

# 1990 International Zoo Yearbook volume 30

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EDITED BY P. J. S. OLNEY  
PAT ELLIS

ASSISTANT EDITOR FIONA A. FISKEN



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Norfolk USA 1.0(1.0); San Diego USA 1.5; Santa Barbara USA 1.1(1.1); Yokohama KNP Jap 2.1(2.1).

**Total:** 9.12(7.6) in 8 collections.

**1990:** Belize 0.1; Columbia USA 1.1(0.1); Columbus USA 1.1(1.1); Los Angeles USA 2.1(2.1); Miami MZ USA 4.2(4.2); Morelia Mex 1.0; Norfolk USA 1.1(1.1); San Diego USA 2.5; Santa Barbara USA 1.1(1.1); Yokohama KNP Jap 2.1(2.1).

**Total:** 15.14(11.8) in 10 collections.

**Studbook** held: see List of studbooks and world registers.

\*MALAYAN TAPIR *Tapirus indicus* IUCN(E)

**1989:** Aalborg Den 1.1(0.1); Amsterdam Ne 1.2(0.1); Antwerp Bel 1.1(1.0); Bangkok Thai 5.4; Berlin ZG Ge 1.1; Chiba Jap 1.0(1.0); Chicago Br USA 0.1(0.1); Chiangmai Thai 1.2; Cincinnati USA 1.1(1.1); Columbus USA 1.1(1.1); Copenhagen Den 1.2(1.2); Denver USA 1.1(1.1); Detroit USA 0.1(0.1); Dortmund Ge 1.1(1.1); Dresden Ge 1.1(1.1); Fukuoka Jap 1.2(1.2); Heidelberg Ge 1.2(1.2); Jakarta Indon 3.3; Katowice Pol 1.0; Lympne GB 1.2(1.0); Marwell GB 1.2(1.2); Melaka Mal 2.0; Memphis USA 1.1(1.1); Miami MZ USA 2.2(1.1); Milwaukee USA 1.1(1.0); Minneapolis USA 1.1(1.1); Mulhouse Fr 2.2(2.2); Nagoya Fr 2.1(2.1); NY Bronx USA 4.3(3.2); Nuremberg Ge 1.3(1.3); Oklahoma USA 1.1(1.1); Ostrava Cz 1.0; Philadelphia USA 1.2(1.2); Poznan Pol 1.0; Prague Cz 1.1; Pretoria SA 1.2(1.2); Rotterdam Ne 0.3(0.2); St Louis USA 2.2(1.1); San Diego USA 2.1; Sao Paulo Braz 0.1(0.1); Sapporo Jap 1.0(1.0); Shizuoka Jap 1.1(0.1); Singapore 2.4.1(2.4.1); Stuttgart Ge 1.2(1.2); Taipei Tai 0.1(0.1); Tampa LP USA 1.2(1.2); Tokyo Tama Jap 2.2(2.2); Toronto Can 2.2(2.2); Twycross GB 1.1(1.1); Vienna Aus 1.1(0.1); Washington NZP USA 1.1(1.1).

**Total:** 64.75.1(39.54.1) in 51 collections.

**1990:** Aalborg Den 1.1(0.1); Amsterdam Ne 1.1; Antwerp Bel 1.2(1.1); Bangkok Thai 3.3; Berlin ZG Ge 1.1; Chiba Jap 1.0(1.0); Chiangmai Thai 1.2; Cincinnati USA 1.1(1.1); Columbus USA 0.1(0.1); Copenhagen Den 1.2(1.2); Denver USA 1.1(1.1); Dortmund Ge 0.1(0.1); Dresden Ge 1.1(1.1); Fukuoka Jap 1.2(1.2); Heidelberg Ge 1.2(1.2); Katowice Pol 1.0; Lympne GB 1.3(1.1); Marwell GB 1.2(1.2); Memphis USA 1.1(1.1); Miami MZ USA 2.2(1.1); Milwaukee USA 1.1(1.0); Minneapolis USA 1.2(1.2); Mulhouse Fr 2.2(2.2); Munich Ge 1.2(1.2); Nagoya Jap 2.1(2.1); NY Bronx USA 4.3(3.2); Nuremberg Ge 1.3(1.3); Oklahoma USA 1.2(1.2); Ostrava Cz 1.0; Philadelphia USA 1.1(1.1); Prague Cz 1.1; Pretoria SA 1.1(1.1); Rotterdam Ne 1.3(1.2); St Louis USA 3.2(2.2); San Diego USA 2.3; Sao Paulo Braz 0.1(0.1); Sapporo Jap 1.0(1.0); Shizuoka Jap 2.1(1.1); Singapore 2.4.1(2.4.1); Stuttgart Ge 1.2(1.2); Taipei Tai 0.1(0.1); Tampa LP USA 1.1(1.1); Tokyo Tama Jap 2.1(2.1); Toronto Can 2.2(2.2); Twycross GB 1.1(1.1); Vienna Aus 1.1(0.1); Washington NZP USA 1.1(1.1).

**Total:** 58.72.1(41.54.1) in 47 collections.

Breeding loans from Amsterdam (at Antwerp); Milwaukee (at Detroit and Toronto); Philadelphia (at Cincinnati and San Diego); Rotterdam (at Antwerp and Philadelphia); St Louis (at Chicago Br, Denver, Milwaukee and NY Bronx); Stuttgart (at Copenhagen).

**Studbook** held: see List of studbooks and world registers.

\*MOUNTAIN or WOOLLY TAPIR *Tapirus pinchaque* IUCN(V)

**1989:** Los Angeles USA 2.2(1.2); San Diego USA 1.2; Stuttgart Ge 1.1.

**1990:** Los Angeles USA 2.2(1.2); San Diego USA 2.1; Stuttgart Ge 1.1.

Breeding loan from Cali (at San Diego).

\*INDIAN RHINOCEROS *Rhinoceros unicornis* IUCN(E)

**1989:** Amsterdam Ne 1.0(1.0); Basle Switz 1.3(1.3); Berlin TP Ge 1.1(1.0); Berlin ZG Ge 1.2(1.1); Bhubaneswar Ind 1.1; Calcutta Ind 2.1(1.0); Chester GB 1.1(1.0); Chiangmai Thai 0.1; Cologne Ge 1.1(1.1); Dvur Kralove Cz 2.1(2.1); Hamburg Ge 1.1(1.1); Hyderabad Ind 1.0(1.0); Kanpur Ind 3.1(1.1); Los Angeles USA 2.1(1.1); Miami MZ USA 2.0(1.0); Mysore Ind 1.1; Nagoya Jap 1.1(1.0); NY Bronx USA 3.4(3.1); Oklahoma USA 1.1(0.1); Philadelphia USA 2.1(1.1); Planckendael Bel 2.2(2.2); Rotterdam Ne 1.0(1.0); San Diego USA 2.0(2.0); San Diego WAP USA 3.4(3.4); San Francisco USA 1.1; Sao Paulo Braz 1.0(1.0); Seoul Kor 1.0.1; Stuttgart Ge 2.1(2.1); Tampa LP USA 1.0(1.0); Tokyo Tama Jap 1.1; Toronto Can 1.1(1.1); Washington NZP USA 1.2(1.0); Whipsnade GB 2.1; Yokohama KNP Jap 1.1(1.1).

**Total:** 48.36(34.21) in 34 collections.

**1990:** Basle Switz 1.3(1.3); Berlin TP Ge 2.1(2.0); Berlin ZG Ge 1.2(1.1); Bhubaneswar Ind 1.1; Calcutta Ind 2.1(1.0); Chandigarh Ind 2.0.2; Chester GB 1.0(1.0); Chiangmai Thai 1.1; Cincinnati USA 1.0(1.0); Cologne Ge 1.1(1.1); Dvur Kralove Cz 1.1(1.1); Gauhati Ind 8.3.11(1.0.1); Hamburg Ge 1.1(1.1); Kanpur Ind (b); Liberec Cz 1.0(1.0); Los Angeles USA 2.1(1.1); Miami MZ USA 2.0(1.0); Mysore Ind 1.2; Nagoya Jap 1.1(1.0); NY Bronx USA 2.5(2.2); Nuremberg Ge 1.0(1.0); Oklahoma USA 0.1(0.1); Philadelphia USA 1.1(0.1); Planckendael Bel 2.2(2.2); Rotterdam Ne 1.0(1.0); San Diego USA 1.0; San Diego WAP USA 3.4(3.4); San Francisco USA 1.1; Sao Paulo Braz 1.0(1.0); Seoul Kor 1.0.1; Stuttgart Ge 2.1(2.1); Tampa LP USA 1.0(1.0); Tokyo Tama Jap 1.1; Toronto Can 2.1(2.1); Washington NZP USA 1.2(1.0) Whipsnade GB 3.1; Yokohama KNP Jap 1.1(1.1).

**Total:** 55.40.14(32.21.1)+ in 37 collections.

Breeding loans Miami MZ and Oklahoma (at NY Bronx); Philadelphia (at Cincinnati and Miami MZ); Washington NZP (at NY Bronx, Oklahoma and Toronto); Whipsnade (at Planckendael).

**Studbook** held: see List of studbooks and world registers.

\*SUMATRAN RHINOCEROS *Dicerorhinus sumatrensis* IUCN(E)

**1989:** Jakarta Indon 1.1; Los Angeles USA 0.1; Lympne GB 1.1; Melaka Mal 1.8(0.1); San Diego USA 0.1.

**Total:** 3.12(0.1) in 5 collections.

**1990:** Cincinnati USA 0.1; Dublin Ire 1.1(1.0); Los Angeles USA 0.1; Lympne GB 1.1; San Diego USA 0.1; Windsor GB 2.4.

**Total:** 4.9(1.0) in 6 collections.

**Studbook** held: see List of studbooks and world registers.

**SOUTHERN WHITE or SQUARE-LIPPED RHINOCEROS** *Ceratotherium s. simum*

**1989 Total:** 163.202(69.78) in 123 collections.

**1990 Total:** 151.197.2(62.72) in 121 collections.

**\*NORTHERN WHITE or SQUARE-LIPPED RHINOCEROS** *C. s. cottoni*  
IUCN(E)

**1989:** Dvur Kralove Cz 4.6(1.2); Pistoia It 1.1; San Diego WAP USA 1.0.

**1990:** Dvur Kralove Cz 3.5(1.3); Frejus Fr 1.0(1.0); San Diego WAP USA 1.0.

**Studbook** held: see List of studbooks and world registers.

**\*BLACK RHINOCEROS** *Diceros bicornis*  
IUCN(E)

**1989:** Alma-Ata USSR 1.1(1.0); Berlin ZG Ge 3.4(1.2); Buenos Aires Arg 0.1(0.1); Cairo Egt 1.0; Chester GB 1.1(1.1); Chicago Br USA 2.3(2.2); Cincinnati USA 2.3(1.2); Colombo SL 0.1; Colorado USA 1.1(1.1); Columbus USA 1.0; Dallas USA 0.2; Denver USA 2.2(1.1); Detroit USA 1.1(0.1); Dvur Kralove Cz 4.5(4.3); Frankfurt Ge 1.0(1.0); Garden City USA 0.1; Hiroshima Jap (b); Lisbon Port 0.1; London ZSL GB 1.3(1.1); Los Angeles USA 2.4(1.2); Lympne GB 4.3(3.1); Miami MZ USA 2.5(2.2); Mysore Ind 3.3; Nagoya Jap 0.2(0.2); Naples It 1.1(0.1); Oklahoma USA 1.0(1.0); Osaka Jap 1.1(1.1); Portland USA 1.0(1.0); Ramat Gan Is 1.0; Rome It 0.1(0.1); St Louis USA 1.2(0.1); San Antonio USA 1.2(0.2); San Diego USA 2.2(1.0); San Diego WAP USA 4.2(4.1); San Francisco USA 1.2(0.1); Sao Leopoldo Braz 0.1(0.1); Sydney Austral 0.2(0.1); Taipei Tai 1.2(1.2); Tallin USSR 1.0; Tampa USA 1.0(1.0); Tyler USA 2.2(2.2); Vienna Aus 1.0; Wichita USA 1.1(1.0); Zurich Switz 1.3(1.1).

**Total:** 54.71(34.37) + in 44 collections.

**1990:** Alma-Ata USSR 0.1; Atlanta USA 1.0(1.0); Berlin ZG Ge 3.4(1.2); Buenos Aires Arg 0.1(0.1); Chester GB 1.1(1.1); Chicago Br USA 2.3(2.2); Chicago LP USA 2.2; Cincinnati USA 1.1(0.1); Colombo SL 0.1; Colorado USA 1.1(1.1); Columbus USA 2.3(1.2); Dallas USA 1.3; Denver USA 3.2(2.1); Detroit USA 1.2(0.2); Dvur Kralove Cz 4.6(4.4); Fort Worth USA 2.1; Frankfurt Ge 2.1(1.0); Garden City USA 0.1; Hiroshima Jap 2.2(1.1); Lisbon Port 0.1; London ZSL GB 1.2(1.1); Los Angeles USA 2.4(1.2); Lympne GB 4.5(3.3); Miami MZ USA 2.3(2.1); Milwaukee USA 2.2(1.1); Mysore Ind 2.2; Nagoya Jap 1.2(1.2); Naples It 1.1(0.1); Oklahoma USA 0.1(0.1); Osaka Jap 1.1(1.1); Paignton GB 1.0(1.0); Portland USA

1.0(1.0); Rome It 0.1(0.1); St Louis USA 1.2(0.1); San Antonio USA 1.2(0.2); San Diego USA 2.3(1.0); San Diego WAP USA 3.2(3.1); San Francisco USA 1.1; Sao Leopoldo Braz 0.1(0.1); Sydney Austral 0.2(0.1); Taipei Tai 1.2(1.2); Tallin USSR 1.0; Tyler USA 2.2(2.2); Vienna Aus 1.0; Wichita USA 1.1(0.1); Zurich Switz 1.4(1.2).

**Total:** 61.83(35.45) in 46 collections.

Breeding loans from Boston (at Miami MZ); Chicago Br (at Columbus; San Diego WAP and Tyler); Cincinnati (at Chicago Br, Chicago LP, Columbus, San Diego, San Diego WAP and Tyler); Detroit (at St Louis, Tyler and Wichita); Frankfurt (at Zurich); Leipzig (Berlin ZG); Oklahoma (at Detroit); Paignton (at London ZSL); Sydney (at Berlin ZG); Zimbabwe gvt (at Dallas); Zurich (at Frankfurt and Tallin).

**Studbook** held: see List of studbooks and world registers.

**ARTIODACTYLA**

**\*BABIRUSA** *Babyrousa babyrussa* IUCN(V)

**1989:** Antwerp Bel 7.6; Berlin ZG Ge 2.3; Copenhagen Den 1.1; Frankfurt Ge 1.1; Jakarta Indon 8.3(1.0); Jersey GB 3.2; Leipzig Ge 1.1; Los Angeles USA 1.1; Lympne GB 1.1; NY Bronx USA 4.2; Nuremberg Ge 2.2; Rotterdam Ne 3.5; Stuttgart Ge 3.3.

**Total:** 37.31 in 13 collections; most are presumed captive bred—see Key 6.

**1990:** Antwerp Bel 9.6; Bandung Indon 1.2(0.0); Berlin ZG Ge 1.3; Cincinnati USA 1.0; Copenhagen Den 1.1; Frankfurt Ge 1.1; Jakarta Indon (b); Jersey GB 3.3; Krefeld Ge 1.0(0.0); Leipzig Ge 1.1; Los Angeles USA 1.1.3; Lympne GB 2.1; NY Bronx USA 5.4(4.3); Nuremberg Ge 2.2; Rotterdam Ne 2.3; Stuttgart Ge 3.3.

**Total:** 34.31.3 + in 16 collections; most are presumed captive bred—see Key 6.

Breeding loans from Amsterdam (at Frankfurt); Antwerp (at Copenhagen); Los Angeles (at NY Bronx); Lympne (at Antwerp); Stuttgart (at Berlin ZG and Frankfurt).

**Studbook** held: see List of studbooks and world registers.

**\*PYGMY HIPPOPOTAMUS** *Choeropsis liberiensis* IUCN(V)

**1989:** Aalborg Den 1.3(0.2); Adelaide Austral 1.2(1.2); Antwerp Bel 1.1(1.1); Arnhem Ne 2.3(1.1); Atina It 1.1(1.1); Barcelona Sp 3.1(2.0); Basle Switz 2.3(2.3); Baton Rouge USA 1.1(1.1); Berlin TP Ge 1.4(0.3); Berlin ZG Ge 2.2(2.2); Boston USA 1.1(1.1); Bratislava Cz 1.2(1.2); Bristol GB 1.1(1.0); Broome Austral 1.1(1.1); Brownsville USA 1.2(0.1); Chicago Br USA 1.1(1.1); Chicago LP USA 1.2; Colombo SL 1.1(1.0); Columbus USA 1.1(1.1); Dallas USA 1.1(0.1); Debrecen Hun 0.1; Duisburg Ge 2.2; Dvur Kralove Cz 2.3(2.3); Edinburgh GB 2.1(2.1); Gdansk Pol 1.1; Gelsenkirchen Ge 1.2(1.2); Halle Ge 1.1(1.1); Hilo USA 1.2(1.2); Hoyerswerda Ge 1.1; Jackson USA 1.1(1.1); Jacksonville USA 1.0(1.0); Jakarta Indon 1.0; Johannesburg SA 1.2(1.2); Kaliningrad USSR 2.2(2.2); Kaunas USSR 1.2(1.2); Krefeld Ge 1.1(1.1); Leipzig Ge 1.2(1.2); Madrid Sp 1.1(1.1); Marwell GB 1.1(1.1); Melbourne Austral 1.2(1.2); Miami MZ USA 0.1; Munster Ge 1.1(1.1); Nagoya Jap 1.1(1.1); Nairobi