

Diceros bicornis

Census of rare animals in the International Zoo Yearbook, London Black Rhinoceros							
Zoo	vol.3 jn 1961	vol.4	vol.5 in 1963	vol.6	vol.7	vol.8	vol.9
Adelaide	1/0		1/0	1/0	1/0		1/0
Amsterdam	1/2		1/1	1/1	1/1	1/1	1/1
Antwerp	1/1		1/1	0/1	0/1	0/1	0/1
Arnhem	1/0				1/1	1/1	1/1
Atlanta							1/0 (1/0)
Bangkok					1/0 (1/0)		
Barcelona			1/1	1/1	1/1	1/1	1/1
Berlin E	1/1		1/1	1/1	1/1	1/1	1/2
Berlin W	1/1		1/1	1/1	1/1	1/1	1/1
Bristol	2/1 (1/0)		1/2 (0/1)	1/2 (0/1)	2/2 (1/1)	2/2 (1/1)	2/3 (1/2)
Buenos Aires	2/2 (3)		2/2 (2)	1/2		1/2 (1/2)	
Cairo	1/1		1/1	1/1	1/1		1/1
Chester	1/1		1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	2/1 (2/0)
Chicago Br	1/2		1/1	1/1	1/1	1/1	0/1
Cincinnati	1/2 (0/1)		1/1	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	3/1 (2/0)
Cleethorpes							1/0
Cleveland	1/0		1/0	1/0	1/0	1/0	1/0
Colombo	1/1		1/1	1/1		1/1	
Colorado	1/1		1/0	1/0	1/0	1/0	1/1
Columbus	1/1		1/0	1/0	1/0	1/0	1/0
Copenhagen	1/0		1/0	1/0	1/0	1/0	1/0
Dallas	1/1		1/1	1/1	1/1	1/1	1/1
Denver	1/1		1/1	1/1	1/1	1/1	1/2 (0/1)
Detroit	2/1 (1/0)		1/1 (0/1)	1/0	1/1	1/1	1/1
Dresden	1/0		1/0	1/0			
Dublin	0/1 (0/1)		1/1 (1/1)	1/1	1/1 (1/1)	1/1	1/1 (1/1)
Duluth				1/0 (1/0)	1/0 (1/0)	1/0	1/0
Evansville	1/0		1/0	1/0	1/0		
Fort Worth	0/1		?				
Frankfurt	1/2 (0/1)		1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)

D. bicornis

3-9 (2)

	3	4	5	6	7	8	9
Fresno			1/0	1/1	0/1	0/1	0/1
Fukuoka					1/0		1/0
Gelsenkirchen	1/1			0/1	1/0	1/0	
Granby	0/1		0/1	0/1	0/1	0/1	0/1
Hanover			1/1	1/1+1 (1)		1/1	
Jacksonville	1/1		1/1 (1/0)	1/1 (1/0)	1/1 (0/1)	1/1 (1/0)	1/1 (1/0)
Jerusalem			1/0	1/0	1/0	1/0	1/0
Kanazawa			1/0				
Kansas	1/0		1/1 (1)		1/1 (0/1)	1/1	1/1
Kobe	1/1		2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	2/0 (1/0)	1/1
Kolmarden				1/1			
Leningrad			1/0		1/0	1/0	1/0
Lisbon	1/1		1/1	1/1	3/1 (1/0)	3/1 (1/0)	2/1 (1/0)
Lodz							1/0
London ZSL	0/1				1/1	1/1	1/1
Los Angeles						0/1	0/1
Magdeburg							1/0
Malton GB						1/0	
Manchester	0/1		0/1	1/1	1/1	1/1	1/1
Manilla	1/0		1/0	1/0	1/0	1/0	1/0
Memphis	1/0		0/1	1/1	1/0	1/0	
Mexico Chap.	1/0		1/1	1/1	1/1	1/1	1/1
Moscow			0/1	0/1	0/1	0/1	0/1
Munich	1/1			1/1	1/1	1/1	
Mwanza				1/2	1/0	1/0	
Mysore	1/1			1/1	1/1 (1/1)	2/1 (1/0)	2/1 (1/0)
Nagoya	0/1		0/1	0/1	1/1	1/1 (1/0)	
Nairobi					0/2	0/1	
Naples	1/2		1/2	1/2	1/2	1/2	1/2
NY Bronx	1/0		1/0	1/0	1/0	1/0	1/0
NY Central Park	1/0						
Okahandja				1/0	0/2		
Oklahoma			1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1	1/1
Osaka	1/1		0/1	0/1	1/1	1/1 (1/1)	
Paris PZ	0/1		0/1	0/1	0/1	0/1	0/1

	3	4	5	6	7	8	9
Peking	1/1		1/1	1/2 (0/1)	1/2 (0/1)	b	
Perth	0/1		0/1	0/1	0/1	0/1	0/1 (0/1)
Philadelphia	1/1		1/1	1/1	1/1	1/0	1/0
Pittsburgh	2/1 (1/0)		2/1 (1/0)	1/1	2/1 (1/0)	2/1 (1/0)	1/1
Prague	1/1		1/1	1/1	1/1	1/1	1/1
Pretoria	0/1		1/1	1/1	1/1	1/1	1/1
Rio de Janeiro	0/3 (0/2)		0/1				
Rotterdam	1/2 (0/1)						
St Louis	1/1		0/2	1/3	1/3	1/3	1/3
San Antonio	1/1		?		1		1/0
San Diego	1/1		1/1	1/1	1/1	1/1	1/1
San Francisco	1/0		1/0	1/0	1/0	1/0	1/1
Santo Domingo			1/1				
Sao Paulo							1/0
Sapporo	1/0						
Sydney	1/0		8 (4)	1/7/1 (5)	1/6 (0/5)	1/6 (0/5)	2/5 (1/3)
Tehran					1/0		1/0
Tel Aviv						1/1	1/1
Thoiry							1/1
Tokyo Ueno	1/1		1/1	0/1	0/1		
Toledo	0/1			0/1			
Turin					0/1	1/1	1/1
Vienna	1/1		1/1	1/0	1/0	1/0	1/1
Washington	1/1		1/1	1/1	1/1	1/1	2/1 (1/0)
Whipsnade	1/0		1/1	1/1	1/1	1/1	1/1
Wroclaw					1/0	1/0	1/0
Zagreb				0/1	0/1	1/1	1/1
Zurich	1/1		1/1	1/1/1	1/2	1/2	1/2
TOTAL	57/62 (6+3) 64 zoos		53/52 +8 (6/5+7) 63 zoos	57/64/3 (6/4/6) 66 zoos	66/64/2 (10/12/1) 72 zoos	66/60 (11/10) 68 zoos	67/59 (12/9) 67 zoos

Census of rare animals in the International Zoo Yearbook, London Black Rhinoceros							
Zoo	vol.10 in 1969	vol.11 in 1970	vol.12 in 1971	vol.13 in 1972	vol.14 in 1973	vol.15 in 1974	vol.16 in 1975
Adelaide	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Alma Ata			1/1 (1/0)	1/0 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)
Amsterdam	1/1	0/1	0/1	0/1	0/1	0/1	0/1
Antwerp	0/1						
Arnhem	1/1	?					
Asheboro							1/1
Atlanta	1/1	1/1	1/1	1/1 (1/1)	1/1	1/1	1/1
Bangkok				1/0			
Barcelona	1/0	1/0 (1/0)					
Bekesbourne				1/2 (1/0)	1/2 (1/0)	1/2 (1/0)	1/2 (1/0)
Berlin E	1/2	0/2	0/1	0/1	0/1	0/1	0/1
Berlin W	1/1	1/1	1/1	1/1	1/1	1/1	0/1
Bristol	2/3 (1/2)	2/2 (1/1)	2/2 (1/1)	2/0 (1/0)	1/0 (1/0)	1/1 (1/0)	1/1 (1/0)
Budapest		0/1	0/1	0/1	0/1	0/1	0/1
Buenos Aires		1/2	1/1 (1/1)	1/1 (1/1)			
Cairo	1/1	1/1	1/1	1/0	1/0 (1/0)	1/0	
Chester	2/1 (2/0)	2/1 (2/0)	2/1 (2/0)	2/1 (1/1)	2/1 (2/0)	1/2 (1/1)	1/2 (1/1)
Chicago Br	0/1	0/1	0/1	0/1	0/1	1/3	1/3
Cincinnati	2/1 (1/0)	2/1 (1/0)	1/1 (0/1)	1/1 (0/1)	2/1 (1/1)	2/2 (1/1)	2/2 (1/1)
Cleethorpes	1/0	1/0		1/0			
Cleveland	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Colombo		1/1 (0/1)	1/1	1/1 (0/1)		1/1	1/1 (0/1)
Colorado	1/1	1/1	1/1	1/1	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)
Columbus	1/0	1/0	1/1	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/1 (1/0)
Copenhagen	1/0						
Dallas	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Denver	1/1	1/1	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	2/2 (1/1)	3/2 (2/1)
Detroit	1/1	1/1	1/1	1/1	2/1 (1/0)	1/1	1/1
Dublin	1/1 (1/1)	2/1 (2/1)	1/1	0/1 (0/1)	1/2	1/2 (0/2)	1/1 (0/1)
Duluth	1/0	1/0 (1/0)		1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	
Dvur Kralove				4/6	3/5	3/5	3/7
Frankfurt	1/1 (0/1)	1/2 (0/2)	1/2 (0/2)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)

D-birwnis 10-16 (2)

	10	11	12	13	14	15	16
Fresno	0/1	0/1					
Fukuoka							
Granby	1/0			1/0		1/1	1/1
Grodno							1/0
Hanover	1/2 (0/1)	1/1	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	1/1 (1/0)	1/1 (1/0)
Hiroshima				1/1	1/1	1/1	1/1
Hitachi		1/0					
Jacksonville	1/1 (1/0)	1/1			1/1	1/1	1/1
Jerusalem			1/0				
Johannesburg						1/0 (1/0)	1/0 (1/0)
Kagoshima					0/1	1/1	1/1
Kanazawa	0/1						
Kano						1/0	
Kansas	1/1	1/1	1/1	0/1 (0/1)			
Kobe	1/1	?	1/1 (1/0)	1/1 (1/0)	1/1	1/1 (1/0)	1/1 (1/0)
Kuala Lumpur	1/0		1/0	1/0	1/0	1/0	1/0
Leipzig				1/1	1/1	1/1	1/1
Leningrad	1/0	1/0	1/0	1/0	1/0		
Lisbon	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	1/1	2/1 (1/0)	2/1 (1/0)
Lodz	1/0	1/0	1/0	1/0	1/0	1/0	1/0
London ZSL	1/1	1/2 (0/1)	1/2 (0/1)	1/1	1/2 (0/1)	0/1	1/1
Los Angeles	1/1	1/1	1/1	1/2 (0/1)	1/1		1/1
Magdeburg	1/0	1/0		1/1	1/1	1/1	1/1
Maiduguri							1/1
Manchester	1/1	1/1	1/1		1/1		
Manilla	1/0	1/0	1/0				
Memphis	1/1 (0/1)	0/1	0/2	0/2 (0/2)	0/2 (0/2)	1/2 (0/2)	1/2 (0/2)
Mexico Chap.	1/1	1/1		1/1	1/1	1/1	1/1
Miami CP						0/1	1/1
Moscow	0/1	0/1	0/1				
Mount Meru TZ	1/0						
Munich			1/1	1/1	1/1	1/1	
Mysore	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	1/1 (1/1)	2/1 (1/0)	2/1 (1/0)
Nagoya	1/2 (1/0)	1/2 (1/0)	0/2	0/2	1/2	1/2	1/2
Nairobi			2/1	1/0			2/0

	10	11	12	13	14	15	16
Nanyuki							1/1
Naples	1/2	1/1	1/1	1/2 (0/1)	1/2	1/2 (0/1)	1/1
NY Bronx	1/0	1/0	1/0	1/0	1/0	1/0	1/0
NY Central Park	1/0						
Okahandja				1/0			
Oklahoma	1/2 (1/2)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/2 (1/2)	1/2 (1/1)	1/2 (1/1)
Osaka					1/2 (0/1)		0/2
Paignton						1/0 (1/0)	1/0 (1/0)
Paris PZ	0/1	0/1	0/1	0/1	0/1	0/1	
Peking					3	0/3	0/3
Perth		0/1	0/1	0/1	0/1	0/1	0/1
Philadelphia	1/0	1/0	1/0	1/0			
Pittsburgh	2/1 (1/0)	1/0	1/0	1/0	1/0	1/0	
Prague	1/1	0/1	0/1	0/1			
Pretoria	1/1	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	1/0	1/0	1/0
Rome						1/1 (0/1)	1/1 (0/1)
St Louis	1/2	1/1	1/1	1/1	1/2 (0/1)	1/2 (0/1)	1/3 (0/2)
San Antonio	1/0	1/0	1/0	1/0	1/0	1/1	1/1
San Diego	0/1	1/1	2/1 (1/0)	1/1	1/1	1/1 (0/1)	1/1 (0/1)
San Diego WAP				1/1 (1/1)	1/2 (1/1)	1/1 (1/0)	
San Francisco	1/1	1/1	1/1	2/1 (1/0)	2/1 (1/0)	1/0	1/1
Sao Leopoldo				1/0 (1/0)	1/0	1/0 (1/0)	1/0 (1/0)
Sao Paulo	1/0	1/0	1/0				1/1
Southampton	1/1	1/1			0/1		
Sydney	2/5 (1/3)	2/5 (1/3)	2/4 (1/2)	2/4 (1/2)	1/4 (0/2)	1/4 (0/2)	1/2 (0/1)
Tampa		1/1 (0/1)	1/0	1/1	1/1	1/1	1/2 (0/1)
Tehran	1/1	1/1	1/1	2/1 (1/0)	2/1 (1/0)		
Tel Aviv	1/1	1/1	1/1	1/1	1/1		1/1
Thoiry	0/1	0/1					
Toronto							0/1 (0/1)
Turin	1/1	1/1	1/1	1/1			
Vienna	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Washington	2/1 (1/0)	2/2 (1/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)
Whipsnade	1/1	1/1	2/1 (1/0)	2/1 (1/0)	1/1	2/1 (1/0)	0/1
Wichita			1/0			1/1 (1/1)	1/1 (1/1)

D-bicums

10-16 (4)

	10	11	12	13	14	15	16
Wroclaw	1/0	2/2 (1/1)		1/0	0/1	0/1	1/1
Zagreb	1/1	1/1	1/2 (0/1)	1/2 (0/1)	1/1	1/1	1/1
Zurich	1/2	1/2	1/3 (0/1)	1/3 (0/1)	1/3 (0/1)	1/3 (0/1)	1/3 (0/1)
TOTAL	72/64 (13/11) 72 zoos	67/63 (15/12) 71 zoos	65/63 (14/14) 65 coll	75/69 (20/20) 73 coll	65/74/3 (16/17) 68 coll	67/78 (19/19) 69 coll	72/87 (18/12) 73 coll

Census of rare animals in the International Zoo Yearbook, London Black Rhinoceros							
Zoo	vol.17 in 1976	vol.18 in 1977	vol.19 in 1978	vol.20 in 1979	vol.21 in 1980	vol.22 in 1981	vol.23 in 1982
Adelaide	1/0	1/0	1/0	1/0	1/0	1/0	
Alma Ata	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/0	1/1 (1/0)
Amsterdam	0/1	0/1	0/1				
Asheboro		1/1	0/1				
Atlanta	1/1	1/1				1/1	1/1
Bangkok	1/0		1/0	1/0	1/0	1/0	1/0
Bekesbourne	1/2 (1/0)		2/2 (2/0)				
Berlin E	0/1	0/1	0/1	0/1		0/1	0/1
Berlin W	1/2	1/2	1/3	1/3	1/3	1/3	1/4 (0/1)
Boston	1/2	2/2 (1/0)					
Bristol	1/1 (1/0)	1/1 (1/0)		0/1	0/1	0/1	
Budapest	0/1 (0/1)	0/1	0/1	0/1 (0/1)	0/1 (0/1)	0/1	0/1
Buenos Aires					0/1 (0/1)	0/1 (0/1)	0/1 (0/1)
Buffalo		1/2	2/2 (1/0)	2/2 (1/0)	1/2	1/1 (1/1)	1/1
Cairo				1/0	1/0		
Chester	1/1 (1/1)	1/0 (1/0)	1/2 (1/2)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/1 (1/1)
Chicago Br	1/3	1/3	1/3	0/3	0/3	1/2	1/2 (1/0)
Cincinnati	2/2 (1/1)	2/3 (1/2)	3/3 (1/2)	2/2 (0/1)	3/2 (1/1)	4/2 (2/1)	2/2 (0/1)
Cleveland		1/0 (1/0)					
Colombo	0/1	0/1	0/1	1/1	1/1		1/1
Colorado	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)
Columbus	2/0 (1/0)		1/0 (1/0)	1/1	1/1 (0/1)		1/1
Dallas	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Delhi	1/1	1/1	1/1	1/1	1/1	1/1	1/2 (0/1)
Denver	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)
Detroit	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	2/2 (1/1)
Dublin	1/1 (0/1)						
Duluth	1/0 (1/0)	1/0 (1/0)					
Dvur Kralove	3/7	2/6	2/7 (0/1)	2/5 (1/2)	2/6 (2/2)	3/6 (2/2)	3/5 (2/2)
Frankfurt	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/0 (1/0)
Gauhati	1/1	1/1		1/1			
Granby							1/1

	17	18	19	20	21	22	23
Grodno	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Hanover	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	0/1
Hiroshima	1/1	1/1	2/1 (1/0)	2/1 (1/0)	2/2 (1/1)	2/2 (1/1)	3/2 (2/1)
Jacksonville	1/1	1/1	1/1				
Johannesburg	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)
Kagoshima		1/1	1/1	1/1	1/1	2/1 (1/0)	2/1 (1/0)
Kano Nigeria	1/0	1/0	1/1	1/0			
Kobe	1/1 (1/0)	1/1 (1/0)	1/0 (1/0)				
Kuala Lumpur	1/0	1/0	1/0	1/1	1/0	1/0	1/0
Lahore							1/0
Leipzig	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Lesna		1/1	0/1	0/1			
Lisbon		1/2 (0/2)		2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)
Lodz	1/0	1/0	1/0	1/0	1/0	1/0	1/0
London ZSL	0/2 (0/1)	0/2 (0/1)	1/1	2/1 (1/0)	2/1 (1/0)	1/1	1/1
Los Angeles	2/1 (1/0)	1/1	2/1 (1/0)	1/1 (1/0)	1/2 (1/1)	1/2 (1/1)	1/2 (1/1)
Lympne		1/2 (1/0)		2/2 (2/0)	2/2 (2/0)	2/2 (2/0)	2/2 (2/0)
Magdeburg	1/1	1/1	1/1	1/1	2/1 (1/0)	2/1 (1/0)	2/2 (1/1)
Maiduguri	1/1	1/2 (0/1)		0/2			
Marwell						1/0 (1/0)	1/1 (1/1)
Memphis		1/2 (0/2)	1/2 (0/2)	2/2 (1/2)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)
Mexico Chap.	1/1	1/1	1/1	1/1	1/1	1/1	
Miami CP	1/1	1/1	1/1	2/1 (1/0)		0/1	0/1
Mysore	2/2 (1/1)					2/3 (1/2)	2/3 (1/2)
Nagoya	1/2	1/2	1/2	1/2	2/3 (1/1)	2/3 (1/1)	2/3 (1/1)
Nairobi	3/0						
Nanyuki	1/0						
Naples	1/2 (0/1)	1/2 (0/1)	1/1	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)
Oklahoma	2/2 (2/1)	1/2 (1/1)	2/2 (2/1)	2/2 (2/1)	1/2 (1/1)	1/2 (1/1)	1/1 (1/1)
Osaka	0/2 (0/1)	1/2 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)
Paignton	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	
Peking	0/3	0/3	0/3	0/3		1/3	1/2
Perth		0/1	0/1	0/1	0/1	0/1	
Pretoria	1/0	1/1	1/1	0/1	0/1	0/1	0/1
Ramat Gan						1/1	1/1

D. bicolor 17-23 (3)

	17	18	19	20	21	22	23
Rome	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	2/1 (1/1)	1/2 (1/1)
St Felicien				1/1		1/1	
St Louis	1/2 (0/1)	2/2 (0/1)	2/2 (1/1)	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	
San Antonio	1/1	1/1 (0/1)	0/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/2 (0/1)
San Diego	1/1 (0/1)	1/1 (1/1)	1/1	1/1	1/1	0/1	1/1 (1/0)
San Diego WAP	1/1 (1/0)	1/2 (1/1)	1/2 (1/2)	1/2 (1/1)	1/2 (1/1)	1/2 (1/1)	2/2 (2/1)
San Francisco	1/1	1/1	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	1/1	2/1 (1/0)
Sao Leopoldo	1/0 (1/0)	1/0	1/0 (1/0)	1/1 (1/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)
Sydney	2/2 (1/1)	2/2 (1/2)	2/2 (1/2)	1/2 (1/2)	1/2 (1/2)	1/1 (1/1)	2/2 (1/2)
Tampa	1/2 (0/1)	2/2 (1/2)	2/2 (1/2)	1/1 (0/1)	1/1	1/1	1/2 (0/1)
Teheran	1/2 (0/1)	2/2 (1/1)	2/2 (1/1)				
Toronto	1/2	1/1 (1/1)	1/1 (1/1)				
Vienna	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Washington	1/1	1/2 (0/1)	1/2 (0/1)	2/1 (1/1)	1/1 (1/1)	1/0 (1/0)	1/0 (1/0)
Whipsnade	1/1	1/1	0/1	1/1 (1/0)	1/2 (1/1)	1/2 (1/1)	1/1 (1/0)
Wichita	1/1 (1/1)		0/1 (0/1)		0/1 (0/1)	0/1 (0/1)	1/1 (1/1)
Wroclaw	1/1	1/1	1/1	1/1	1/0		
Zagreb	1/1						
Zurich	1/3 (0/1)	2/3 (0/1)	2/3 (0/1)	3/3 (1/1)	3/3 (1/1)	1/3 (0/1)	2/3 (1/1)
TOTAL	74/85 (20/21) 70 coll	73/93 (21/28) 71 coll	69/85 (25/27) 65 coll	70/81 (26/24) 64 coll.	62/75 (26/29) 58 coll	65/79 (28/28) 62 coll	70/80 (32/32) 60 coll

Census of rare animals in the International Zoo Yearbook, London
Black Rhinoceros

Zoo	vol.24/25 in 1983	vol.24/25 in 1984	vol.26 in 1985	vol.27 in 1986	vol.28 in 1987	vol.29 in 1988	vol.30 in 1989
Alma Ata	1/1 (1/0)	1.1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)
Atlanta	1/1	1/1	1/1	1/1	1/1	0/1	
Bangkok	1/0	1/0					
Bekesbourne			3/3 (3/1)	3/3 (3/1)	3/3 (3/1)		
Berlin E	0/1						
Berlin W	1/5 (0/2)	1/4 (0/1)	2/3 (1/1)	2/3 (1/1)	2/4 (1/2)	2/5 (1/3)	3/4 (1/2)
Budapest	0/1 (0/1)						
Buenos Aires	0/1 (0/1)	0/1 (0/1)				0/1 (0/1)	0/1 (0/1)
Buffalo	1/1						
Bulawayo						2/2	
Cairo	1/0						1/0
Chester	1/1 (1/1)	2/1 (2/1)	2/1 (2/1)	2/1 (2/1)	2/1 (2/1)		1/1 (1/1)
Chicago Br	1/2 (1/0)	1/2 (1/0)	1/2 (1/0)	1/3 (1/1)	2/2 (2/1)	3/2 (3/1)	2/3 (2/2)
Chicago LP	1/1 (1/1)		1/1 (1/1)	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)	
Cincinnati	2/3 (1/2)	3/3 (2/2)	2/2 (1/1)	3/3 (2/2)	3/3 (2/2)	2/2 (1/1)	2/3 (1/2)
Colombo		1/1		0/1			0/1
Colorado	0/2 (0/1)	1/1 (1/1)	1/1 (1/1)	1/1	1/1	1/1 (1/1)	1/1 (1/1)
Columbus		1/0			1/0	1/0	1/0
Dallas	1/1	1/1	1/1	1/1	0/2	0/2	0/2
Delhi	1/2 (0/1)		1/2 (0/1)	1/2 (0/2)	1/2 (0/2)	1/3 (1/3)	
Denver	2/3 91/2)	2/3 (1/2)	2/2 (2/2)	2/2 (2/2)	2/2 (2/2)	3/2 (3/2)	2/2 (1/1)
Detroit	2/2 (1/1)	2/2 (1/1)	2/1 (1/0)	1/1 (1/1)	1/1 (1/1)	0/1 (0/1)	1/1 (0/1)
Dvur Kralove	3/5 (2/2)	2/4 (1/2)	3/5 (3/3)	3/5 (3/2)	4/5 (4/3)	4/5 (4/3)	4/5 (4/3)
Frankfurt	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)
Garden City			1/1	1/1	1/1	0/1	0/1
Granby	1/2 (0/1)		1/1	0/1			
Hanover	0/1	1/1 (1/0)	1/1 (1/0)	0/1			
Hiroshima	(b)	2/2 (1/1)	2/3 (1/2)	2/3 (1/2)	2/3 (1/2)	2/2 (1/1)	(b)
Hodenhagen						2/2 (1/0)	
Johannesburg	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)			
Kagoshima	1/1		1/0				

	24/25	24/25	26	27	28	29	30
Kansas			1/1 (1/1)	0/1 (0/1)	0/1 (0/1)		
Kuala Lumpur	1/0	1/0	1/0		1/0 (1/0)	1/0	
Leipzig	1/1	1/1	1/1	1/1	1/0	1/0	
Lisbon	1/0	1/0			1/0	1/0 (1/0)	0/1
Lodz	1/0	1/0	1/0				
London ZSL	1/2 (0/1)	1/2 (0/1)	0/1	0/1	0/1	1/1	1/3 (1/1)
Los Angeles		2/4 (1/2)	2/4 (1/1)	2/5 (1/3)	3/3 (2/2)	3/5 (2/3)	2/4 (1/2)
Lympne	2/2 (2/0)	3/3 (3/1)				3/3 (3/1)	4/3 (3/1)
Magdeburg	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	
Marwell	1/1 (1/1)	1/1 (1/1)	1/1	1/1			
Mexico Chap.		1/1					
Miami MZ	0/1	1/2 (1/0)	1/2 (1/0)		(b)	3/4 (2/2)	2/5 (2/2)
Mysore	2/3 (1/2)			2/3 (1/0)	2/3/5 (2/3/5)	2/2	3/3
Nagoya	1/2	1/2	2/2 (2/0)	2/2 (2/2)	1/2 (1/2)	1/2 (1/2)	0/2 (0/2)
Naples	1/1	1/2 (0/1)	1/1	1/1		1/1	1/1 (0/1)
Oklahoma	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/0)	0/1	0/1	1/0 (1/0)
Osaka	1/1 (1/1)	2/1 (2/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)
Peking	1/2						
Perth			0/1				
Portland							1/0 (1/0)
Pretoria	0/1	0/1	1/0				
Ramat Gan	1/1	1/0		1/0	1/0	1/0	1/0
Rome	2/1 (1/1)	2/1 (1/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)
St Louis	1/1	1/1	1/2 (0/1)	1/2 (0/1)	1/3 (0/2)	1/2 (0/1)	1/2 (0/1)
San Antonio	1/2 (1/1)	1/2 (1/1)	1/1 (0/1)	1/2 (0/2)	1/2 (0/2)	1/2 (0/2)	1/2 (0/2)
San Diego		1/2 (1/0)		2/1 (2/0)	1/1 (1/0)	2/1 (1/0)	2/2 (1/0)
San Diego WAP	2/1 (2/1)	2/2 (2/2)	2/1 (2/1)	1/1 (1/1)	2/2 (2/1)	3/2 (3/1)	4/2 (4/1)
San Francisco	1/1	2/1 (1/0)	1/1	1/2 (1/2)	1/2 (0/1)	1/1	1/2 (0/1)
Sao Leopoldo	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)	1/1 (0/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)
Sydney	1/2 (1/1)	1/2 (1/1)	1/2 (1/1)	1/2 (1/1)	1/2 (1/1)	1/2 (1/1)	0/2 (0/1)
Taipei					1/1	1/2 (1/2)	1/2 (1/2)
Tallin							1/0
Tampa		1/2 (0/1)	1/1 (0/1)	0/2 (0/1)		1/1 (1/0)	1/0 (1/0)
Tyler						0/2 (0/2)	2/2 (2/2)
Vienna	1/0		1/0	1/0	1/0	1/0	1/0

	24/25	24/25	26	27	28	29	30
Washington	1/0 (1/0)	1/0 (1/0)					
Whipsnade	2/1 (2/0)	2/1 (2/0)	0/1	1/1	1/1	1/1	
Wichita	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/0)
Zurich	2/2 (1/1)	1/3 (0/1)	2/3 (1/1)	2/3 (1/1)	2/3 (1/1)	2/3 (1/1)	1/3 (1/1)
TOTAL	57/72 (28/31) 54 coll	62/71 (35/31) 49 coll	58/66 (34/29) 48 coll	55/75 (34/39) 46 coll	55/68/5 (36/40/5) 44 coll	63/79 (39/42) 48 coll	54/71 (34/37) 44 coll

Census of rare animals in the International Zoo Yearbook, London Black Rhinoceros								
Zoo	vol.30 in 1990	vol.31 in 1991	vol.32 in 1992	vol.33 in 1993	vol.34 in 1994	vol.35 in 1995	vol.36 in 1996	vol.36 in 1997
Alma Ata	0/1							
Atlanta	1/0 (1/0)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)
Berlin ZG	3/4 (1/2)	3/5 (2/2)	2/7 (2/7)	1/6 (1/4)	1/5 (1/3)	2/5 (1/3)	1/6 (0/4)	2/6 91/4)
Boston								0/1
Buenos Aires	0/1 (0/1)			0/1 (0/1)				
Bulawayo					2/3 (0/1)			
Chester	1/1 (1/1)	1/1 (1/1)	1/2 (1/2)	2/3 (1/3)	2/2 (2/2)	1/2 (1/2)	2/2 (2/2)	2/2 (2/2)
Chicago Br	2/3 (2/2)	2/2 (2/1)	2/3 (2/2)	2/2 (2/1)	2/2 (2/1)	3/2 (3/1)	4/2 (4/1)	3/2 (3/1)
Chicago LP	2/2	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)
Cincinnati	1/1 (0/1)	1/2 (0/1)	1/2 (0/1)	2/2 (1/1)	2/1 (1/0)	3/2 (3/1)	3/2 (3/1)	2/1 (2/0)
Cleveland						1/0 (1/0)	1/0 (1/0)	1/0 (1/0)
Colombo	0/1	0/1	0/1				0/1 (0/1)	0/1
Colorado	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)		0/1 (0/1)	
Columbia			1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	2/1 (2/1)	1/1 (1/1)
Columbus	2/3 (1/2)	1/2 (1/1)	2/2 (1/1)	2/1 (2/1)	2/1 (1/1)	2/1 (1/1)	2/1 (1/1)	1/0
Dallas	1/3	1/4 (0/1)	1/4 (0/1)	1/4 (0/1)	1/3 (0/1)			
Delhi		1/2 (0/1)						
Denver	3/2 (2/1)	3/3 (3/3)		3/2 (3/2)	4/2 (4/2)	4/2 (4/2)	2/1 (2/1)	2/0 (2/0)
Detroit	1/2 (0/2)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)	1/0	1/0	1/0
Dortmund						0/1 (0/1)	0/1 (0/1)	1/1 (1/1)
Dubbo			0/2 (0/1)	2/9 (0/1)	0/6			
Dvur Kralove	4/6 (4/4)	3/7 (3/5)	5/6 (5/4)	6/7 (6/5)	5/9 (5/7)	5/9 (5/7)	5/8 (5/6)	4/7 (4/6)
Fort Worth	2/1	2/1	1/2 (0/1)	1/1 (0/1)	1/1 (0/1)	1/1 (1/1)	1/2 (1/1)	1/2 (1/1)

	30	31	32	33	34	35	36	36
Frankfurt	2/1 (1/0)	2/1 (1/0)	1/1	1/1	1/1	1/2 (0/1)	1/2 (0/1)	
Garden City	0/1	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)		1/0 (1/0)
Hanover				1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	2/1 (2/1)	2/1 (2/1)
Hiroshima	2/2 (1/1)	2/2 (1/1)	2/3 (1/2)	1/3 (0/2)	1/3 (0/2)	1/4 (0/3)	1/4 (0/3)	1/4 (0/3)
Honolulu						2/0 (2/0)	1/0 (1/0)	2/0
Jacksonville								1/0 (1/0)
Johannesburg								1/0
Kansas						2/0 (2/0)	2/0 (2/0)	2/1 (2/0)
Krefeld						1/1 (1/1)	1/1 (1/1)	1/1 (1/1)
Kuala Lumpur			1/0	1/0	1/0	1/0		
Lansing			1/0 (1/0)		1/0 (1/0)	1/1		1/1 (1/1)
Leipzig					1/1 (1/1)	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)
Lisbon	0/1	0/1						
Little Rock								1/0 (1/0)
London ZSL	1/2 (1/1)	2/2 (2/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)
Los Angeles	2/4 (1/2)	2/4 (1/2)	2/4 (1/2)	2/4 (1/2)	2/3 (1/2)	1/3 (1/2)	1/3 (1/2)	1/3 (1/2)
Lympne	4/5 (3/3)	5/5 (4/2)	5/5 (5/2)	6/5 (6/2)	4/5 (4/2)	6/5 (5/2)	4/6 (3/3)	5/7 (4/4)
Magdeburg		2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	1/2 (1/1)	0/3 (0/2)	1/3 (1/3)
Mexico		1/1						
Miami MZ	2/3 (2/1)	3/3 (3/1)	3/3 (3/1)	3/3 (3/2)	(b)	2/3 (2/1)	2/3 (2/1)	2/4 (2/3)
Milwaukee	2/2 (1/1)	2/2 (1/1)	1/1	2/1 (1/0)	2/1 (1/0)	1/1	1/1	1/2 (0/1)
Mysore	2/2					1/2/3		1/2 (1/2)
Nagoya	1/2 (1/2)	1/2 (1/2)	1/1 (1/1)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/1 (1/1)	2/1 (2/1)
Naples	1/1 (0/1)	1/1	1/1	1/1	1/1	1/1	1/1	
NY Bronx						1/0 (1/0)	1/0 (1/0)	1/0 (1/0)
Oklahoma	0/1 (0/1)	0/1 (0/1)	0/1	0/1	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)	1/0 (1/0)
Osaka	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/2 (1/2)		1/2 (1/2)
Paignton	1/0 (1/0)							
Pittsburgh								1/1 (1/1)
Portland	1/0 (1/0)	1/1 (1/1)			1/1 (1/1)			1/1 (1/1)
Potgietersrus			2/1	2/1	3/1 (1/0)	3/1 (1/0)	4/1 (2/0)	4/1 (2/0)
Pretoria		1/1						
Rome	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)	0/1 (0/1)
St Louis	1/2 (0/1)	1/2 (0/1)	2/2 (1/2)	2/2 (1/2)	1/2 (0/2)	1/1 (0/1)	1/1 (0/1)	1/1 (0/1)
San Antonio	1/2 (0/2)	1/2 (0/2)		1/2 (0/2)	1/2 (0/2)	1/2 (0/2)		1/2 (0/2)

	30	31	32	33	34	35	36	37
San Diego	2/3 (1/0)	2/3	2/2 (1/1)	3/2 (2/0)	4/2 (3/1)	2/2 (1/1)	2/1 (0/1)	1/1
San Diego WAP	3/2 (3/1)	4/2 (4/1)	4/1 (4/0)	4/1 (4/0)	4/1 (3/0)	3/2 (2/0)	4/3 (2/1)	2/3 (2/2)
San Francisco	1/1	1/1	1/1	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)	1/1 (1/0)
Sao Leopoldo	0/1 (0/1)	0/1 (0/1)						
Sioux Falls							1/0 (1/0)	1/0 (1/0)
Sydney	0/2 (0/1)	0/2 (0/1)						
Taipei	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)	1/2 (1/2)	0/2 (0/2)	0/2 (0/2)	0/4
Tallin	1/0	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Tampa		1/1 (1/1)	2/1 (2/1)	2/2 (2/2)	2/1 (2/1)	2/2 (2/1)		2/2 (2/2)
Tyler	2/2 (2/2)	2/1 (2/1)	2/1 (2/1)	2/1 (2/1)	2/2 (2/2)	2/1 (2/1)	2/1 (2/1)	2/1 (2/1)
Vienna	1/0							
Whipsnade					1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)
Wichita	1/1 (0/1)	1/1 (1/0)	1/1 (1/0)	1/0 (1/0)	2/1 (2/0)	2/1 (1/0)	1/1 (1/0)	1/1 (1/0)
Yokohama KNP			0/1 (0/1)	1/1 (1/1)	1/1		1/0 (1/0)	1/2 (1/2)
Yulee				0/1	0/1	2/1		3/3
Zurich	1/4 (1/2)	2/4 (2/2)	2/4 (2/2)	1/4 (1/2)	1/4 (1/2)	2/3 (2/1)	2/3 (2/1)	1/4 (1/2)
TOTAL	61/83 (35/45) 46 coll	67/89 (44/48) 47 coll	64/81 (46/49) 44 coll	73/91 (53/52) 46 coll	75/86 (54/52)+ 50 coll	79/82/3 (58/51) 51 coll	69/77 (53/51) 47 coll	79/93 (62/62) 57 coll

NB. From IZY vol. 36 census of rare animals split into subspecies: *Diceros bicornis* ssp.; D.b. *michaeli*, Eastern black rhinoceros and D.b. *minor*, Southern Black Rhinoceros.
Numbers combined in table if zoo present in more than one subspecies.

Jarvis & Morris 1960a, Int. Zoo yearbook 2 - Mammals bred in 1960 - *Diceros bicornis*
Pittsburgh Rotterdam

Jarvis 1961a - IZY 3 - Mammals bred in 1961 - *Diceros bicornis*
Bristol Buenos Aires

Jarvis 1965a - IZY 5 - Mammals bred in 1963 - *Diceros bicornis*
Kobe 1/0 Pittsburgh 1

Jarvis 1966a - IZY 6 - Mammals bred in 1964 - *Diceros bicornis*
Bristol 0/1 Cincinnati 1/0 Detroit 1 (1).

Jarvis 1967b - IZY 7 - Mammals bred in 1965 - *Diceros bicornis*
Hanover 1/0 Kobe 1/0 Lisbon 1/0
Peking 0/1 Pittsburgh 1/0 Sydney 0/0/1

Jarvis 1968a - IZY 8 - Mammals bred in 1966 - *Diceros bicornis*

Sumatran

Census of rare animals in the International Zoo Yearbook, London Sumatran Rhinoceros										
Zoo	vol.1 1959	vol.2 1960	vol.3 1961	vol.4	vol.5 1963	vol.6	vol.7	vol.8	vol.9	vol.10
Bandung			1 ?							
Copenhagen			0/1		0/1	0/1	0/1	0/1	0/1	0/1
TOTAL							0/1 1 zoo	0/1 1 zoo		

Census of rare animals in the International Zoo Yearbook, London Sumatran Rhinoceros										
Zoo	vol.11	vol.12								
Copenhagen	0/1	0/1								
TOTAL										

Census of rare animals in the International Zoo Yearbook, London Sumatran Rhinoceros								
Zoo	vol.27 in 1986	vol.28 in 1987	vol.29 in 1988	vol.30 in 1989	vol.30 in 1990	vol.31 in 1991	vol.32 in 1992	vol.33 in 1993
Bekesbourne		1/0						
Cincinnati					0/1	0/1	1/1	1/0
Doha Qatar								2/0
Dublin					1/1 (1/0)			
Jakarta	1/0	1/0	1/1	1/1				
Kings Mills							0/3	
Los Angeles				0/1	0/1		0/1	0/1
Lympne			1/0	1/1	1/1	1/1	1/1	1/1
Melaka				1/8 (0/1)		1/7 (0/1)		
NY Bronx						0/1	0/1	0/1
Nuremberg						1/0 (1/0)		
San Diego				0/1	0/1	0/1	0/2	1/1
Windsor					2/4			
TOTAL				3/12 (0/1) 5 coll	4/9 (1/0) 6 coll	3/11 (1/1) 6 coll	2/9 6 coll	5/4 6 coll

Census of rare animals in the International Zoo Yearbook, London
Sumatran Rhinoceros

Zoo	vol.34 in 1994	vol.35 in 1995	vol.36 in 1996	vol.36 in 1997				
Cincinnati	1/1	1/1	1/2	1/2				
Colchester			1/1					
Jakarta			0/1					
Los Angeles	0/1	0/1						
Lympne	1/1	1/0	1/0	1/0				
Melaka				2/1				
San Diego	1/1	1/1						
TOTAL	3/4 4 coll	3/3 4 coll	3/4 4 coll	4/3 3 coll				

C. Simum cuktani

Ceratotherium simum

Census of rare animals in the International Zoo Yearbook, London Northern White Rhinoceros								
Zoo	vol.8	vol.9	vol.10	vol.11 in 1970	vol.12	vol.13 in 1972	vol.14 in 1973	vol.15 in 1974
Abu Dhabi								0/1
Antwerp		1/1	0/1	0/1	0/1	0/1	0/1	0/1
Khartoum	1/1	1/1	?	1/1	1/1			
London ZSL	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Memphis							1/1	
Prescott								0/1
Rangoon			1/1					
San Dicgo WAP							2/2	2/2
St Louis	1/1	1/1	1/1	1/1	1/1	1/1		
Southampton	1/0							
Washington NZP	1/1	1/1	1/1	1/1	1/1	1/1		
Lion Country Safaris USA							1/0	
TOTAL	5/3 5 zoos	5/4 5 zoos	4/4 6 zoos	4/4 5 zoos	4/4 5 coll	3/3 4 coll	4/4 4 coll	3/5 5 coll

Census of rare animals in the International Zoo Yearbook, London
Northern White Rhinoceros

Zoo	vol.16 in 1975	vol.17 in 1976	vol.18 in 1977	vol.19 in 1978	vol.20 in 1979	vol.21 in 1980	vol.22 in 1981	vol.23 in 1982
Abu Dhabi				1/1	1/0			1/0 (1/0)
Alexandria				1/0				
Antwerp	0/1	0/1	0/1		0/1	0/1	0/1	0/1
Dvur Kralove		2/4	2/4	2/6 (0/1)	2/6 (0/1)	2/6 (0/1)	3/6 (1/1)	3/6 (1/1)
Leipzig			1/1					
London ZSL	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Prescot			0/1					
Rabat				1/1	1/1		1/1	
San Diego WAP	2/1	1/1	1/1	1/1	1/1	1/0	1/0	1/0
Tunis			2/2		2/2	misreported as northern, they are southern white rhino		
TOTAL			7/10 7 coll	7/9 (0/1) 6 coll		4/7 (0/1) 4 coll	6/8 (1/1) 5 coll	6/7 (2/1) 5 coll

Census of rare animals in the International Zoo Yearbook, London
Northern White Rhinoceros

Zoo	vol.24/25 in 1983	vol.24/25 in 1984	vol.26 in 1985	vol.27 in 1986	vol.28 in 1987	vol.29 in 1988	vol.30 in 1989
Abu Dhabi	1/1 (1/1)	1/1 (1/1)	These specimens are now considered to be <i>C.s.simum</i>				
Antwerp	0/1		0/1				
Chester						1/1 (1/1)	
Dvur Kralove	3/5 (1/1)	3/6 (1/2)	3/6 (1/2)	3/6 (2/1)	4/6 (1/2)	4/6(1/2)	4/6 (1/2)
Frejus				1/0	1/0	1/0	
London ZSL	1/0	1/0	1/0	1/0			
Pistoia							1/1
Rabat	1/1	1/1	1/1	1/1	1/1 (1/1)		
San Diego WAP	1/0	1/0	1/0	1/0		1/0	1/0
Wroclaw					1/1		
TOTAL	7/8 (2/2) 6 coll	7/8 (2/3) 5 coll	6/8 (1/2) 5 coll.	7/7 (2/1) 5 coll	7/8 (2/3) 4 coll	7/7 (2/3) 4 coll	

Census of rare animals in the International Zoo Yearbook, London
Northern White Rhinoceros

Zoo	vol.30 for 1990	vol.31 for 1991	vol.32 in 1992	vol.33 in 1993	vol.34 in 1994	vol.35 in 1995	vol.36
Baton Rouge				1/2	1/2	1/2	
Burford						1/2	
Christchurch			2/2 (2/2)				
Colchester						1/1	
Dvur Kralove	3/5 (1/3)	2/5 (1/3)	2/5 (1/3)	2/4 (1/3)	2/3 (1/2)	2/3 (1/2)	
Frejus	1/0 (1/0)		1/0	1/0			
Fresno				0/1			
Honolulu			1/0 (1/0)				
Litchfield Park		1/0 (1/0)					
London ZSL							
Mayaguez PR				0/1			
Miami MZ					3/3 (3/1)		
Monroe		1/1	1/1				
Montevideo PPR		1/1 (1/1)					
Omaha				1/1 (1/0)			
Rabat		1/1 (2/1) sic					
Ramat Gan				8/5 (4/2)			
San Diego WAP	1/0	2/2	2/2	2/2	2/2	2/2 (1/0)	
Toyohashi					1/2	1/2	
Waco				1/1 (1/1)			
TOTAL		8/10 (5/5) 6 coll	9/10 (4/5) 6 coll	16/17 (7/6) 9 coll	9/12 (4/3) 5 coll	8/12 (2/2) 6 coll	

Census of rare animals in the International Zoo Yearbook, London (Southern) White Rhinoceros								
Zoo	vol.3 in 1961	vol.4	vol.5	vol.6	vol.7	vol.8	vol.9	vol.10
Antwerp	1/1		1/1	1/1	1/1	1/1		
Berlin E			1/1	1/1	1/1	1/1	1/1	1/1
Berlin W			1/1	1/1	1/1	1/1	1/1	1/1
Boras				1/1	1/1	1/1	1/1	1/1
Calgary					1/1	1/1	1/1	1/1
Catskill			1/1	1/1	1/1	1/1	1/1	1/1
Chester	1/1		1/1	1/1	1/1	1/1	1/1	1/1
Chicago Brookf			1/1	1/1	1/1	1/1	1/1	1/1
Dresden					1/1	1/1	1/1	1/1
Duisburg								1/1
Durbanville						1/1	1/1	1/1
Edmonton AGF			1/1	1/1	1/1	1/1	1/1	1/1
Fort Worth								1/1
Gelsenkirchen					1/1		1/1	1/1
Hanover			1/0	1/1				
Jacksonville							1/1	1/1
Johannesburg				1/1	1/1	2/2	2/2	2/2
Khartoum				1/2	1/1			
Kolmarden					1/1	1/1	1/1	1/1
Leipzig								1/1
London ZSL	1/1		1/1	1/1	1/1	0/1	0/1	0/1
Los Angeles					1/1	1/1	1/1	1/1
Louisville							1/1	0/1
Memphis				1/1	1/1	1/1	1/1	1/1
Milwaukee			1/2	1/2	1/2	1/2	1/2	1/2
NY Bronx			1/1	1/1	1/1	1/1	1/1	1/1
Oklahoma			1/1	1/1	1/1	1/1	1/1	1/1
Omaha					1/1	1/1	1/1	1/1
Phoenix			1/1	1/1	1/1	1/1	1/1	1/1
Pretoria	1/2		2/3	1/2	1/2	3/5 (1/0)	3/3 (1/0)	3/3 (1/0)
Rangoon					1/1	1/1	1/1	
Rapperswil					1/1			

	3	4	5	6	7	8	9	10
Riyadh			0/1					
Rotterdam			1/1	1/1	1/1	1/1	1/1	1/1
St Louis	1/1		1/1	1/1	1/1			
San Diego			1/1	1/1	1/1	1/1	1/1	1/1
San Francisco			1/1	1/1	1/1	1/1		1/1
Tampa				1/1	1/1	1/1	1/1	1/1
Thoiry							1/1	1/1
Tokyo Ueno						1/1	1/1	1/1
Washington NZP	1/1		1/1	1/1	1/1			
Whipsnade	1/1					1/1	1/1	1/1
Zurich				1/1	1/1	1/1	1/1	1/1
TOTAL	10/12		20/22	25/28	32/34	32/36 (1/0)	34/36 (1/0)	36/39 (1/0)
	10 zoos		20 zoos	25 zoos	32 zoos	30 zoos	32 zoos	35 zoos

**Census of rare animals in the International Zoo Yearbook, London
(Southern) White Rhinoceros**

Zoo	vol.11 in 1970	vol.12	vol.13 in 1972	vol.14 in 1973	vol.15 in 1974	vol.16 in 1975	vol.17 in 1976
Abu Dhabi							1/1
Albuquerque					1/1	1/1	
Alexandria					1/0 (1/0)	1/0 (1/0)	1/0 (1/0)
Antwerp						2/2 (1/0)	2/2 (1/0)
Arnhem		1/1	4/8	3/7	4/8	4/8	3/8
Bandholm				1/1		1/1	
Barcelona		1/1	1/1	1/1	1/1	1/1	1/2
Baton Rouge						1/2	1/2
Berlin E	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Berlin W	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Birmingham							1/2
Blackpool				1/2	1/3 (0/1)	1/2	1/1
Bloemfontein		1/0	1/1	1/1	1/1	1/1	1/1
Boras	1/1		1/1	1/1	1/1	1/1	1/1
Brownsville		1/1	1/1	2/2	2/2	2/2	1/1
Cadiz					3/2		
Calgary		1/1	1/1	1/1	1/1	1/1	1/1
Catskill	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Chester	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Chicago Brookf	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Colchester				1/1			
Cologne	1/0	1/0	1/0	1/1	1/1	1/1	1/1
Columbia						1/2	1/2
Columbus							1/2 (0/1)
Copenhagen			1/2	1/2	1/2	2/3 (1/1)	2/3 (1/1)
Dortmund						1/1	1/1
Doswell							8/8
Dresden	1/1	1/1	1/1	1/1	1/1 (1/1)		1/1
Duisburg	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Duluth						1/0	
Durbanville	1/1		1/1				
Dvur Kralove		2/4	2/4	2/8	3/9	2/7	2/7

	11	12	13	14	15	16	17
Edmonton AGF	1/1	1/1	1/1	1/1	1/1		1/1
Emmen							1/1
Fillmore USA			1/1				
Fort Worth	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Fresno			1/1	1/1	1/1	1/1	1/1
Gauhati							1/0
Gelsenkirchen	1/1	1/1	1/1		2/0	2/2	
Glasgow							2/0
Grand Prairie LCS					6/13 (0/1)		
Hanover		2/1 (1/0)	1/1	1/1	1/1	1/1 (1/0)	1/1
Hilvarenbeck				1/2	3/2	1/4	1/4
Honolulu				1/1	1/1	1/1	1/1
Houston			1/1	1/1	1/1	1/1	1/1
Jackson						1/2	1/2
Jacksonville	1/1	1/1	1/1	1/1	2/2	1/1	2/3
Johannesburg	2/2	2/2	2/2	2/2	2/2	2/2	1/2
Kaliningrad				1/1	1/1	1/1	1/1
Kansas				1/1	1/1	1/1	1/1
Katowice			1/1	1/1	1/1	1/1	1/1
Kiev				1/1	1/1	0/1	1/1
Kings Mills						7/6	6/2
Knoxville							1/2
Kolmarden	1/1	1/1		1/1	1/1	1/1	1/1
Krefeld			1/1	1/1	1/1	1/1	1/1
Laguna Hills					7/8 (0/1)	6/9 (0/1)	8/8 (1/1)
Leipzig	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Lisbon	1/1	1/1	1/1	2/1	1/1	1/1	
Little Rock							1/1
London ZSL	0/1	0/1	0/1	0/1	0/1		
Longleat		3/3	3/3	3/4	3/3		3/3
Los Angeles	1/1	1/1		1/1	1/1	1/1	1/1
Louisville	1/1	1/1	1/1	1/1	1/1		1/1
Madrid					1/1	1/1	1/1
Mallorca		1/1		1/1	1/1	1/1	1/1
Maracaibo				1/1	1/1		

	11	12	13	14	15	16	17
Memphis	1/1	1/1	1/1		1/0	1/0	
Milwaukee	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Monroe		1/1	1/1	1/1	1/1	1/1	1/1
Munich						1/2	1/2
Mysore			1/1	1/1	1/1	1/1	1/1
New Orleans						2/2	2/2
NY Bronx	1/1						
Norfolk						1/1	
Nuremberg			1/1	1/1	1/1	1/1	1/1
Oklahoma	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Omaha	1/1	1/1	1/1	1/1	1/1		1/1
Ostrava						1/1	1/1
Peking						1/1	1/1
Philadelphia						1/1 (1/1)	1/1 (1/1)
Phoenix	1/1	1/1	1/1		1/1	0/1	2/1
Pietermaritzburg		1/1		1/1	1/1	1/0	1/2
Pietermaritzburg NLP					1/2	1/2	
Prague			1/2	1/2	1/2	1/2	1/2
Prescott					3/1		
Pretoria	5/3 (2/0)	4/4 (2/0)	4/2 (2/0)	4/2 (2/0)	5/2 (3/0)	3/2 (1/1)	1/1
Ramat Gan					4/4	4/4	4/4
Rangoon	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Rio de Janeiro							1/1
Rockton					2/2	2/2	2/2
Rostov					1/1	1/1	1/1
Rotterdam	1/1	1/1	1/1	1/1	1/1	1/1	1/1
St Louis				1/1			
San Antonio		1/1	1/2	2/2 (1/0)	2/2 (1/0)	2/2 (1/0)	2/2 (1/0)
San Diego	1/1	6/14	0/2			2/0 (2/0)	2/0 (2/0)
San Diego WAP			6/14	7/16 (2/1)	8/17 (3/3)	7/17 (3/4)	5/14 (2/2)
San Francisco	1/1	1/1	1/1	1/1	1/1	1/1	1/1
San Roque						7/10	
Santo Domingo						2/2	2/2
Sao Paulo				1/1	1/0	1/1	1/1
Sendai	1/1	1/1	1/1	1/1	1/1	1/1	1/1

	11	12	13	14	15	16	17
Sigean						1/1	
Singapore					1/1	1/1	0/1
Stockbridge LCS					11/18	7/11	
Tampa	1/1	1/1	1/1	1/1	1/1		1/1
Thoiry	1/1	1/1		4/2		3/1	3/1
Tokyo Ueno	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Toledo		1/1	1/1	1/1	1/1	1/1	1/1
Toronto						2/2 (2/2)	2/2
Tunis						2/2	
Turin				1/1	1/1	1/1	1/1
Villiersdorp							0/2
Vriedehoek					1/2		
West Palm Beach LCS					9/14		
Whipsnade	8/14	9/14 (1/0)	9/14 (1/0)	9/14 (1/0)	9/13 (2/0)	8/14 (2/1)	5/13 (2/1)
Windsor					3/5	3/5	3/5
Winston							2/2 (2/2)
Woburn		3/3			3/3	2/3	
Zurich	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Lion Country Safaris USA				16/29			
TOTAL	49/54 (2/0) 38 coll	71/84 (4/0) 49 coll	76/99 (3/0) 55 coll	110/150 (6/1) 67 coll	155/196 (11/7) 82 coll	150/192 (16/11) 90 coll	144/181 (14/9) 95 coll

Census of rare animals in the International Zoo Yearbook, London (Southern) White Rhinoceros								
Zoo	vol.18 in 1977	vol.19 in 1978	vol.20 in 1979	vol.21 in 1980	vol.22 in 1981	vol.23	vol.24	vol.25
Aalborg		1/3	1/3	1/3		not		
Abu Dhabi				1/1 (0/1)	1/1 (0/1)	specified		
Albuquerque	1/1	1/1	1/1	1/1	1/1			
Alexandria	1/0 (1/0)		1/0 (1/0)					
Antwerp	2/2 (1/0)	2/2 (1/0)	2/2 (1/0)	2/2 (1/0)	3/2 (2/0)			
Arnhem	4/7	5/7 (1/0)	4/7 (1/0)	3/6	3/5			
Asheboro	1/1	1/2 (0/1)	1/2 (0/1)	1/2 (0/1)	2/2 (0/1)			
Auckland					1/1 (1/1)			
Augsburg					1/1			
Barcelona	1/2	1/2	1/2	1/2	1/2			
Baton Rouge	1/2	1/2	1/2	1/2	1/2			
Belo Horizonte			1/1		0/1			
Berlin E	1/1	1/1	1/1	1/1	1/1			
Berlin W	1/1	1/1	1/1	1/1	1/1			
Birmingham	1/2	1/2	1/2	1/2	1/2			
Blackpool	1/2	1/2	1/2	1/2	1/2			
Blair Drummond	1/0							
Bloemfontein	1/1	1/1	1/1	1/1 (1/0)	1/1 (1/0)			
Boras	1/1	1/1	1/1	1/1	1/1			
Brownsville	1/1	1/1	1/1	1/1	1/1			
Burford			1/2	1/2	1/2			
Calgary	1/1	1/1	1/1	1/1	1/1			
Canton			1/1					
Caracas Caricuao	1/1	1/1	1/1	1/1 (1/1)	1/1 (1/1)			
Catskill	1/1	1/1	1/1	1/1	1/1			
Chester	1/1	1/1	1/1	1/1	1/1			
Chester-le-Street		1/1						
Chicago Brookf	1/1	1/1	1/1	1/1	1/1			
Cologne	1/1	1/1	1/1	1/1	1/1			
Columbia	1/2	1/2	1/2	1/2	1/2			

	18	19	20	21	22			
Columbus		1/2 (0/1)	1/2 (0/1)	1/1				
Copenhagen	2/2 (1/0)	2/2 (1/0)	3/2 (2/0)	4/2 (3/2)	1/2			
Dortmund	1/1	1/1	1/1	1/1	1/1			
Doswell	7/6				3/4 (1/1)			
Dresden	1/1	1/1	1/1	1/1	1/1			
Dubbo					1/1			
Dublin	0/1	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)			
Duisburg	1/1	1/1	1/1	1/1	1/1			
Durbanville		0/1						
Dvur Kralove	2/6	2/6	2/7 (0/1)	2/5 (1/0)				
Edinburgh	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	1/2 (0/1)	1/2 (0/1)			
El Paso			1/2 (0/1)	1/2 (0/1)				
Emmen	1/1	1/1	1/1	1/1	1/1			
Fort Worth	1/1	1/1	1/1	1/1	1/1			
Fresno	1/1	1/1	1/1	1/1	1/1			
Fukuoka		1/1 (1/1)	1/1	1/1	1/1			
Gauhati	1/0		1/0					
Gelsenkirchen	0/1		1/0 (1/0)	2/0 (1/0)	2/0 (1/0)			
Glasgow	2/0 (2/0)	2/0 (2/0)	2/0 (2/0)	2/0 (2/0)	2/0 (2/0)			
Hanover	1/1	1/1	1/1	1/1	1/1			
Heidelberg					1/1			
Hilvarenbeek	2/4 (1/0)	3/4 (2/0)	3/5 (2/1)	2/4 (1/1)	3/3 (2/0)			
Honolulu	1/1	1/1	1/1	1/1	1/1			
Houston	1/1	1/1	1/1	1/1	1/1 (1/1)			
Hudson					1/0			
Hyderabad	1/1	1/1						
Jackson	1/2	1/2	1/2	1/2	2/2 (2/2)			
Jacksonville	2/2	2/2		1/4 (0/1)	1/4 (0/1)			
Jakarta	1/1		1/1	1/1	1/1 (1/1)			
Johannesburg	2/2	2/2	2/2	2/2	2/2			
Kaliningrad	1/1	1/1	1/1	1/1	1/1			
Kansas			0/1	1/1	1/1			
Katowice	1/1	1/1		1/1	1/2			
Kiev	1/1	1/1	1/1	1/1	1/1			

	18	19	20	21	22			
Kings Mills	6/3	6/3	6/3	5/3 (1/0)	5/4 (1/1)			
Knoxville	1/4	1/4	3/4 (2/0)	1/4 (b)	1/5 (0/1)			
Kobe			1/1	1/1	1/1			
Kolmarden	1/1	1/1	1/1	1/1	1/1			
Krefeld	1/1	1/1	1/1	1/1	1/1			
Laguna Hills	7/8 (0/1)		8/9 (1/2)	8/3 (2/1)	7/4 (4/2)			
Leipzig		1/1	1/1	1/1	1/1			
Lesna				1/1	1/1			
Liberec	1/1 (0/1)	0/1	0/1 (0/1)	0/1	0/1			
Lichtenberg	3/4							
Lisbon	1/1		1/1	1/1	1/1			
Little Rock	1/1	1/1	1/1	1/1				
London ZSL	0/1	0/1	0/1	0/1	0/1			
Longleat	5/3 (2/0)	3/3			4/2 (2/0)			
Los Angeles	1/1	1/1	1/1	1/1	1/1			
Louisville	1/1	1/1	1/1	1/1	1/1			
Madison	1/1		1/1	1/1				
Madrid	1/1	2/2	2/2		2/2			
Mallorca	1/1	1/1	1/1	1/1	1/1			
Memphis	1/1	1/1	1/1	1/1 (0/1)	1/1 (0/1)			
Milwaukee	1/2	1/2	1/2	2/1	1/2			
Monroe	1/1	1/1 (0/1)	1/1	1/1	1/1			
Morelia					1/2 (0/1)			
Munich	1/2	1/2	1/2	1/2	1/2			
Munster	1/1	2/1 (1/0)	2/1 (1/0)	3/1 (2/0)	2/1 (1/0)			
Mysore					1/1			
New Orleans	2/2	2/2	2/2	2/2	2/2 (2/2)			
Norfolk		1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)			
Nuremberg	1/1	1/1	1/1	1/1	1/1			
Oklahoma	1/1	1/1						
Omaha	1/1	1/1						
Osnabruck				1/1	1/1 (1/0)			
Ostrava	1/1	1/1	1/1	1/1	1/1			
Peking	1/1	1/1	1/1		0/1			

	10	19	20	21	22			
Philadelphia	1/2 (1/2)	1/2 (1/1)	1/2 (1/1)	1/2 (1/2)	1/2 (1/1)			
Phoenix	2/1 (1/0)	2/1 (1/0)	2/1 (1/0)	1/1 (0/1)	1/1 (0/1)			
Pietermaritzburg	1/2	1/0	1/0	1/0				
Pistoia		1/1	1/1	1/1	1/1			
Pittsburgh		1/1 (1/1)		1/1 (1/1)	1/1 (1/1)			
Prague	1/2	1/2	1/2	1/2	1/2			
Pretoria	3/2 (1/0)	6/6/3 (b)	7/6 (2/1)	7/7	8/8 (1/2)			
Prescot	3/1	4/1 (1/0)	4/1 (1/0)		4/1 (1/0)			
Ramat Gan	4/4	4/4	5/4 (1/0)	6/4 (2/0)	6/3 (2/0)			
Rangoon	1/1	1/1	1/1	1/1	1/1			
Rio de Janeiro	1/1	1/1	1/1	1/1	1/1			
Rockton	2/2							
Rostov	1/1	1/1	1/1	1/1	1/1			
Rotterdam	1/2	1/2	1/2	1/2	1/2			
Salt Lake		1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)			
San Antonio	3/3 (2/1)	3/3 (2/1)	2/2 (1/0)	2/2 (1/0)	2/2 (1/0)			
San Diego	2/0 (2/0)	2/0 (2/0)	2/0 (2/0)	1/0 (1/0)				
San Diego WAP	9/13 (6/4)	6/8 (4/1)	6/9 (4/1)	9/13 (8/7)	8/12 (6/6)			
San Francisco	1/1	1/1	1/1	1/1	1/1			
San Jose		1/0 (1/0)	1/0 (1/0)					
San Roque	1/1							
Santo Domingo	2/2	2/2	2/2	3/2 (1/0)				
Sao Paulo	1/1	1/1	1/1	1/1	1/1			
Sendai	1/1	1/1	1/1	1/1	1/1			
Sigean	1/1		1/1	1/1	1/1			
Singapore	1/1	1/1	1/1	1/1	1/1			
Surabaya	1/1 (1/1)	1/1	1/1 (0/1)	1/1	1/1			
Taipei			2/2	2/2	2/2			
Tampa	1/1	1/1	1/1	1/1	1/1			
Thoiry	3/1			3/1 (3/1)	3/1			
Tokyo Ueno	1/1	1/1	1/1	1/1	1/1			
Toledo	1/1	1/1	1/1	1/1	1/1			
Toronto	2/2 (1/1)	2/2 (1/1)	2/2 (1/1)	2/3 (1/2)	2/3 (1/2)			

	18	19	20	21	22			
Tucson	1/1	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)	1/1 (1/1)			
Tunis		2/2	2/2	3/2 (1/0)				
Turin	1/1	1/1	1/1	1/1	1/1			
Usti					1/2			
Villiersdorp	0/2	0/2	0/2	0/2				
Whipsnade	3/12 (1/4)	2/12 (0/4)	3/12 (1/5)	5/13 (3/6)	4/14 (2/7)			
Winston	2/1 (2/1)	2/1 (2/1)	2/1 (2/1)	1/1 (1/1)	1/1 (1/1)			
Windsor	3/5		3/4	2/4	2/4			
Wroclaw					1/2 (1/1)			
Zurich	1/1	1/1	1/1	1/1				
		in 1978				in 1982		
TOTAL	170/195 (27/16) 110 coll	152/180/ 3 (30/18+) 108 coll	167/192 (37/23) 113 coll	170/195 (45/36+) 114 coll	173/197 (49/44) 116 coll	157/195 (42/40) 117 coll		