 169–191.
64. Petronio, C.; Pandolfi, L. *Stephanorhinus hemitoechus* (Falconer, 1868) del Pleistocene superiore dell'area di Melpignano-Cursi e S. Sidero (Lecce, Italia). *Geol. Romana* **2008**, 41, 1–12.
49. Kahlke, H.D. Die Rhinocerotiden-Reste aus dem unterpleistozän von Untermassfeld. In Kahlke R.-D. (Ed.), *Das Pleistozän von Untermassfeld bei Meiningen, Thüringen. Monogr. Römisch-German. Zentralmus. Mainz* **2001**, 40(2), 501–556.
45. Kahlke, H.D. Die Rhinocerotiden-Reste aus den Tonen von Voigtstedt in Thüringen. *Palaeontol. Abh. A* **1965**, 2(2–3), 451–520.
3. Cerdeño, E. *Stephanorhinus hemitoechus* (Falc.) (Rhinocerotidae, Mammalia) del Pleistoceno medio y superior de España. *Est. Geol.* **1990**, 46, 465–479.
79. Bonifay M.F. *Dicerorhinus etruscus* Falc. du Pléistocène moyen des grottes de Lunel-Viel (Hérault). *Ann. Paléont.* **1973**, 59(1), 79–111.
60. Santafé, J.V.; Casanovas, M.L. *Dicerorhinus hemitoechus* (Falconer, 1868) (Mammalia, Perissodactyla) del yacimiento Pleistocénico de la Cova del Gegant (Garraf, Barcelona). *Empúries* **1986**, 48–50, 310–322.
30. Fortelius, M.; Mazza, P.; Sala, B. *Stephanorhinus* (Mammalia-Rhinocerotidae) of the Western European Pleistocene, with a revision of *S. etruscus* (Falconer, 1868). *Palaeontogr. Ital.* **1993**, 80, 63–155.
46. Sala, B.; Fortelius, M. The Rhinoceros of Isernia La Pineta (early Middle Pleistocene, Southern Italy). *Palaeontogr. Ital.* **1993**, 80, 157–174.
48. Kahlke, H.D. Die Rhinocerotiden-Reste aus den Kiesen von Süssenborn bei Weimar. *Palaeontol. Abh. A* **1969**, 3(3–4), 667–709.
61. Mazza, P.; Sala, B.; Fortelius, M. A small latest Villafranchian (late Early Pleistocene) rhinoceros from Pietrafitta (Perugia, Umbria, Central Italy) with notes on the Pirro and Westerhoven rhinoceroses. *Palaeontogr. Ital.* **1993**, 8, 25–50.
35. Mazza, P. The Tuscan Early Pleistocene *Dicerorhinus etruscus*. *Palaeontogr. Ital.* **1988**, 75, 1–87.
75. Pandolfi, L.; Petronio, C. *Stephanorhinus etruscus* (Falconer, 1868) from Pirro Nord (Apricena, Foggia, Southern Italy) with notes on the older late Early Pleistocene rhinoceros remains of Italy. *Riv. Ital. Paleontol. Stratigr.* **2011**, 117(1), 173–187.