

Hornbill North American
Regional Studbook
Genera: *Aceros*, *Rhyticeros*, &
Berenicornis



Knobbed Hornbill, *Aceros cassidix*
Wrinkled Hornbill, *Aceros corrugatus*
Papuan Hornbill, *Rhyticeros plicatus*
Wreathed Hornbill, *Rhyticeros undulatus*
White-crowned Hornbill, *Berenicornis comatus*

9th edition
current thru 31 December 2013
Eric Kowalczyk, Woodland Park Zoo

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STUDBOOK**

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Knobbed Hornbill (*Aceros cassidix*)

Wrinkled Hornbill (*Aceros corrugatus*)

Papuan Hornbill (*Rhyticeros plicatus*)

Wreathed Hornbill (*Rhyticeros undulatus*)

White-crowned Hornbill (*Berenicornis comatus*)



9th Edition (current through 31 December 2013)

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**HORNBILL NORTH AMERICAN REGIONAL
STUDBOOK GENERA:
*Aceros, Rhyticeros, and Berenicornis***

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INTRODUCTION

Studbook Scope

The second edition of the *Aceros* North American Regional Studbook was current through 31 December 2003. The taxonomy used there, which had been accepted by the Coraciiformes TAG, was based on Kemp (1995). Kemp listed 11 species in this genus, which he further divided into three subgenera: *Aceros*, *Rhyticeros*, and *Berenicornis*. The third edition, (current through 31 December 2006) used Kemp's taxonomy as listed in The Handbook of Birds of the World, volume 6 (Del Hoyo et al, 2001). This latter reference is what has been accepted by the 2012 Coraciiformes Regional Collection Plan. Five of these species are covered in this ninth edition.

Of particular note, two species are listed under the genus *Rhyticeros* (*plicatus* and *undulatus*) and the White-crowned hornbill (*Aceros comatus*) is now listed in the genus *Berenicornis*. Since there are so few captive birds, it was decided to keep track of these latter three species in this "*Aceros*" studbook. In addition, although there are no *Aceros leucocephalus* in North American collections, I have chosen to keep the historical data available here (see Appendix).

Historical records exist for two other *Aceros* species that are not included in this studbook. A male Rufous-necked hornbill (*Aceros nipalensis*) arrived at Philadelphia Zoological Garden on 19 May 1909 and died on 10 July 1909. 2.1 Sumba wreathed hornbills (*Aceros everetti*) arrived at the San Diego Zoological Gardens on 29 September 1955 (male #005960 died on 31 December 1960; female #005961 died on 31 December 1960; and male #005962 died on 23 July 1974). They are mentioned here for historical purposes.

A total of 552 historical entries (of which 121 are living and not "Itf") are listed in these studbooks. Data are current through 31 December 2013.

Format

The *Aceros* North American Regional Studbook utilizes the **Single Population Analysis and Record Keeping System (SPARKS)** software, version 1.56beta.

<u>Column</u>	<u>Definition</u>
Studbook number	A unique number assigned to a bird when it is entered in the studbook.
Sex	M= male; F= female; ? = unknown.
Hatch Date	Date of hatch (day/month/year). This date is either actual, estimated or unknown. Estimated hatch dates were used when the receiving institution recorded this estimate on the taxon report.
Sire/Dam	Studbook number of the parents if known; WILD if parents were from the wild; UNK if captive hatched birds are of unknown parentage.
Location	Specimen location listed from earliest to most current.
Date	Date of arrival (day/month/year) at institution. If arrival date is unknown, an estimated date is used.

Local ID/Itf

Institution's ISIS number or other ID number if not an ISIS participant. The letters "Itf" denote a bird that is "lost to follow up". A bird is considered to be "Itf" when its final disposition is unknown. This applies to birds transferred to collections that do not report to the studbook keeper, to birds that may have (or probably have) died, and to birds that have disappeared from the managed population. These birds may enter the studbook at a later date if additional information is received.

Event

Description of the type of activity includes hatch, capture, transfer, or death.

Breeder

In the "living to last current location" reports, the "user defined field" is used to designate birds that are/have been a successful breeder.

Conventions Used

1. When known, loan information is recorded in Special Data.
2. All specimens entering the population prior to the first reported captive hatch are assumed to be wild caught birds and parent reared.
3. If not exactly known, dates entered in "Special Data" are when the studbook keeper entered that particular information. Sources: taxon reports, specimen records, telephone, e-mail, fax.
Exceptions: dates of recorded weights taken from specimen records.
4. When there is a conflict of dates between the sending institution and the receiving institution, the date recorded by the receiving institution is used. If the difference of dates was greater than one day, both institutions were contacted.
5. For late stage embryos, cause of death is listed as "premature".
6. If the egg has pipped, it is listed as "stillborn".

KNOBBED HORNBILL

Aceros cassidix

GENERAL INFORMATION

The Hornbill Taxonomic Advisory Group (TAG) has adopted taxonomy used by Kemp in Del Hoya et al (2001). The older genus name *Rhyticeros* might be seen in the literature (Kemp 1979). Poonswad et al (2013) returned this species into *Rhyticeros*. In 2012, the IUCN Red List up listed this species from a species of "least concern" to "vulnerable" to global extinction (published by Birdlife International). Poonswad et al (2013) state that this means this species has a 10% chance of going extinct in 100 years. Other common names in use include: Sulawesi Red-knobbed hornbill, Island hornbill, Buton hornbill and Celebes hornbill.

Captive propagation

The first documented captive breeding in this region occurred at Audubon Park and Zoological Garden in 1991. Michi (1993) wrote about breeding this species at Walsrode Vogelpark at Mallorca, Spain.

Recent successful reproduction in this region has occurred from the pair at St. Augustine Alligator Farm (Krueger 2010). Reproduction at St. Augustine's in 2009 marked the first successful reproduction from two F1 birds. (#70, 55). Unfortunately with the loss of several wild caught birds in 2010, the North American captive population is at risk of going endangered in the near future.

This studbook includes 84 historical records. Currently, there are 7.8.0 living birds in 7 institutions recorded in this studbook

Knobbed hornbill

Aceros cassidix



STUDBOOK REPORTS

Listed by location

Here are listed the studbook numbers for each of the specimens reported by participating institutions.

AUDUBON:	10,11,24,26,27,29,30,33,34,36,38,40,43,44,46,65,
CINCINNAT:	32
EL PASO:	35
GUADLJR:	22, 23, 54
LOSANGELE:	13,18,19,20,21,35,51,56,60,68,70,72,73,82
METROZOO:	9, 11, 46, 68
NY BRONX:	78, 79
PHILADELP:	1, 2, 3
SACRAMNTO:	6,7,12
SANDIEGOZ:	4,5,8,13,14,15,16,17,25,46,49,67, 77, 80
SD-WAP:	8,13,14,15,16,17,25,28,31,32,37,39,45,46, 48,49,50,55, 56, 57, 58, 63, 64, 66, 69, 71, 73, 74, 75,76,77,79
SEATTLE:	20,21,35,41,42,46,47,51,52,53,56,58,59,60,61,62
SEAWORLD:	55, 58, 79
ST AUGUST:	55, 70, 78, 81, 83, 84
WEBB B:	68

KNOBBED HORNBILL STUDBOOK
(*Aceros cassidix*)

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
1	M	????	WILD	WILD	SULAWESI	????	NONE	Capture
					DESCHAUEN	????	NONE	Transfer
					PHILADELP	15 Jun 1928	20951	Transfer
						28 Aug 1928		Death
2	?	????	WILD	WILD	SULAWESI	????	NONE	Capture
					L RUHE	????	NONE	Transfer
					PHILADELP	12 Jun 1940	20952	Transfer
						27 Jan 1942		Death
3	F	????	WILD	WILD	SULAWESI	????	NONE	Capture
					L RUHE	????	NONE	Transfer
					PHILADELP	12 Jun 1940	20953	Transfer
						3 Oct 1940		Death
4	F	~ 1972	WILD	WILD	SULAWESI	????	NONE	Capture
					JAKARTA	????	NONE	Transfer
					SANDIEGOZ	13 Mar 1982	082249	Transfer
						20 Mar 1983		Death
5	M	~ 1973	WILD	WILD	SULAWESI	????	NONE	Capture
					JOHNSTON	????	NONE	Transfer
					SANDIEGOZ	27 Jan 1978	202121	Transfer
					SD-WAP	4 May 1978	202121	Transfer
					SANDIEGOZ	26 Jul 1978	202121	Transfer
						10 Aug 1986		Death
6	M	~ 1985	WILD	WILD	SULAWESI	????	NONE	Capture
					SCHMIDT R	????	UNK	Transfer
					SACRAMNTO	25 Jan 1990	200913	Transfer
7	F	~ 1985	WILD	WILD	SULAWESI	????	NONE	Capture
					SCHMIDT R	????	UNK	Transfer
					SACRAMNTO	25 Jan 1990	200914	Transfer
						2 Mar 1994		Death
8	F	~ 1986	WILD	WILD	SULAWESI	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	3 Feb 1989	389065	Transfer
					SD-WAP	23 Aug 1989	389065	Transfer
					SANDIEGOZ	3 Apr 1993	389065	Transfer
						1 May 2005		Death
9	M	~ 1986	WILD	WILD	SULAWESI	????	NONE	Capture
					ZOO IMPRT	????	NONE	Transfer
					METROZOO	3 Mar 1988	A02170	Transfer
						12 Sep 1988		Death
10	M	~ 1986	WILD	WILD	SULAWESI	????	NONE	Capture
					MILLER R	????	NONE	Transfer
					AUDUBON	23 May 1989	1170	Transfer
						6 Sep 1995		Death
11	F	~ 1986	WILD	WILD	SULAWESI	????	NONE	Capture
					MILLER R	????	UNK	Transfer
					AUDUBON	23 May 1989	1171	Transfer
					METROZOO	15 May 2003	B30079	Transfer
12	F	~ 1986	WILD	WILD	BUTON	????	NONE	Capture
					MILLER R	~1988 +/-2yr	UNK	Transfer
					SACRAMNTO	13 Oct 1994	201152	Transfer

13	M	~ 1987	WILD	WILD	SULAWESI V.D.BRINK SANDIEGOZ SD-WAP SANDIEGOZ LOSANGELE	???? ???? 18 Feb 1989 23 Aug 1989 3 Apr 1993 11 Aug 2005 31 Oct 2010	NONE NONE 389115 389115 389115 991094	Capture Transfer Transfer Transfer Transfer Death
14	M	~ 1987	WILD	WILD	SULAWESI V.D.BRINK SANDIEGOZ SD-WAP SANDIEGOZ	???? ???? 21 Apr 1989 21 May 1989 1 Mar 2010 18 Oct 2010	NONE NONE 389466 389466 389466	Capture Transfer Transfer Transfer Transfer Death
15	F	~ 1987	WILD	WILD	SULAWESI V.D.BRINK SANDIEGOZ SD-WAP	???? ???? 21 Apr 1989 21 May 1989 4 Jul 1994	NONE NONE 389467 389467	Capture Transfer Transfer Transfer Death
16	F	~ 1988	WILD	WILD	SULAWESI V.D.BRINK SANDIEGOZ SD-WAP	???? ???? 10 Jun 1989 8 Jul 1989	NONE NONE 389740 389740	Capture Transfer Transfer Transfer
17	M	~ 1988	WILD	WILD	SULAWESI V.D.BRINK SANDIEGOZ SD-WAP	???? ???? 10 Jun 1989 8 Jul 1989	NONE NONE 389741 389741	Capture Transfer Transfer Transfer
18	M	????	WILD	WILD	SULAWESI SCHMIDT R LOSANGELE	???? ???? 31 Jan 1989 27 Mar 2005	NONE UNK 95657	Capture Transfer Transfer Death
19	F	????	WILD	WILD	SULAWESI SCHMIDT R LOSANGELE	???? ???? 31 Jan 1989 19 Oct 1999	NONE UNK 95658	Capture Transfer Transfer Death
20	M	????	WILD	WILD	SULAWESI SCHMIDT R LOSANGELE SEATTLE	???? ???? 31 Jan 1989 5 Mar 1993 27 Jun 1999	NONE UNK 95659 930053	Capture Transfer Transfer Transfer Death
21	F	????	WILD	WILD	SULAWESI SCHMIDT R LOSANGELE SEATTLE LOSANGELE	???? ???? 31 Jan 1989 5 Mar 1993 23 Feb 2000 13 Sep 2013	NONE UNK 95660 930054 95660	Capture Transfer Transfer Transfer Transfer Death
22	M	????	WILD	WILD	SULAWESI LOZANO AL GUADALJR	???? ???? 26 Mar 1989 20 Oct 1997	NONE NONE A00034	Capture Transfer Transfer Death
23	F	????	WILD	WILD	SULAWESI LOZANO AL GUADALJR	???? ???? 26 Mar 1989 17 Aug 2010	NONE NONE A00035	Capture Transfer Transfer Death
24	?	4 Jun 1991	10	11	AUDUBON	4 Jun 1991 1 Jul 1991	1280	Hatch Death

25	F	~ 1993	WILD	WILD	SULAWESI MILLER R SANDIEGOZ SD-WAP SANDIEGOZ	???? ???? 5 Oct 1994 11 Nov 1994 1 Mar 2010	NONE UNK 394394 394394 394394	Capture Transfer Transfer Transfer Transfer
26	?	22 May 1992	10	11	AUDUBON	22 May 1992 2 Jun 1992	1705	Hatch Death
27	?	30 May 1992	10	11	AUDUBON	30 May 1992 2 Jun 1992	1712	Hatch Death
28	M	16 Jul 1992	14	15	SD-WAP MILLER R	16 Jul 1992 17 Feb 1993	892270 UNK	Hatch lft Transfer
29	M	25 Aug 1992	10	11	AUDUBON	25 Aug 1992 31 Aug 1992	1823	Hatch Death
30	?	21 May 1993	10	11	AUDUBON	21 May 1993 5 Jun 1993	1889	Hatch Death
31	M	30 May 1993	14	15	SD-WAP MILLER R	30 May 1993 11 Nov 1993	893319 UNK	Hatch lft Transfer
32	M	14 Apr 1994	17	16	SD-WAP CINCINNAT	14 Apr 1994 23 Feb 1995 5 Apr 1995	894145 295016	Hatch Transfer Death
33	?	16 May 1994	10	11	AUDUBON	16 May 1994 4 Jun 1994	1988	Hatch Death
34	?	26 May 1994	10	11	AUDUBON	26 May 1994 4 Jun 1994	1989	Hatch Death
35	F	~30 May 1994	20	21	SEATTLE EL PASO	~30 May 1994 4 May 1995 26 May 1995	940234 951036	Hatch Transfer Death
36	M	17 Aug 1994	10	11	AUDUBON	17 Aug 1994 10 Oct 1994	2030	Hatch Death
37	F	13 Apr 1995	17	16	SD-WAP	13 Apr 1995 13 Jun 1995	895183	Hatch Death
38	?	6 May 1995	10	11	AUDUBON	6 May 1995 17 Jun 1995	2076	Hatch Death
39	?	6 May 1995	14	25	SD-WAP MILLER R	6 May 1995 29 Nov 1995	895108 UNK	Hatch lft Transfer
40	M	12 May 1995	10	11	AUDUBON	12 May 1995 11 Aug 1998	2081	Hatch Death
41	?	~18 May 1995	20	21	SEATTLE	~18 May 1995 ~ 3 Jul 1995	950064	Hatch Death
42	?	~23 May 1995	20	21	SEATTLE	~23 May 1995 ~15 Jun 1995	950134	Hatch Death
43	?	23 Aug 1995	10	11	AUDUBON	23 Aug 1995 31 Aug 1995	2102	Hatch Death
44	?	29 Aug 1995	10	11	AUDUBON	29 Aug 1995 3 Sep 1995	2104	Hatch Death

45	?	17 Apr 1996	14	25	SD-WAP	17 Apr 1996 12 May 1996	896111	Hatch Death
46	M	~31 May 1996	20	21	SEATTLE AUDUBON METROZOO SANDIEGOZ SD-WAP	~31 May 1996 9 Oct 1997 15 May 2003 28 Jul 2005 12 Feb 2010	960137 2270 B30078 305419 305419	Hatch Transfer Transfer Transfer Transfer
47	?	~ 7 Jun 1996	20	21	SEATTLE	~ 7 Jun 1996 7 Jun 1996	960147	Hatch Death
48	?	23 Jul 1996	17	16	SD-WAP	23 Jul 1996 2 Sep 1996	896279	Hatch Death
49	M	19 Apr 1997	17	16	SD-WAP SANDIEGOZ SD-WAP WALSR KG	19 Apr 1997 2 Jun 1997 29 Jul 1997 9 Sep 1998	897207 897207 897207 1.8900	Hatch Transfer Transfer Transfer ltf
50	F	30 Apr 1997	14	25	SD-WAP	30 Apr 1997 30 May 1997	897152	Hatch Death
51	F	~ 8 May 1997	20	21	SEATTLE	~ 8 May 1997	970128	Hatch
52	?	~15 May 1997	20	21	SEATTLE	~15 May 1997 25 May 1997	970146	Hatch Death
53	?	~21 May 1997	20	21	SEATTLE	~21 May 1997 21 May 1997	970148	Hatch Death
54	?	1 Jul 1997	22	23	GUADALJR	1 Jul 1997 1 Jul 1997	AO2466	Hatch Death
55	F	5 Apr 1998	17	16	SD-WAP SEA WORLD ST.AUGUST	5 Apr 1998 6 May 1999 29 Aug 2008	898083 RKH002 A0822	Hatch Transfer Transfer
56	M	17 Apr 1998	14	25	SD-WAP SEATTLE LOSANGELE	17 Apr 1998 11 Mar 1999 8 Nov 2011 7 Aug 2012	898116 990014 992560	Hatch Transfer Transfer Death
57	?	23 Apr 1998	14	25	SD-WAP	23 Apr 1998 4 Jul 1998	898139	Hatch Death
58	M	~ 6 May 1998	20	21	SEATTLE SD-WAP SEATTLE SEA WORLD	~ 6 May 1998 1 Mar 1999 1 Mar 1999 5 May 1999 9 Sep 2010	980058 899036 980058 RKH001	Hatch Transfer Transfer Transfer Death
59	?	~10 May 1998	20	21	SEATTLE	~10 May 1998 14 May 1998	980062	Hatch Death
60	M	15 May 1998	20	21	SEATTLE LOSANGELE	15 May 1998 24 Sep 1998 5 Nov 2003	980067 985299	Hatch Transfer Death
61	M	~20 May 1999	20	21	SEATTLE	~20 May 1999 27 Jun 1999	990171	Hatch Death
62	?	~22 May 1999	20	21	SEATTLE	~22 May 1999 28 May 1999	990181	Hatch Death

63	F	13 Jun 1999	14	25	SD-WAP MILLER R	13 Jun 1999 24 Feb 2000	899175 UNK	Hatch ltf Transfer
64	M	~12 May 2000	14	25	SD-WAP WALSRODE	~12 May 2000 29 Oct 2001	800218 UNK	Hatch ltf Transfer
65	?	4 Jun 2001	46	11	AUDUBON	4 Jun 2001 10 Jun 2001	100255	Hatch Death
66	?	19 May 2001	14	25	SD-WAP	19 May 2001 8 Jun 2001	801183	Hatch Death
67	F	~29 Jun 2001	13	8	SANDIEGOZ	~29 Jun 2001 7 Aug 2002	301313	Hatch Death
68	M	18 May 2001	18	21	LOSANGELE METROZOO WEBB B	18 May 2001 20 Aug 2002 9 Apr 2008 24 Jun 2009	990456 B20129 NONE	Hatch Transfer Transfer Death
69	M	~15 Jun 2002	14	25	SD-WAP	~15 Jun 2002 1 Sep 2002	802175	Hatch Death
70	M	~ 7 May 2002	18	21	LOSANGELE ST AUGUST	~ 7 May 2002 17 Feb 2004	990645 A0402	Hatch Transfer
71	F	20 Jun 2003	14	25	SD-WAP	20 Jun 2003 12 Apr 2004	803163	Hatch Death
72	?	18 Jul 1996	18	19	LOSANGELE	18 Jul 1996 18 Jul 1996	N00591	Hatch Death
73	F	3 May 2005	14	25	SD-WAP	3 May 2005 15 Dec 2006	805133	Hatch Death
74	F	2 May 2007	14	25	SD-WAP	2 May 2007 15 May 2007	807078	Hatch Death
75	M	27 June 2007	14	25	SD-WAP Miller R	27 Jun 2007 28 Feb 2008	807167	Hatch ltf Transfer
76	F	28 July 2008	14	25	SD-WAP	28 Jul 2008	808202	Hatch
77	M	30 Jul 2008	14	25	SD-WAP SANDIEGOZ	30 Jul 2008 30 Jul 2008 18 Oct 2008	808205	Hatch Transfer Death
78	M	6 June 2009	70	55	ST AUGUST NY BRONX	6 Jun 2009 29 Apr 2010	A0905 B10036	Hatch Transfer
79	F	5 June 2009	14	25	SD-WAP SEAWORLD NY BRONX	5 Jun 2009 2 Sep 2010 12 May 2011	809214 RKH003 B11053	Hatch Transfer Transfer
80	F	5 Aug 2010	14	25	SANDIEGOZ	5 Aug 2010	310244	Hatch
81	U	~7 May 2012	70	55	ST AUGUST	~7 May 2012 29 May 2012	A1204	Hatch Death

82	M	~27 May 2012	56	21	LOSANGELE	~27 May 2012	992751	Hatch
83	M	30 Apr 2013	70	55	ST AUGUST	30 Aug 2013	A1311	Hatch
84	U	~2 May 2013	70	55	ST AUGUST	~2 May 2013	A1313	Hatch
						19 May 2013	A1313	Death

=====
TOTALS: 32.25.27 (84) in 18 institutions

KNOBBED HORNBILL STUDBOOK
(*Aceros cassidix*)

Restricted to:

Status: Living on 31 Dec 2013

Report ordered by: current/last location (alphabetic)

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=====
Stud # | Sex | Hatch Date | Sire | Dam | Location | Date | Local ID | Event
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LOSANGELE - Los Angeles Zoo & Botanical Gardens, Los Angeles, California, USA

82	M	~27 May 2012	56	21	LOSANGELE	~27 May 2012	992751	Hatch
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Totals: 1.0.0 (1)

NY BRONX - Wildlife Conservation Society, New York, New York, USA

78	M	6 June 2009	70	55	ST AUGUST NY BRONX	6 Jun 2009 29 Apr 2010	A0905 B10036	Hatch Transfer
79	F	5 June 2009	14	25	SD-WAP SEAWORLD NY BRONX	5 Jun 2009 2 Sep 2010 12 May 2011	809214 RKH003 B11053	Hatch Transfer Transfer

Totals: 1.1.0 (2)

SACRAMNTO - Sacramento Zoo, Sacramento, California, USA

6	M	~ 1985	WILD	WILD	SULAWESI SCHMIDT R SACRAMNTO	???? ???? 25 Jan 1990	NONE UNK 200913	Capture Transfer Transfer
12	F	~ 1986	WILD	WILD	BUTON MILLER R SACRAMNTO	???? ~1988 +/-2yr 13 Oct 1994	NONE UNK 201152	Capture Transfer Transfer

Totals: 1.1.0 (2)

SANDIEGOZ - San Diego Zoological Garden, San Diego, California, USA

25	F	~ 1993	WILD	WILD	SULAWESI MILLER R SANDIEGOZ SD-WAP SANDIEGOZ	???? ???? 5 Oct 1994 11 Nov 1994 1 Mar 2010	NONE UNK 394394 394394 394394	Capture Transfer Transfer Transfer Transfer
80	F	5 Aug 2010	14	25	SANDIEGOZ	5 Aug 2010	310244	Hatch

Totals: 0.2.0 (2)

SD-WAP - San Diego Zoo Safari Park, Escondido, California, USA

16	F	~ 1988	WILD	WILD	SULAWESI	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	10 Jun 1989	389740	Transfer
					SD-WAP	8 Jul 1989	389740	Transfer
17	M	~ 1988	WILD	WILD	SULAWESI	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	10 Jun 1989	389741	Transfer
					SD-WAP	8 Jul 1989	389741	Transfer
46	M	~31 May 1996	20	21	SEATTLE	~31 May 1996	960137	Hatch
					AUDUBON	9 Oct 1997	2270	Transfer
					METROZOO	15 May 2003	B30078	Transfer
					SANDIEGOZ	28 Jul 2005	305419	Transfer
					SD-WAP	12 Feb 2010	305419	Transfer
76	F	28 July 2008	14	25	SD-WAP	28 Jul 2008	808202	Hatch

Totals: 2.2.0 (4)

SEATTLE - Woodland Park Zoo, Seattle, WA, USA

51	F	~ 8 May 1997	20	21	SEATTLE	~ 8 May 1997	970128	Hatch
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Totals: 0.1.0 (1)

ST AUGUST - St Augustine Alligator Farm, St Augustine, Florida, USA

55	F	5 Apr 1998	17	16	SD-WAP	5 Apr 1998	898083	Hatch
					SEA WORLD	6 May 1999	RKH002	Transfer
					ST AUGUST	29 Aug 2008	A0822	Transfer
70	M	~ 7 May 2002	18	21	LOSANGELE	~ 7 May 2002	990645	Hatch
					ST AUGUST	17 Feb 2004	A0402	Transfer
83	M	30 Apr 2013	70	55	ST AUGUST	30 Aug 2013	A1311	Hatch

Totals: 2.1.0 (3)

=====

TOTALS: 7.8.0 (15) in 7 Institutions

WRINKLED HORNBILL

Aceros corrugatus

GENERAL INFORMATION

The other common name in use is Sunda Wrinkled hornbill. This species was recently placed in the genus *Rhyticeros* (Poonswad et al 2013).

Status: Local and scarce throughout range, about 0.02-0.06 per km² in southern Thailand. Always uncommon, but now rare in Peninsular Malaysia, close to extinction in Thailand. Still reasonably common in parts of Borneo (Kalimantan) and in parts of Sumatra. Occurs in protected areas such as Gunung Leuser and Way Kampas NP (Sumatra), Danum Valley (Borneo) and Taman Negara (Peninsular Malaysia). Population is declining due to rapid loss of forest in the Sundaic lowlands due to legal and illegal logging, land conversion and forest fires. National survey of hornbill population in Thailand during 2004-2008 abundance index from average 170 km line transect (53-293 km in four forest complexes of its range) was extremely low (0.01-0.03 bird per km) in two forest complexes. However, in the last two decades only three nests confirmed in a rainforest of the Hala-Bala Forest Complex. In Brunei, abundance index from line transect survey of 2-17 km in six localities (every five years during 1991-2001) was 0.04-1.0 birds per km from five localities. Since this species seems to prefer large tracts of tall lowland forest and avoids degraded forest, IUCN warns of increased threat and currently lists it as near-threatened with global extinction. Poonswad et al (2013) cautions that this species may be uplisted.

Captive propagation

This species was first bred in captivity at Audubon Park in 1988 (Sigler and Myers 1992). Presently, there are successful breeding pairs at Brevard Zoo, San Diego Zoo, and Honolulu Zoo. Lindholm (1999) wrote about successful reproduction at the Ft. Worth Zoo.

In Europe, there are 32.21.9 (pers. communication with Jo Gregson), with success at Arnhem, Usti, and Plankendale in 2011. Jo Gregson at the Paignton Zoo (UK) is the European studbook keeper for this species. (Low 1999; Summers 1998; Wilkinson et al 1996).

Aceros corrugatus has the greatest number of living species listed in this studbook (35.28.0 in 26 institutions). There are 215 historical records. To maintain genetic variation in a self-sustaining captive population, this species will be closely managed as a Population Management Plan (PMP). With the help of Colleen Lynch at the Population Management Center, the most recent PMP was distributed to participating institutions in December 2011. Of the 63 living individuals, only 25.26.2 birds were included in the 2011 PMP. The next PMP is planned for October 2014. Priority will be to breed wild caught birds that have low mean kinships and to keep a close look at birds that have higher mean kinships.

Wrinkled hornbill

Aceros corrugatus



STUDBOOK REPORTS

Listed by location

Here are listed the studbook numbers for each of the specimens reported by participating institutions.

ATTLEBORO:	52, 60
AUDUBON:	5,6,25,26,33,34,44,45,46,56,57,58,59,65,66,67, 68, 78, 79, 82, 83, 85, 86, 87, 88, 97, 98, 110, 111, 115, 116, 146, 149, 154, 170, 181, 182,
AURORA:	150
BREVARD:	76, 77, 177, 187, 190, 195, 200
CINCINNAT:	36, 37
COAL VAL:	42, 73,104
CROFT L:	86, 88,101,105,112,113,114
FALLBROOK:	63, 64, 138, 145, 197
FORTWORTH:	14,29,30,87,107,121,131,136,137,146,147,157,158, 184, 189
FT WAYNE:	48, 61, 123, 144, 159, 160,
FRANKLINP:	2
GABOREK:	54, 55,128,129,133,141,142,143,
HONOLULU:	71,72,91,92,93,104,105,117,118,124,140,156,157, 163,169,172,173,174,180,181, 182, 183, 189, 198, 199, 205, 206, 213, 214
HOUSTON:	96, 126,
JACKSONVL:	29, 166
KITCHENS:	90, 94,125,139,155
LAKEBUENA:	21, 44, 69
MANHATTAN:	152
MEMPHIS:	27, 28, 96,126
METROZOO:	11, 12,22,69,86,177,181
MCCORMIC:	74, 75,138,145,162,168
MILL MOUN:	44

NY BRONX: 1, 12, 78, 85,86,88,89,91,92,93
 NZP-WASH: 96, 126
 OCEANJRY: 52
 OKLAHOMA: 31, 32,44,49,69,151, 176, 180
 PHILADELP: 43, 47
 PHOENIX: 44, 89, 190, 204
 PROVIDNCE: 50,51,52,60,163,175, 195
 QUEBEC: 136, 144
 RIO GRANDE: 86,154
 SANDIEGOZ: 3,7,8,9,10,13,14,15,16,19,20,23,24,35,53,58,
 62,87,89,96,99,100,101,102,103,106,108,109,120,
 126,127,131,132,133,135,144,145,152,153,154,159
 160, 163, 168, 169,173, 178, 191, 192, 193, 206,210,
 211, 212
 SAN FRAN: 194, 201
 SEATTLE: 28,38,39,40,41,55,57,68,87,121,164,165, 202
 SCHROEDER: 28,109,119
 SD-WAP: 2,4,7,9,10,15,16,19,20,23,24,35,53,80,81,84,87,
 89,95,96,99,100,102,103,106,111,119,120,122,130,
 132, 134,135, 156, 185, 186, 197, 200,201, 202,
 207,208, 209,
 SEDGWICK: 124,126,137, 188. 196, 204, 215
 SHARPE M: 71, 72, 74, 75, 76, 77, 162
 SC ISLAND: 12,22,29,69,70,78,85,86,149,156,158,161,166.167,
 170,171,178, 179, 184, 194
 STATEN IS: 44
 TRACY AV: 120
 TORONTO: 153, 172
 TULSA 108,122, 175,176, 179
 WEBB B: 74, 75, 162, 183, 198, 203, 205

WRINKLED HORNBILL STUDBOOK
(*Aceros corrugatus*)

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
1	?	????	WILD	WILD	SE ASIA	????	NONE	Capture
					L RUHE	????	NONE	Transfer
					NY BRONX	5 Jun 1931	UNK	Transfer
						9 Feb 1934		Death
2	F	????	WILD	WILD	SE ASIA	????	NONE	Capture
					UNKNOWN	????	NONE	Transfer
					FRANKLINP	~ Feb 1975	75A033	Transfer
					SD-WAP	17 Oct 1979	018625	Transfer
		26 Feb 1981	Death					
3	M	~ 1981	WILD	WILD	SE ASIA	????	NONE	Capture
					FOUTS J	????	NONE	Transfer
					SANDIEGOZ	10 Oct 1983	010506	Transfer
		25 Oct 1983	Death					
4	M	~ 1982	WILD	WILD	SE ASIA	????	NONE	Capture
					FOUTS J	????	NONE	Transfer
					SD-WAP	10 Oct 1983	010507	Transfer
		28 Mar 1984	Death					
5	M	~ 1985	WILD	WILD	SE ASIA	????	NONE	Capture
					MCMORRIS	????	NONE	Transfer
					AUDUBON	2 Feb 1987	918	Transfer
					HEIDELBRG	19 Jun 2002	UNK	Transfer
		16 Dec 2002	UNK ltf	Transfer				
6	F	~ 1985	WILD	WILD	SE ASIA	????	NONE	Capture
					MCMORRIS	????	NONE	Transfer
					AUDUBON	2 Feb 1987	919	Transfer
		14 Feb 1999	Death					
7	M	~ 1986	WILD	WILD	SE ASIA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	13 Jan 1988	388098	Transfer
					SD-WAP	18 Feb 1988	388098	Transfer
		11 Nov 1989	Death					
8	F	~ 1986	WILD	WILD	SE ASIA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	13 Jan 1988	388114	Transfer
		9 Feb 1988	Death					
9	M	~ 1986	WILD	WILD	SE ASIA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	13 Jan 1988	388115	Transfer
					SD-WAP	13 Feb 1988	388115	Transfer
		4 Sep 1988	Death					
10	F	~ 1986	WILD	WILD	SE ASIA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	13 Jan 1988	388097	Transfer
					SD-WAP	18 Feb 1988	388097	Transfer
			ltf	Transfer				
11	F	~ 1986	WILD	WILD	INDONESIA	????	NONE	Capture
					ZOO IMPRT	????	NONE	Transfer
					METROZOO	3 Mar 1988	A02167	Transfer
		26 Aug 1992	Death					
12	F	~ 1986	WILD	WILD	INDONESIA	????	NONE	Capture
					ZOO IMPRT	????	NONE	Transfer
					METROZOO	3 Mar 1988	A02168	Transfer
					STCATHERN	1 Sep 1992	925029	Transfer
					NY BRONX	17 Jan 1997	925029	Transfer
		24 Jun 1998	Death					

13	F	~ 1987	WILD	WILD	SE ASIA V.D.BRINK SAN DIEGOZ	???? ???? 21 Apr 1989 8 Dec 1989	NONE NONE 389469	Capture Transfer Transfer Death
14	M	~ 1987	WILD	WILD	SE ASIA V.D.BRINK SAN DIEGOZ FORTWORTH FORTWORTH	???? ???? 21 Apr 1989 23 Mar 2006 7 Jun 2010	NONE NONE 389470 204412	Capture Transfer Transfer Transfer Death
15	F	~ 1987	WILD	WILD	SE ASIA V.D.BRINK SAN DIEGOZ SD-WAP SAN DIEGOZ	???? ???? 21 Apr 1989 25 May 1989 3 Jan 1990 11 Nov 1993	NONE NONE 389471 389471 389471	Capture Transfer Transfer Transfer Death
16	M	~ 1987	WILD	WILD	SE ASIA V.D.BRINK SAN DIEGOZ SD-WAP	???? ~ 1987 21 Apr 1989 25 May 1989	NONE NONE 389468 389468	Capture Transfer Transfer Transfer ltf
17	M	????	WILD	WILD	SUMATRA KUALA LUM	???? 27 Jan 1987 ~ Jun 1991	NONE 87002 87002	Capture Transfer Transfer ltf
18	F	????	WILD	WILD	SUMATRA KUALA LUM	???? 1 Dec 1987 ~ Jun 1991	NONE 87003 87003	Capture Transfer Transfer ltf
19	M	~ 1988	WILD	WILD	SE ASIA V.D.BRINK SAN DIEGOZ SD-WAP	???? ???? 30 Nov 1990 23 Jan 1991 11 Oct 1991	NONE NONE 490065 490065	Capture Transfer Transfer Transfer Death
20	F	~ 1988	WILD	WILD	SE ASIA V.D.BRINK SAN DIEGOZ SD-WAP	???? ???? 30 Nov 1990 23 Jan 1991 11 Oct 1991	NONE NONE 490066 490066	Capture Transfer Transfer Transfer Death
21	F	????	WILD	WILD	SE ASIA C JONSSON LAKEBUENA	???? 29 Dec 1987 16 Jun 1988 11 Oct 1993	NONE NONE 180603	Capture Transfer Transfer Death
22	M	????	WILD	WILD	BORNEO IN C JONSSON METROZOO STCATHERN	???? 29 Dec 1987 20 Sep 1988 1 Sep 1992 8 Jan 1996	NONE NONE A02419 925028	Capture Transfer Transfer Transfer Death
23	M	~ 1989	WILD	WILD	SE ASIA V.D.BRINK SAN DIEGOZ SD-WAP SAN DIEGOZ	???? ???? 30 Jun 1990 2 Aug 1990 1 Feb 2001 5 Oct 2006	NONE NONE 390706 390706 390706	Capture Transfer Transfer Transfer Transfer Death
24	F	~ 1989	WILD	WILD	SE ASIA V.D.BRINK SAN DIEGOZ SD-WAP SAN DIEGOZ	???? ???? 30 Jun 1990 2 Aug 1990 1 Feb 2001 1 Nov 2004	NONE NONE 390707 390707 390707	Capture Transfer Transfer Transfer Transfer Death

25	F	~28 Jun 1988	5	6	AUDUBON	~28 Jun 1988 11 Aug 1991	1054	Hatch Death
26	F	~28 Jun 1988	5	6	AUDUBON	~28 Jun 1988 24 Jul 1988	1055	Hatch Death
27	F	~ Mar 1990	WILD	WILD	SE ASIA LEBEDA MEMPHIS	???? ???? 5 Mar 1992 14 Jul 2000	NONE UNK 12691	Capture Transfer Transfer Death
28	F	6 Mar 1990	WILD	WILD	SE ASIA LEBEDA MEMPHIS SCHROEDER SEATTLE	???? ???? 5 Mar 1992 22 Oct 1998 14 Sep 2000 10 Jun 2002	NONE UNK 12692 NONE 200269	Capture Transfer Transfer Transfer Transfer Death
29	M	~ 1990	WILD	WILD	SE ASIA MCCOY T FORTWORTH STCATHERN SC ISLAND JACKSONVL	???? ???? 25 Apr 1996 2 Oct 2003 1 Jan 2006 21 Mar 2012	NONE UNK 960412 S03081 S03081 612303	Capture Transfer Transfer Transfer Transfer Transfer
30	F	~ 1990	WILD	WILD	SE ASIA MCCOY T FORTWORTH	???? ???? 25 Apr 1996 6 Jun 2003	NONE UNK 960413	Capture Transfer Transfer Death
31	M	19 May 1989	UNK	UNK	MILLER R OKLAHOMA	19 May 1989 24 Aug 1994 29 Jul 1995	UNK 656201	Hatch Transfer Death
32	F	2 Jun 1989	UNK	UNK	MILLER R OKLAHOMA	2 Jun 1989 24 Aug 1994 24 Aug 2001	UNK 656302	Hatch Transfer Death
33	F	28 Jun 1989	5	6	AUDUBON	28 Jun 1989 17 Aug 1990	1212	Hatch Death
34	M	30 Jun 1989	5	6	AUDUBON	30 Jun 1989 24 Mar 1990	1213	Hatch Death
35	M	~ 1991	WILD	WILD	SE ASIA MILLER R SANDIEGOZ SD-WAP SANDIEGOZ SD-WAP	???? ???? 15 Jan 1992 15 Feb 1992 8 Mar 1993 1 Feb 2001	NONE UNK 392014 392014 392014 392014	Capture Transfer Transfer Transfer Transfer Transfer
36	M	????	WILD	WILD	SE ASIA SCHMIDT R CINCINNAT	???? ???? 7 Apr 1993 12 Jul 1993	NONE UNK 293038	Capture Transfer Transfer Death
37	F	????	WILD	WILD	SE ASIA SCHMIDT R CINCINNAT	???? ???? 7 Apr 1993 12 Jul 1993	NONE UNK 293039	Capture Transfer Transfer Death
38	M	????	WILD	WILD	SE ASIA LEBEDA SEATTLE	???? ???? 10 Mar 1992 11 Jun 2004	NONE UNK 920107	Capture Transfer Transfer Death

39	M	????	WILD	WILD	SE ASIA LEBEDA SEATTLE AVI BREED	???? ???? 10 Mar 1992 21 Apr 1993	NONE UNK 920108 301789	Capture Transfer Transfer lft Transfer
40	F	????	WILD	WILD	SE ASIA LEBEDA SEATTLE	???? ???? 10 Mar 1992 9 Oct 1995	NONE UNK 920109	Capture Transfer Transfer Death
41	F	????	WILD	WILD	SE ASIA MILLER R AVI BREED SEATTLE	???? ???? 1 Feb 1991 23 Sep 1999 15 Jun 2000	NONE UNK 001250 990219	Capture Transfer Transfer Transfer Death
42	M	~ 1990	UNK	UNK	MILLER R COAL VAL	~ 1990 27 Sep 1990 6 Mar 1998	UNK B1596	Hatch Transfer Death
43	M	4 May 1990	UNK	UNK	MILLER R PHILADELP JURONG	4 May 1990 12 May 1994 20 Mar 2003	UNK 204811 UNK	Hatch Transfer lft Transfer
44	M	2 Jun 1990	5	6	AUDUBON LAKEBUENA OKLAHOMA MILL MOUN PHOENIX STATEN IS	2 Jun 1990 3 Apr 1991 18 Nov 1999 6 Dec 2000 16 Oct 2008 18 Oct 2012	1345 210402 765304 459 11213 112071	Hatch Transfer Transfer Transfer Transfer Transfer
45	?	5 Jun 1990	5	6	AUDUBON	5 Jun 1990 6 Jan 1991	1346	Hatch Death
46	?	7 Jun 1990	5	6	AUDUBON	7 Jun 1990 20 Jun 1990	1347	Hatch Death
47	F	21 Feb 1991	UNK	UNK	MILLER R PHILADELP	21 Feb 1991 12 May 1994 1 Sep 2001	UNK 204812	Hatch Transfer Death
48	M	2 Apr 1991	UNK	UNK	MILLER R FT WAYNE	2 Apr 1991 25 May 1994 10 Mar 2005	UNK 94145	Hatch Transfer Death
49	M	~21 Apr 1991	UNK	UNK	MILLER R OKLAHOMA	~21 Apr 1991 19 Apr 1996 19 Jun 2001	UNK 687003	Hatch Transfer Death
50	M	~ 1991	UNK	UNK	MILLER R PROVIDNCE	~ 1991 7 Mar 1994 18 Jun 1994	UNK 942005	Hatch Transfer Death
51	F	~ 1991	UNK	UNK	MILLER R PROVIDNCE	~ 1991 7 Mar 1994 17 Jun 1994	UNK 942006	Hatch Transfer Death
52	M	1 May 1991	UNK	UNK	MILLER R ATTLEBORO PROVIDNCE OCEANJRNRY	1 May 1991 18 Nov 1993 19 May 1999 25 Jul 2001	UNK 932019 992004 801090	Hatch Transfer Transfer Transfer
53	F	~ 1 Jan 1990	WILD	WILD	SE ASIA MILLER R SANDIEGOZ SD-WAP	???? ???? 4 Mar 1993 1 Feb 2001 7 Apr 2001	NONE UNK 393084 393084	Capture Transfer Transfer Transfer Death

54	M	~ 1991	WILD	WILD	SE ASIA SCHMIDT R GABOREK M	???? ???? ~ 1992	NONE UNK 930001	Capture Transfer Transfer Death
						10 Jun 2001		
55	F	~ 1991	WILD	WILD	SE ASIA SCHMIDT R GABOREK M	???? ???? ~ 1992	NONE UNK 930002	Capture Transfer Transfer Transfer Death
					SEATTLE	25 Nov 2002	200940	
						10 Jun 2004		
56	F	22 May 1991	5	6	AUDUBON	22 May 1991	1483	Hatch Death
						3 Jul 1991		
57	F	25 May 1991	5	6	AUDUBON SEATTLE	25 May 1991	1488	Hatch Transfer
						25 Apr 2002	200770	
58	M	~24 May 1991	17	18	KUALA LUM SANDIEGOZ AUDUBON	~24 May 1991	91008	Hatch Transfer Transfer Death
						17 Feb 1992	392144	
						19 Mar 1992	1663	
						2 May 2001		
59	?	29 May 1991	5	6	AUDUBON	29 May 1991	1491	Hatch Death
						9 Jul 1991		
60	F	1 Nov 1991	UNK	UNK	MILLER R ATTLEBORO PROVIDNCE	1 Nov 1991	UNK	Hatch Transfer Transfer Death
						18 Nov 1993	932020	
						19 May 1999	992005	
						21 Jun 2000		
61	F	12 Nov 1991	UNK	UNK	MILLER R FT WAYNE	12 Nov 1991	UNK	Hatch Transfer Death
						25 May 1994	94146	
						3 Mar 2005		
62	F	~ 1 Jan 1990	WILD	WILD	SE ASIA MILLER R SANDIEGOZ	???? ???? 1 Mar 1994	NONE UNK 394018	Capture Transfer Transfer Death
						21 Jun 2005		
63	M	????	WILD	WILD	SE ASIA HERNANDEZ FALLBROOK	???? ???? ~ Apr 1993	NONE NONE UNK	Capture Transfer Transfer Death
						1 Sep 2002		
64	F	????	WILD	WILD	SE ASIA BIRDHAVEN FALLBROOK	???? ???? ~ Apr 1993	NONE NONE UNK	Capture Transfer Transfer Death
						1 Sep 2002		
65	?	5 Jun 1992	5	6	AUDUBON	5 Jun 1992	1714	Hatch Death
						13 Jun 1992		
66	M	11 Jun 1992	5	6	AUDUBON	11 Jun 1992	1722	Hatch Death
						24 Jun 1992		
67	?	1 Sep 1992	5	6	AUDUBON	1 Sep 1992	1824	Hatch Death
						1 Oct 1992		

68	F	7 Sep 1992	5	6	AUDUBON SEATTLE	7 Sep 1992 30 Nov 1995 6 Dec 1995	1826 950368	Hatch Transfer Death
69	F	1 Apr 1993	22	12	STCATHERN LAKEBUENA OKLAHOMA	1 Apr 1993 20 Jul 1994 18 Nov 1999 24 Apr 2000	935028 240735 765405	Hatch Transfer Transfer Death
70	?	10 Apr 1993	22	12	STCATHERN	10 Apr 1993 7 Sep 1993	935029	Hatch Death
71	M	????	WILD	WILD	SE ASIA SHARPE M HONOLULU	???? ~ Oct 1993 4 Apr 1995	NONE 5 950128	Capture Transfer Transfer
72	F	????	WILD	WILD	SE ASIA SHARPE M HONOLULU	???? ~ Oct 1993 4 Apr 1995	NONE 6 950129	Capture Transfer Transfer
73	F	~ 9 Feb 1993	UNK	UNK	MILLER R COAL VAL	~ 9 Feb 1993 9 Feb 1996	UNK B1568	Hatch Transfer
74	M	~ May 1993	WILD	WILD	SE ASIA SHARPE M MCCORMIC WEBB B	???? ~ Oct 1993 10 Aug 2004 ~ Feb 2006 4 Jul 2011	NONE 1 NONE NONE	Capture Transfer Transfer Death
75	F	~ May 1993	WILD	WILD	SE ASIA SHARPE M MCCORMIC WEBB B	???? ~ Oct 1993 10 Aug 2004 ~ Feb 2006 17 Aug 2007	NONE 2 NONE NONE	Capture Transfer Transfer Death
76	M	~ May 1993	WILD	WILD	SE ASIA SHARPE M BREVARD	???? ~ Oct 1993 30 Jul 2004	NONE 3 24069	Capture Transfer Transfer
77	F	~ May 1993	WILD	WILD	SE ASIA SHARPE M BREVARD	???? ~ Oct 1993 30 Jul 2004	NONE 4 24070	Capture Transfer Transfer
78	F	20 Jun 1993	5	6	AUDUBON NY BRONX STCATHERN SC ISLAND AUDUBON	20 Jun 1993 23 Nov 1995 15 Jan 1997 1 Jan 2006 8 Feb 2012	1904 952354 952354 952354 1904	Hatch Transfer Transfer Transfer Transfer
79	?	27 Jun 1993	5	6	AUDUBON	27 Jun 1993 15 Jul 1993	1905	Hatch Death
80	?	25 Apr 1994	23	24	SD-WAP	25 Apr 1994 9 May 1994	894154	Hatch Death
81	?	25 Apr 1994	23	24	SD-WAP	25 Apr 1994 9 May 1994	894155	Hatch Death
82	?	14 May 1994	5	6	AUDUBON	14 May 1994 17 Jun 1994	1986	Hatch Death
83	?	16 May 1994	5	6	AUDUBON	16 May 1994 29 May 1994	1987	Hatch Death

84	?	28 Jul 1994	23	24	SD-WAP	28 Jul 1994 27 Aug 1994	894282	Hatch Death
85	M	4 Apr 1995	22	12	STCATHERN NY BRONX STCATHERN SC ISLAND AUDUBON	4 Apr 1995 15 Nov 1995 15 Jan 1997 1 Jan 2006 8 Feb 2012	955002 955002 955002 955002 103519	Hatch Transfer Transfer Transfer Transfer
86	M	4 Apr 1995	22	12	STCATHERN NY BRONX CROFT L AUDUBON RIO GRAND	4 Apr 1995 15 Nov 1995 9 Dec 1999 19 Sep 2002 5 Jun 2006	955003 955003 990066 100697 BO6019	Hatch Transfer Transfer Transfer Transfer
87	F	14 Apr 1995	23	24	SD-WAP SANDIEGOZ SD-WAP SEATTLE FORTWORTH	14 Apr 1995 19 Apr 1995 22 Jun 1995 18 Jan 1996 09 Dec 2008	895095 895095 895095 960037 205687	Hatch Transfer Transfer Transfer Transfer
88	F	18 May 1995	5	6	AUDUBON NY BRONX CROFT L AUDUBON	18 May 1995 23 Nov 1995 9 Dec 1999 19 Sep 2002 12 Mar 2006	2088 952355 990067 2088	Hatch Transfer Transfer Transfer Death
89	F	11 Oct 1995	23	24	SD-WAP SANDIEGOZ SD-WAP NY BRONX PHOENIX	11 Oct 1995 18 Oct 1995 20 Feb 1996 7 Jan 1997 17 Apr 2008 15 Feb 2011	895338 895338 895338 972001 11012	Hatch Transfer Transfer Transfer Transfer Death
90	F	????	UNK	UNK	UNKNOWN MILLER R CAVE G KITCHENS	???? ???? ~ 1997 ~ May 1998	UNK UNK UNK NONE	Hatch Transfer Transfer lft Transfer
91	M	17 Apr 1996	71	72	HONOLULU NY BRONX	17 Apr 1996 4 Dec 1996 14 Mar 1997	960179 962315	Hatch Transfer Death
92	M	21 Apr 1996	71	72	HONOLULU NY BRONX	21 Apr 1996 4 Dec 1996 13 Mar 1998	960109 962316	Hatch Transfer Death
93	F	22 Apr 1996	71	72	HONOLULU NY BRONX	22 Apr 1996 4 Dec 1996 4 Mar 1998	960181 962317	Hatch Transfer Death
94	M	????	UNK	UNK	UNKNOWN CAVE G KITCHENS	???? ~ 1997 ~ May 1998 7 Feb 2003	UNK UNK NONE	Hatch Transfer Transfer Death
95	?	14 May 1996	23	24	SD-WAP	14 May 1996 1 Jun 1996	896156	Hatch Death

96	M	16 May 1996	23	24	SD-WAP	16 May 1996	896157	Hatch
					SANDIEGOZ	20 May 1996	896157	Transfer
					SD-WAP	31 Jul 1996	896157	Transfer
					MEMPHIS	12 Dec 1996	16547	Transfer
					HOUSTON	24 Apr 2003	20431	Transfer
					NZP-WASH	27 Mar 2013	216226	Transfer
97	?	27 Aug 1996	5	6	AUDUBON	27 Aug 1996	2194	Hatch
						19 Sep 1996		Death
98	?	29 Aug 1996	5	6	AUDUBON	29 Aug 1996	2195	Hatch
						10 Sep 1996		Death
99	F	22 Sep 1996	23	24	SD-WAP	22 Sep 1996	896308	Hatch
					SANDIEGOZ	30 Sep 1996	896308	Transfer
						2 Oct 1996		Death
100	M	12 Apr 1997	14	62	SANDIEGOZ	12 Apr 1997	497121	Hatch
					SD-WAP	4 Nov 1997	497121	Transfer
					PRETORIA	28 Jul 1998	907178	Transfer ltf
101	F	12 Apr 1997	14	62	SANDIEGOZ	12 Apr 1997	497122	Hatch
					CROFT L	5 Nov 1997	970027	Transfer
						15 May 2001		Death
102	F	5 May 1997	23	24	SD-WAP	5 May 1997	897197	Hatch
					SANDIEGOZ	13 May 1997	897197	Transfer
					SD-WAP	29 Jul 1997	897197	Transfer
						24 Sep 2005		Death
103	F	8 May 1997	23	24	SD-WAP	8 May 1997	897198	Hatch
					SANDIEGOZ	13 May 1997	897198	Transfer
					SD-WAP	29 Jul 1997	897198	Transfer
					PRETORIA	28 Jul 1998	907179	Transfer
						10 Mar 2001		Death
104	M	8 Jun 1997	71	72	HONOLULU	8 Jun 1997	970312	Hatch
					COAL VAL	24 Apr 1998	B1705	Transfer
						1 Nov 1998	B1705	Transfer
105	?	8 Jul 1997	71	72	HONOLULU	8 Jul 1997	970316	Hatch
					CROFT L	21 Jan 1998	980001	Transfer
						13 Feb 1998		Death
106	?	31 Jul 1997	23	24	SD-WAP	31 Jul 1997	897378	Hatch
					SANDIEGOZ	11 Aug 1997	897378	Transfer
						17 Aug 1997		Death
107	?	26 Sep 1997	29	30	FORTWORTH	26 Sep 1997	970902	Hatch
						16 Oct 1997		Death
108	M	2 Mar 1998	14	62	SANDIEGOZ	2 Mar 1998	498132	Hatch
					TULSA	19 Nov 1998	13071	Transfer
109	M	2 Mar 1998	14	62	SANDIEGOZ	2 Mar 1998	498133	Hatch
					SCHROEDER	2 Jun 1999	NONE	Transfer
						15 Jul 2002	NONE	Transfer ltf

110	M	????	WILD	WILD	SE ASIA MCCOY T AUDUBON	???? ???? 19 Jul 1999 17 Sep 1999	NONE UNK 2593	Capture Transfer Transfer Death
111	F	????	WILD	WILD	SE ASIA MCCOY T AUDUBON SD-WAP	???? ???? 19 Jul 1999 23 Jan 2002 8 Sep 2002	NONE UNK 2594 802022	Capture Transfer Transfer Transfer Death
112	M	????	WILD	WILD	SE ASIA MCCOY T CROFT L MCCOY T	???? ???? 5 May 1999 15 Aug 2002	NONE UNK 990051 UNK	Capture Transfer Transfer lft Transfer
113	M	????	WILD	WILD	SE ASIA MCCOY T CROFT L MCCOY T	???? ???? 2 Jul 1999 15 Aug 2002	NONE UNK 990061 UNK	Capture Transfer Transfer lft Transfer
114	F	????	WILD	WILD	SE ASIA MCCOY T CROFT L MCCOY T	???? ???? 2 Jul 1999 15 Aug 2002	NONE UNK 990062 UNK	Capture Transfer Transfer lft Transfer
115	?	24 May 1998	5	6	AUDUBON	24 May 1998 2 Jun 1998	2381	Hatch Death
116	?	27 May 1998	5	6	AUDUBON	27 May 1998 7 Jun 1998	2382	Hatch Death
117	?	29 Jun 1998	71	72	HONOLULU	29 Jun 1998 26 Jul 1998	980190	Hatch Death
118	F	~29 Jun 1998	71	72	HONOLULU CL SPR AV	~29 Jun 1998 3 Feb 1999	980191 UNK	Hatch lft Transfer
119	F	20 Jul 1998	23	24	SD-WAP SCHROEDER	20 Jul 1998 18 Oct 2000 15 Apr 2003	898355 UNK	Hatch Transfer Death
120	M	22 Jul 1998	23	24	SD-WAP SANDIEGOZ SD-WAP TRACY AV	22 Jul 1998 22 Jul 1998 23 Mar 2005 18 Oct 2012	898346 898346 898346 2562	Hatch Transfer Transfer Transfer
121	M	~27 Jul 1998	29	30	FORTWORTH SEATTLE	~27 Jul 1998 23 Sep 1999 15 Nov 2011	980713 990272	Hatch Transfer Death
122	F	27 Jul 1998	23	24	SD-WAP SANDIEGOZ TULSA	27 Jul 1998 27 Jul 1998 18 Nov 1998 15 Mar 2009	898352 898352 13072	Hatch Transfer Transfer Death
123	?	16 Aug 1998	48	61	FT WAYNE	16 Aug 1998 18 Aug 1998	95566	Hatch Death
124	M	30 Mar 1999	71	72	HONOLULU SEDGWICK	30 Mar 1999 3 Mar 2000	990161 9264	Hatch Transfer
125	M	~28 May 1999	94	90	KITCHENS	~28 May 1999 ~ 1 Feb 2000	NONE	Hatch Death

126	F	~14 Jun 1999	14	62	SANDIEGOZ	~14 Jun 1999	499100	Hatch
					SEDGWICK	1 Dec 1999	9154	Transfer
					MEMPHIS	22 Mar 2001	19799	Transfer
					HOUSTON	24 Apr 2003	20432	Transfer
					NZP-WASH	27 Mar 2013	216227	Transfer
						18 Oct 2013		Death
127	F	~14 Jun 1999	14	62	SANDIEGOZ	~14 Jun 1999	499125	Hatch
					NEW CALED	29 Jun 2000	UNK	ltf Transfer
128	?	~15 Jun 1999	54	55	GABOREK M	~15 Jun 1999	990001	Hatch
						~ Jul 1999		Death
129	M	~15 Jun 1999	54	55	GABOREK M	~15 Jun 1999	990002	Hatch
130	?	16 Aug 1999	23	24	SD-WAP	16 Aug 1999	899293	Hatch
						1 Oct 1999		Death
131	F	~ 6 Jul 1999	29	30	FORTWORTH	~ 6 Jul 1999	990702	Hatch
					SANDIEGOZ	22 Feb 2000	300015	Transfer
					NEW CALED	29 Jun 2000	UNK	Transfer
					SANDIEGOZ	6 Sep 2007		Transfer
132	M	20 Apr 2000	14	62	SANDIEGOZ	20 Apr 2000	400037	Hatch
					SD-WAP	20 Sep 2000	400037	Transfer
					JERSEY	14 Aug 2001	B5022	ltf Transfer
133	F	20 Apr 2000	14	62	SANDIEGOZ	20 Apr 2000	400038	Hatch
					GABOREK M	19 Oct 2000	200001	Transfer
134	F	8 May 2000	23	24	SD-WAP	8 May 2000	800138	Hatch
					JERSEY	14 Aug 2001	B5023	ltf Transfer
135	M	11 May 2000	23	24	SD-WAP	11 May 2000	800144	Hatch
					SANDIEGOZ	11 May 2000	800144	Transfer
					SD-WAP	17 Aug 2000	800144	Transfer
					JURONG	19 Jun 2002	UNK	ltf Transfer
136	F	31 Jul 2000	29	30	FORTWORTH	31 Jul 2000	200271	Hatch
					QUEBEC	12 Dec 2001	A15704	Transfer
						11 Jun 2005		Death
137	F	2 Aug 2000	29	30	FORTWORTH	2 Aug 2000	200292	Hatch
					SEDGWICK	26 Apr 2001	9713	Transfer
138	M	~17 Jul 2000	63	64	FALLBROOK	~17 Jul 2000	UNK	Hatch
					MCCORMIC	23 Oct 2001	UNK	Transfer
					FALLBROOK	~May 2006	UNK	Transfer
139	?	~ Jul 2000	94	90	KITCHENS	~ Jul 2000	NONE	Hatch
						~ Aug 2000		Death
140	?	28 Feb 2001	71	72	HONOLULU	28 Feb 2001	201038	Hatch
						13 Jul 2001		Death
141	?	~21 May 2001	54	55	GABOREK M	~21 May 2001	NONE	Hatch
						11 Jun 2001		Death
142	?	~25 May 2001	54	55	GABOREK M	~25 May 2001	NONE	Hatch
						9 Jun 2001		Death
143	?	~29 May 2001	54	55	GABOREK M	~29 May 2001	NONE	Hatch
						2 Jun 2001		Death
144	M	2 Apr 2001	14	62	SANDIEGOZ	2 Apr 2001	401056	Hatch
					QUEBEC	21 Nov 2001	A15701	Transfer
					FTWAYNE	26 Sep 2007	97990	Transfer

145	F	6 Apr 2001	14	62	SANDIEGOZ MCCORMIC FALLBROOK	6 Apr 2001 15 Aug 2002 ~ May 2006 15 Jul 2006	401058 UNK UNK	Hatch Transfer Transfer Death
146	F	8 Aug 2001	29	30	FORTWORTH AUDUBON	8 Aug 2001 1 May 2002 7 Apr 2003	200853 100549	Hatch Transfer Death
147	F	10 Aug 2001	29	30	FORTWORTH	10 Aug 2001	200854	Hatch
148	M	12 Aug 2001	29	30	FORTWORTH	12 Aug 2001 27 Aug 2001	200858	Hatch Death
149	M	19 Jun 2001	85	78	STCATHERN AUDUBON	19 Jun 2001 18 Apr 2002 28 Jun 2003	S01057 100434	Hatch Transfer Death
150	M	~ 1 Apr 1992	UNK	UNK	MILLER R AURORA	~ 1 Apr 1992 18 May 1993 13 Apr 2003	UNK WH7501	Hatch Transfer Death
151	?	29 May 2001	49	32	OKLAHOMA	29 May 2001 5 Jun 2001	769506	Hatch Death
152	F	3 Apr 2002	14	62	SANDIEGOZ MANHATTAN SANDIEGOZ	3 Apr 2002 19 Aug 2004 10 Oct 2007 9 Jan 2008	402087 200419 402087	Hatch Transfer Transfer Death
153	F	3 Apr 2002	14	62	SANDIEGOZ TORONTO	3 Apr 2002 17 Jun 2004 1 Mar 2011	402088 39475	Hatch Transfer Death
154	F	7 Jun 2002	23	24	SANDIEGOZ AUDUBON RIO GRAND	7 Jun 2002 3 Mar 2004 18 Oct 2005	302234 101179 B05024	Hatch Transfer Transfer
155	M	~ Jun 2002	94	90	KITCHENS	~ Jun 2002	NONE	lrf Hatch
156	F	4 Feb 2003	71	72	HONOLULU STCATHERN SC ISLAND SD-WAP	4 Feb 2003 7 Oct 2004 1 Jan 2006 19 Jun 2007	203016 S04069 S04069 807153	Hatch Transfer Transfer Transfer
157	F	5 Feb 2003	71	72	HONOLULU FORTWORTH	5 Feb 2003 24 Jun 2004 22 May 2007	203017 203208	Hatch Transfer Death
158	M	~ 9 May 2003	85	78	STCATHERN FORTWORTH	~ 9 May 2003 29 Mar 2004 9 Jun 2004	S03062 202268	Hatch Transfer Death
159	F	21 Apr 2004	23	24	SANDIEGOZ FT WAYNE	21 Apr 2004 2 Jun 2005 18 Dec 2007	304157 97517	Hatch Transfer Death
160	F	22 Apr 2004	23	24	SANDIEGOZ FT WAYNE	22 Apr 2004 2 Jun 2005	304312 97516	Hatch Transfer
161	M	5 May 2004	85	78	STCATHERN	5 May 2004 6 May 2005	S04037	Hatch Death
162	M	~ 4 Apr 2002	76	77	SHARPE M MCCORMIC WEBB B	~ 4 Apr 2002 ~ Feb 2003 ~ Feb 2006	NONE NONE NONE	Hatch Transfer Transfer

163	F	19 May 2004	71	72	HONOLULU SANDIEGOZ PROVIDNCE	19 May 2004 16 Jun 2005 15 May 2008 30 Jul 2008	204038 305299 200203	Hatch Transfer Transfer Death
164	?	23 Oct 2003	38	55	SEATTLE	23 Oct 2003 23 Oct 2003	201307	Hatch Death
165	?	23 Oct 2003	38	55	SEATTLE	23 Oct 2003 23 Oct 2003	201308	Hatch Death
166	F	22 Apr 2005	85	78	STCATHERN SC ISLAND JACKSONVL	22 Apr 2005 1 Jan 2006 21 Mar 2012	S05028 S05028 612304	Hatch Transfer Transfer
167	?	22 Apr 2005	85	78	STCATHERN	22 Apr 2005 31 May 2005	S05032	Hatch Death
168	M	~30 Apr 2005	74	75	MCCORMIC SANDIEGOZ	~30 Apr 2005 13 Sep 2005	NONE 305484	Hatch Transfer
169	M	17 Apr 2005	71	72	HONOLULU SANDIEGOZ NEW CALED	17 Apr 2005 2 Mar 2006 26 Oct 2006	205089 306029 UNK	Hatch Transfer Transfer
170	F	13 May 2006	85	78	SC ISLAND AUDUBON	13 May 2006 15 Nov 2007 15 Jun 2013	S06017 102166	Hatch Transfer Death
171	?	~13 May 2006	85	78	SC ISLAND	~13 May 2006 2 Jul 2006	S06018	Hatch Death
172	M	30 Mar 2006	71	72	HONOLULU TORONTO	30 Mar 2006 15 Nov 2007	206032 42189	Hatch Transfer
173	M	20 Aug 2006	71	72	HONOLULU SANDIEGOZ	20 Aug 2006 10 Oct 2007 21 Feb 2013	206062 307381	Hatch Transfer Death
174	F	20 Aug 2006	71	72	HONOLULU	20 Aug 2006 8 Mar 2007	206066	Hatch Death
175	M	24 Apr 2007	108	122	TULSA PROVIDNCE	24 Apr 2007 15 May 2008	15373 200203	Hatch Transfer
176	F	30 Apr 2007	108	122	TULSA OKLAHOMA	30 Apr 2007 11 Jun 2009	15379 771707	Hatch Transfer
177	M	9 May 2007	76	77	BREVARD METROZOO	9 May 2007 20 Mar 2008	27051 B80061	Hatch Transfer
178	F	13 Jun 2007	85	78	SC ISLAND SANDIEGOZ	13 Jun 2007 29 May 2008 19 Apr 2013	S07022 308109 308109	Hatch Transfer Death
179	F	6 Jul 2007	85	78	SC ISLAND TULSA	6 Jul 2007 24 Mar 2011	S07024 16221	Hatch Transfer
180	M	24 Jun 2008	71	72	HONOLULU OKLAHOMA	24 Jun 2008 15 Oct 2009	208050 772508	Hatch Transfer
181	F	25 Jun 2008	71	72	HONOLULU AUDUBON METROZOO	25 Jun 2008 16 Jul 2009 18 Oct 2010	208051 102898 10B297	Hatch Transfer Transfer
182	M	4 Aug 2009	71	72	HONOLULU AUDUBON	4 Aug 2009 10 Sep 2010	209111 103184	Hatch Transfer

183	F	5 Aug 2009	71	72	HONOLULU WEBB B	5 Aug 2009 14 Oct 2010	209112 NONE	Hatch Transfer
184	F	11 MAY 2010	85	78	SC ISLAND FORTWORTH	11 May 2010 12 Jun 2012	S10023 207515	Hatch Transfer
185	F	7 Jun 2010	35	156	SD-WAP	7 Jun 2010	810180	Hatch
186	U	8 Jun 2010	35	156	SD-WAP	8 Jun 2010 24 Jun 2010	810185	Hatch Death
187	U	~15 May 2010	76	77	BREVARD	~15 May 2010 1 Jun 2010	10061	Hatch Death
188	U	~19 May 2010	124	137	SEDGWICK	~19 May 2010 29 Jul 2010	13059	Hatch Death
189	M	27 Apr 2010	71	72	HONOLULU FORTWORTH	27 Apr 2010 21 Jun 2012	210026 207522	Hatch Transfer
190	F	~2 Apr 2011	76	77	BREVARD PHOENIX	~2 Apr 2011 28 Mar 2012	11074 12004	Hatch Transfer
191	U	11 May 2011	168	131	SANDIEGOZ	11 May 2011 19 May 2011	411047	Hatch Death
192	U	13 May 2011	168	131	SANDIEGOZ	13 May 2011 25 May 2011	411048	Hatch Death
193	U	16 May 2011	168	131	SANDIEGOZ	16 May 2011 25 May 2011	411050	Hatch Death
194	F	19 May 2011	85	78	SC ISLAND SAN FRAN	19 May 2011 27 Sep 2012	S11027 212025	Hatch Transfer
195	F	~2 Apr 2011	76	77	BREVARD PROVIDNCE	~2 Apr 2011 3 Apr 2012	11117 200280	Hatch Transfer
196	U	~5 May 2011	124	137	SEDGWICK	11 May 2011 22 May 2011	13358	Hatch Death
197	F	23 Apr 2011	35	156	SD-WAP FALLBROOK	23 Apr 2011 16 Feb 2012	811067 NONE	Hatch Transfer
198	F	24 Aug 2011	71	72	HONOLULU WEBB B	24 Aug 2011 01 May 2013	211106 NONE	Hatch Transfer
199	F	28 Aug 2011	71	72	HONOLULU	28 Aug 2011	211107	Hatch
200	M	~8 Apr 2012	76	77	BREVARD SD-WAP	~8 Apr 2012 27 Jun 2013	12049 813179	Hatch Transfer
201	M	20 Apr 2012	35	156	SD-WAP SAN FRAN	20 Apr 2012 10 Jan 2013	812036 213001	Hatch Transfer
202	M	21 Apr 2012	35	156	SD-WAP SEATTLE	21 Apr 2012 20 Jun 2013	812042 204689	Hatch Transfer
203	U	~24 Jun 2012	162	183	WEBB B	~24 Jun 2012 24 Jun 2012	NONE	Hatch Death
204	M	~8 Apr 2012	124	137	SEDGWICK PHOENIX	~8 Apr 2012 4 Apr 2013	13790 12236	Hatch Transfer
205	M	18 Jun 2012	71	72	HONOLULU WEBB B	18 Jun 2012 01 May 2013	212083 NONE	Hatch Transfer

206	M	19 Jun 2012	71	72	HONOLULU SAN DIEGOZ	19 Jun 2012 27 Jun 2013	212084 213995	Hatch Transfer
207	M	20 Apr 2013	35	156	SD-WAP	20 Apr 2013	813062	Hatch
208	F	23 Apr 2013	35	156	SD-WAP	23 Apr 2013	813073	Hatch
209	U	26 Apr 2013	35	156	SD-WAP	26 Apr 2013 11 May 2013	813079	Hatch Death
210	M	26 Apr 2013	168	131	SAN DIEGOZ	26 Apr 2013	413042	Hatch
211	M	30 Apr 2013	168	131	SAN DIEGOZ	30 Apr 2013	413043	Hatch
212	F	4 May 2013	168	131	SAN DIEGOZ	4 May 2013	413046	Hatch
213	M	30 May 2013	71	72	HONOLULU	30 May 2013	213072	Hatch
214	M	2 Jun 2013	71	72	HONOLULU	2 Jun 2013	213124	Hatch
215	U	6 Jul 2013	124	137	SEDGWICK	6 Jul 2013 5 Aug 2013	14100	Hatch Death

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TOTALS: 81.89.45 (215) in 47 institutions

WRINKLED HORNBILL STUDBOOK
(*Aceros corrugatus*)

Restricted to:
Status: Living on 31 Dec 2013
Report ordered by: current/last location (alphabetic)

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Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
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AUDUBON- Audubon Zoological Garden, New Orleans, Louisiana, USA

78	F	20 Jun 1993	5	6	AUDUBON	20 Jun 1993	1904	Hatch
					NY BRONX	23 Nov 1995	952354	Transfer
					STCATHERN	15 Jan 1997	952354	Transfer
					SC ISLAND	1 Jan 2006	952354	Transfer
					AUDUBON	8 Feb 2012	1904	Transfer
85	M	4 Apr 1995	22	12	STCATHERN	4 Apr 1995	955002	Hatch
					NY BRONX	15 Nov 1995	955002	Transfer
					STCATHERN	15 Jan 1997	955002	Transfer
					SC ISLAND	1 Jan 2006	955002	Transfer
					AUDUBON	8 Feb 2012	103519	Transfer
182	M	4 Aug 2009	71	72	HONOLULU	4 Aug 2009	209111	Hatch
					AUDUBON	10 Sep 2010	103184	Transfer

Totals: 2.1.0 (3)

BREVARD - Brevard Zoo, Melbourne, Florida, USA

76	M	~ May 1993	WILD	WILD	SE ASIA	????	NONE	Capture
					SHARPE M	~ Oct 1993	3	Transfer
					BREVARD	30 Jul 2004	24069	Transfer
77	F	~ May 1993	WILD	WILD	SE ASIA	????	NONE	Capture
					SHARPE M	~ Oct 1993	4	Transfer
					BREVARD	30 Jul 2004	24070	Transfer

Totals: 1.1.0(2)

COAL VAL - Niabi Zoo, Coal Valley, Illinois, USA

73	F	~ 9 Feb 1993	UNK	UNK	MILLER R	~ 9 Feb 1993	UNK	Hatch
					COAL VAL	9 Feb 1996	B1568	Transfer
104	M	8 Jun 1997	71	72	HONOLULU	8 Jun 1997	970312	Hatch
					COAL VAL	24 Apr 1998	B1705	Transfer
						1 Nov 1998	B1705	Transfer

Totals: 1.1.0 (2)

FALLBROOK - Emerald Forest Bird Gardens, Fallbrook, California, USA

138	M	~17 Jul 2000	63	64	FALLBROOK	~17 Jul 2000	NONE	Hatch
					MCCORMIC	23 Oct 2001	NONE	Transfer
					FALLBROOK	~May 2006	NONE	Transfer
197	F	23 Apr 2011	35	156	SD-WAP	23 Apr 2011	811067	Hatch
					FALLBROOK	16 Feb 2012	NONE	Transfer

Totals: 1.1.0 (2)

FORTWORTH - Fort Worth Zoological Park, Ft Worth, Texas, USA

87	F	14 Apr 1995	23	24	SD-WAP	14 Apr 1995	895095	Hatch
					SANDIEGOZ	19 Apr 1995	895095	Transfer
					SEATTLE	18 Jan 1996	960037	Transfer
					FORTWORTH	09 Dec 2008	205687	Transfer
147	F	10 Aug 2001	29	30	FORTWORTH	10 Aug 2001	200854	Hatch
184	F	11 May 2010	85	78	SC ISLAND	11 May 2010	S10023	Hatch
					FORTWORTH	12 Jun 2012	207515	Transfer
189	M	27 Apr 2010	71	72	HONOLULU	27 Apr 2010	210026	Hatch
					FORTWORTH	21 Jun 2012	207522	Transfer

Totals: 1.3.0 (4)

FT WAYNE - Fort Wayne Children's Zool Garden, Fort Wayne, Indiana, USA

144	M	2 Apr 2001	14	62	SANDIEGOZ	2 Apr 2001	401056	Hatch
					QUEBEC	21 Nov 2001	A15701	Transfer
					FTWAYNE	26 Sep 2007	97990	Transfer
160	F	22 Apr 2004	23	24	SANDIEGOZ	22 Apr 2004	304312	Hatch
					FT WAYNE	2 Jun 2005	97516	Transfer

Totals: 1.1.0 (2)

GABOREK M - Mike Gaborek, Havre De Grace, Maryland, USA

129	M	~15 Jun 1999	54	55	GABOREK M	~15 Jun 1999	990002	Hatch
133	F	20 Apr 2000	14	62	SANDIEGOZ	20 Apr 2000	400038	Hatch
					GABOREK M	19 Oct 2000	200001	Transfer

Totals: 1.1.0 (2)

HONOLULU - Honolulu Zoo, Honolulu, Hawai'I, USA

71	M	????	WILD	WILD	SE ASIA	????	NONE	Capture
					SHARPE M	~ Oct 1993	5	Transfer
					HONOLULU	4 Apr 1995	950128	Transfer
72	F	????	WILD	WILD	SE ASIA	????	NONE	Capture
					SHARPE M	~ Oct 1993	6	Transfer
					HONOLULU	4 Apr 1995	950129	Transfer
199	F	28 Aug 2011	71	72	HONOLULU	28 Aug 2011	211107	Hatch
213	M	30 May 2013	71	72	HONOLULU	30 May 2013	213072	Hatch
214	M	2 Jun 2013	71	72	HONOLULU	2 Jun 2013	213124	Hatch

Totals: 3.2.0 (5)

JACKSONVL -Jacksonville Zoo, Jacksonville, FL, USA

29	M	~ 1990	WILD	WILD	SE ASIA	????	NONE	Capture
					MCCOY T	????	UNK	Transfer
					FORTWORTH	25 Apr 1996	960412	Transfer
					STCATHERN	2 Oct 2003	S03081	Transfer
					SC ISLAND	1 Jan 2006	S03081	Transfer
					JACKSONVL	21 Mar 2012	612303	Transfer
166	F	22 Apr 2005	85	78	STCATHERN	22 Apr 2005	S05028	Hatch
					SC ISLAND	1 Jan 2006	S05028	Transfer
					JACKSONVL	21 Mar 2012	612304	Transfer

Totals: 1.1.0 (2)

METROZOO- Miami Metro Zoo, Miami, Florida, USA

177	M	9 May 2007	76	77	BREVARD	9 May 2007	27051	Hatch
					METROZOO	20 Mar 2008	B80061	Transfer
181	F	25 Jun 2008	71	72	HONOLULU	25 Jun 2008	208051	Hatch
					AUDUBON	16 Jul 2009	102898	Transfer
					METROZOO	18 Oct 2010	10B297	Transfer

Totals: 1.1.0 (2)

NZIP-WASH - National Zoological Park- Smithsonian Institution, Washington, D.C. USA

96	M	16 May 1996	23	24	SD-WAP	16 May 1996	896157	Hatch
					SANDIEGOZ	20 May 1996	896157	Transfer
					SD-WAP	31 Jul 1996	896157	Transfer
					MEMPHIS	12 Dec 1996	16547	Transfer
					HOUSTON	24 Apr 2003	20431	Transfer
					NZIP-WASH	27 Mar 2013	216226	Transfer

Totals: 1.0.0 (1)

OCEANJRNRY - Colorado Ocean Journey, Denver, Colorado, USA

52	M	1 May 1991	UNK	UNK	MILLER R	1 May 1991	UNK	Hatch
					ATTLEBORO	18 Nov 1993	932019	Transfer
					PROVIDNCE	19 May 1999	992004	Transfer
					OCEANJRNRY	25 Jul 2001	801090	Transfer

Totals: 1.0.0 (1)

OKLAHOMA- Oklahoma City Zoological Park, Oklahoma City, Oklahoma, USA

176	F	30 Apr 2007	108	122	TULSA	30 Apr 2007	15379	Hatch
					OKLAHOMA	11 Jun 2009	771707	Transfer
180	M	24 Jun 2008	71	72	HONOLULU	24 Jun 2008	208050	Hatch
					OKLAHOMA	15 Oct 2009	772508	Transfer

Totals: 1.1.0 (2)

PHOENIX - Phoenix Zoo, Phoenix, Arizona, USA

190	F	~2 Apr 2011	76	77	BREVARD PHOENIX	~2 Apr 2011 28 Mar 2012	11074 12004	Hatch Transfer
204	M	~8 Apr 2012	124	137	SEDGWICK PHOENIX	~8 Apr 2012 4 Apr 2013	13790 12236	Hatch Transfer

Totals: 1.1.0 (2)

PROVIDNCE- Roger Williams Park Zoo, Providence, Rhode Island, USA

175	M	24 Apr 2007	108	122	TULSA PROVIDNCE	24 Apr 2007 15 May 2008	15373 200204	Hatch Transfer
195	F	~2 Apr 2011	76	77	BREVARD PROVIDNCE	~2 Apr 2011 3 Apr 2012	11117 200280	Hatch Transfer

Totals: 1.1.0 (2)

RIO GRAND - Albuquerque Biological Park, Albuquerque, New Mexico, USA

86	M	4 Apr 1995	22	12	STCATHERN NY BRONX CROFT L AUDUBON RIO GRAND	4 Apr 1995 15 Nov 1995 9 Dec 1999 19 Sep 2002 5 Jun 2006	955003 955003 990066 100697 B06019	Hatch Transfer Transfer Transfer Transfer
154	F	7 Jun 2002	23	24	SANDIEGOZ AUDUBON RIO GRAND	7 Jun 2002 3 Mar 2004 18 Oct 2005	302234 101179 B05024	Hatch Transfer Transfer

Totals: 1.1.0 (2)

SANDIEGOZ - San Diego Zoological Garden, San Diego, California, USA

131	F	~ 6 Jul 1999	29	30	FORTWORTH SANDIEGOZ NEW CALED SANDIEGOZ	~ 6 Jul 1999 22 Feb 2000 29 Jun 2000 6 Sep 2007	990702 300015 UNK 300015	Hatch Transfer Transfer Transfer
168	M	~30 Apr 2005	74	75	MCCORMIC SANDIEGOZ	~30 Apr 2005 13 Sep 2005	UNK 305484	Hatch Transfer
206	M	19 Jun 2012	71	72	HONOLULU SANDIEGOZ	19 Jun 2012 27 Jun 2013	212084 313995	Hatch Transfer
210	M	26 Apr 2013	168	131	SANDIEGOZ	26 Apr 2013	413042	Hatch
211	M	30 Apr 2013	168	131	SANDIEGOZ	30 Apr 2013	413043	Hatch
212	F	4 May 2013	168	131	SANDIEGOZ	4 May 2013	413046	Hatch

Totals: 4.2.0 (6)

SAN FRAN - San Francisco Zoological Gardens, San Francisco, CA, USA

194	F	19 May 2011	85	78	SC ISLAND	19 May 2011	S11027	Hatch
					SAN FRAN	27 Sep 2012	212025	Transfer
201	M	20 Apr 2012	35	156	SD-WAP	20 Apr 2012	812036	Hatch
					SAN FRAN	10 Jan 2013	213001	Transfer

Totals: 1.1.0 (2)

SD-WAP - San Diego Zoo Safari Park, Escondido, California, USA

35	M	~ 1991	WILD	WILD	SE ASIA	????	NONE	Capture
					MILLER R	????	UNK	Transfer
					SANDIEGOZ	15 Jan 1992	392014	Transfer
					SD-WAP	15 Feb 1992	392014	Transfer
					SANDIEGOZ	8 Mar 1993	392014	Transfer
					SD-WAP	1 Feb 2001	392014	Transfer
156	F	4 Feb 2003	71	72	HONOLULU	4 Feb 2003	203016	Hatch
					STCATHERN	7 Oct 2004	S04069	Transfer
					SC ISLAND	1 Jan 2006	S04069	Transfer
					SD-WAP	19 Jun 2007	807153	Transfer
185	F	7 Jun 2010	35	156	SD-WAP	7 Jun 2010	810180	Hatch
200	M	~8 Apr 2012	76	77	BREVARD	~8 Apr 2012	12049	Hatch
					SD-WAP	27 Jun 2013	813179	Transfer
207	M	20 Apr 2013	35	156	SD-WAP	20 Apr 2013	813062	Hatch
208	F	23 Apr 2013	35	156	SD-WAP	23 Apr 2013	81073	Hatch

Totals: 3.3.0 (6)

SEATTLE - Woodland Park Zoo, Seattle, WA, USA

57	F	25 May 1991	5	6	AUDUBON	25 May 1991	1488	Hatch
					SEATTLE	25 Apr 2002	200770	Transfer
202	M	21 Apr 2012	35	156	SD-WAP	21 Apr 2012	812042	Hatch
					SEATTLE	20 Jun 2013	204689	Transfer

Totals: 1.1.0 (2)

SEDGWICK - Sedgwick County Zoo, Wichita, Kansas, USA

124	M	30 Mar 1999	71	72	HONOLULU	30 Mar 1999	990161	Hatch
					SEDGWICK	3 Mar 2000	9264	Transfer
137	F	2 Aug 2000	29	30	FORTWORTH	2 Aug 2000	200292	Hatch
					SEDGWICK	26 Apr 2001	9713	Transfer

Totals: 1.1.0 (2)

STATEN IS - Staten Island, New York, USA

44	M	2 Jun 1990	5	6	AUDUBON	2 Jun 1990	1345	Hatch
					LAKEBUENA	3 Apr 1991	210402	Transfer
					OKLAHOMA	18 Nov 1999	765304	Transfer
					MILL MOUN	6 Dec 2000	459	Transfer
					PHOENIX	16 Oct 2008	11213	Transfer
					STATEN IS	18 Oct 2012	112071	Transfer

Totals: 1.0.0 (1)

TRACY AV- Tracy Aviary, Salt Lake City, Utah, USA

120	M	22 Jul 1998	23	24	SD-WAP	22 Jul 1998	898346	Hatch
					SANDIEGOZ	22 Jul 1998	898346	Transfer
					SD-WAP	23 Mar 2005	898346	Transfer
					TRACY AV	19 Oct 2012	2562	Transfer

Totals: 1.0.0 (1)

TORONTO - Toronto Zoo, Scarborough, Ontario, Canada

172	M	30 Mar 2006	71	72	HONOLULU	30 Mar 2006	206032	Hatch
					TORONTO	15 Nov 2007	42189	Transfer

Totals: 1.0.0 (1)

TULSA - Tulsa Zoological Park, Tulsa, Oklahoma, USA

108	M	2 Mar 1998	14	62	SANDIEGOZ TULSA	2 Mar 1998 19 Nov 1998	498132 13071	Hatch Transfer
179	F	6 Jul 2007	85	78	SC ISLAND TULSA	6 Jul 2007 24 Mar 2011	S07024 16221	Hatch Transfer

Totals: 1.1.0 (2)

 WEBB B - Bob Webb, Montecito, California, USA

162	M	~ 4 Apr 2002	76	77	SHARPE M MCCORMIC WEBB B	~4 Apr 2002 ~ Feb 2003 ~ Feb 2006	NONE NONE NONE	Hatch Transfer Transfer
183	F	5 Aug 2009	71	72	HONOLULU WEBB B	5 Aug 2009 14 Oct 2010	209112 NONE	Hatch Transfer
198	F	24 Aug 2011	71	72	HONOLULU WEBB B	24 Aug 2011 01 May 2013	211106 NONE	Hatch Transfer
205	M	18 Jun 2012	71	72	HONOLULU WEBB B	18 Jun 2012 01 May 2013	212083 NONE	Hatch Transfer

Totals: 2.2.0 (4)

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 TOTALS: 35.28.0(63) in 26 Institutions

PAPUAN HORNBILL

Rhyticeros plicatus

GENERAL INFORMATION

Another common names in use: Papuan wreathed hornbill, Blyth's hornbill. Kemp (1995) notes that the Plain-pouched wreathed hornbill, *Aceros subruficollis* was once considered conspecific with *plicatus*. There is uncertainty about the species identification of a few of the older records. Five specimens were recorded as *A. plicatus subruficollis*. Kemp does not recognize this subspecies. It is unclear whether they were *A. plicatus* or *A. subruficollis*. These birds (studbook #1-5) did not reproduce, and have all died. Kemp (1995) listed this bird in the genus, *Aceros*. Kemp listed this species in the genus *Rhyticeros* in The Handbook of Birds of the World, volume 6 (Del Hoyo et al, 2001)

Captive propagation

Euing (1995) wrote about the breeding of *Aceros plicatus jungei* at the San Diego Zoo. As these birds were collected in Papua New Guinea, they are identified to subspecies (pers. comm: D. Rimlinger). The other *A. plicatus* in captivity cannot be accurately listed to subspecies. Macek (1998) wrote a short note about breeding success at Saint Louis Zoo. Nyunt et al (in Lum & Poonswad 2005, pp. 45-50) report on the breeding at Jurong Birdpark in Singapore. Noteworthy, in 2003, a female hatched at the Wildlife Conservation Society from two F1 birds. One male that hatched in 2009 at Lincoln Park Zoo was transferred to Jurong BirdPark to foster future cooperative management between the Asian and AZA regions. It is expected that Wrinkled hornbills may enter the AZA region as a result of this cooperation. In 2012, Lincoln Park Zoo hatched out one bird. There are 59 historical records. Presently, there are 5.3.0 living birds in 6 institutions listed in this studbook.

The most current update for the European population is 28.21.0 (current thru 31 Dec 2012) (Cathy King, pers. com.).

Papuan hornbill

Rhyticeros plicatus



STUDBOOK REPORTS

Listed by location

Here are listed the studbook numbers for each of the specimens reported by participating institutions.

CHICAGOBR:	9, 10
CHICAGOLP:	26, 27, 36, 38, 54, 55, 56, 57, 58, 59
CROFT L:	39, 45
EXOTIC EN:	39
GLEN OAK:	34, 48, 51
LAKEBUENA:	12, 13
METROZOO:	14
NY BRONX:	1, 2, 3, 12, 13, 20, 21, 22, 23, 24, 25, 37, 38, 39, 41, 51, 53
SANDIEGOZ:	4, 5, 6, 7, 8, 11, 15, 16, 17, 18, 31, 33, 36, 40, 41, 42, 44, 47, 49, 57, 58
SAN FRAN:	19
SCHROEDER:	39, 45
SD-WAP:	11, 15, 16, 17, 18, 27, 30, 38, 41, 43, 46, 48
STCATHERN:	12, 20, 21, 22, 23, 24, 25, 34, 37, 38, 39
ST LOUIS:	28, 29, 45
TUCSON:	48, 51
WORLDBIRD:	34

PAPUAN HORNBILL STUDBOOK
(Rhyticeros plicatus)

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
1	?	????	WILD	WILD	SE ASIA	????	NONE	Capture
					L RUHE	????	NONE	Transfer
					NY BRONX	8 Nov 1928	UNK	Transfer
						13 Jul 1929		Death
2	?	????	WILD	WILD	SE ASIA	????	NONE	Capture
					UNKNOWN	????	NONE	Transfer
					NY BRONX	14 Jun 1938	UNK	Transfer
						27 Dec 1938		Death
3	?	????	WILD	WILD	SE ASIA	????	NONE	Capture
					UNKNOWN	????	NONE	Transfer
					NY BRONX	14 Jun 1938	UNK	Transfer
						11 May 1939		Death
4	M	~ 1939	WILD	WILD	SE ASIA	????	NONE	Capture
					SURABAYA	????	UNK	Transfer
					SANDIEGOZ	1 Jan 1940	005966	Transfer
						31 Dec 1945		Death
5	F	~ 1940	WILD	WILD	SE ASIA	????	NONE	Capture
					SURABAYA	????	UNK	Transfer
					SANDIEGOZ	1 Jan 1941	005967	Transfer
						31 Dec 1945		Death
6	F	~ 1943	WILD	WILD	SOLOMON B	????	NONE	Capture
					MERRILL	????	NONE	Transfer
					SANDIEGOZ	1 May 1944	005963	Transfer
						31 Dec 1950		Death
7	M	~ 1943	WILD	WILD	SOLOMON B	????	NONE	Capture
					MERRILL	????	NONE	Transfer
					SANDIEGOZ	1 May 1944	005964	Transfer
						31 Dec 1950		Death
8	F	~ 1944	WILD	WILD	SE ASIA	????	NONE	Capture
					COHN	????	NONE	Transfer
					SANDIEGOZ	1 Aug 1945	005965	Transfer
						31 Dec 1950		Death
9	M	~ 1953	WILD	WILD	SE ASIA	~ 1953	NONE	Capture
					L RUHE	~ 1953	NONE	Transfer
					CHICAGOBR	26 Sep 1958	26186	Transfer
						21 Dec 1959		Death
10	F	~ 1953	WILD	WILD	SE ASIA	~ 1953	NONE	Capture
					L RUHE	~ 1953	NONE	Transfer
					CHICAGOBR	26 Sep 1958	26187	Transfer
						1 May 1960		Death
11	M	~ 1976	WILD	WILD	SE ASIA	????	NONE	Capture
					UNKNOWN	????	NONE	Transfer
					SANDIEGOZ	6 Jul 1978	011538	Transfer
					SD-WAP	5 Apr 1985	011538	Transfer
					SANDIEGOZ	16 Sep 1986	011538	Transfer
						25 Oct 1986		Death
12	F	~ 1978	WILD	WILD	SE ASIA	????	NONE	Capture
					HONG KONG	????	UNK	Transfer
					NY BRONX	4 Jan 1983	832000	Transfer
					STCATHERN	12 May 1983	835014	Transfer
					LAKEBUENA	1 Aug 1984	UNK	Transfer
						30 Aug 1987		Death

13	M	~ 1983	WILD	WILD	SE ASIA LAKEBUENA NY BRONX	???? ???? 31 May 1986 29 Aug 1989	NONE UNK 862292	Capture Transfer Transfer Death
14	F	~ 1986	WILD	WILD	INDONESIA ZOO IMPRT METROZOO	???? ???? 3 Mar 1988 11 Mar 1989	NONE NONE A02169	Capture Transfer Transfer Death
15	F	~ Jan 1987	WILD	WILD	NG PAPUA RIMLINGER SANDIEGOZ SD-WAP SANDIEGOZ SD-WAP	~ 1987 ~ Sep 1988 20 Oct 1988 4 Nov 1988 3 Jan 1990 27 May 1993 2 Jan 1996	NONE NONE 488457 488457 488457 488457	Capture Transfer Transfer Transfer Transfer Transfer Death
16	M	~ 1987	WILD	WILD	NG PAPUA RIMLINGER SANDIEGOZ SD-WAP	~ 1987 ~ Sep 1988 20 Oct 1988 4 Nov 1988 20 Sep 1995	NONE NONE 488458 488458	Capture Transfer Transfer Transfer Death
17	M	~ 1987	WILD	WILD	NG PAPUA RIMLINGER SANDIEGOZ SD-WAP SANDIEGOZ	~ 1987 ~ Sep 1988 20 Oct 1988 4 Nov 1988 3 Jan 1990 25 Jan 2004	NONE NONE 488459 488459 488459	Capture Transfer Transfer Transfer Transfer Death
18	F	~ 1987	WILD	WILD	NG PAPUA RIMLINGER SANDIEGOZ SD-WAP	~ 1987 ~ Sep 1988 20 Oct 1988 4 Nov 1988 14 Nov 2000	NONE NONE 488460 488460	Capture Transfer Transfer Transfer Death
19	M	????	WILD	WILD	SE ASIA MCMORRIS SAN FRAN RUNDEL SAN FRAN	???? ???? 13 Jul 1988 24 Mar 1989 21 Oct 1992 26 Oct 1992	NONE NONE 288001 NONE 288001	Capture Transfer Transfer Transfer Transfer Death
20	M	~ 1987	WILD	WILD	SE ASIA HARDERWIJ NY BRONX STCATHERN	???? ???? 2 Aug 1990 1 Sep 1990 4 Oct 1992	NONE NONE 902247 902247	Capture Transfer Transfer Transfer Death
21	F	~ 1987	WILD	WILD	SE ASIA V.D.BRINK NY BRONX STCATHERN	???? ???? 2 Aug 1990 1 Sep 1990 25 Jul 2002	NONE NONE 902249 902249	Capture Transfer Transfer Transfer Death
22	F	~ 1988	WILD	WILD	SE ASIA HARDERWIJ NY BRONX STCATHERN	???? ???? 2 Aug 1990 3 Aug 1990 1 Dec 1998	NONE NONE 905036 905036	Capture Transfer Transfer Transfer Death
23	M	~ 1988	WILD	WILD	SE ASIA HARDERWIJ NY BRONX STCATHERN	???? ???? 2 Aug 1990 3 Aug 1990 10 Jul 1995	NONE NONE 905035 905035	Capture Transfer Transfer Transfer Death

24	M	~ 1989	WILD	WILD	SE ASIA HARDERWIJ NY BRONX AVI BREED STCATHERN	???? ???? 3 Jul 1990 28 Nov 1990 11 Jan 1995 14 Feb 2002	NONE NONE 902248 001234 902248	Capture Transfer Transfer Transfer Death
25	F	~ 1989	WILD	WILD	SE ASIA V.D.BRINK NY BRONX AVI BREED STCATHERN	???? ???? 3 Jul 1990 28 Nov 1990 11 Jan 1995 30 Jun 1995	NONE NONE 902250 001235 902250	Capture Transfer Transfer Transfer Death
26	F	????	WILD	WILD	SE ASIA SCHMIDT R CHICAGOLP	???? ???? 2 Oct 1990 5 May 1999	NONE NONE B9063	Capture Transfer Transfer Death
27	M	????	WILD	WILD	SE ASIA SCHMIDT R CHICAGOLP SD-WAP	???? ???? 2 Oct 1990 20 Sep 2000	NONE NONE B9064 800350	Capture Transfer Transfer Transfer
28	M	????	WILD	WILD	SE ASIA SCHMIDT R ST LOUIS	???? ???? 16 May 1991	NONE NONE 910564	Capture Transfer Transfer
29	F	????	WILD	WILD	SE ASIA SCHMIDT R ST LOUIS	???? ???? 16 May 1991 22 Feb 2008	NONE NONE 910565	Capture Transfer Transfer Death
30	M	~ 1990	WILD	WILD	SE ASIA MCCOY T SD-WAP	???? ???? 22 Nov 1996 28 Oct 1999	NONE NONE 896381	Capture Transfer Transfer Death
31	F	~ Jan 1990	WILD	WILD	SE ASIA MILLER R SANDIEGOZ MILLER R	~ 1990 ~ 1990 6 May 1993 9 Jun 2004	NONE NONE 393199 NONE	Capture Transfer Transfer lft Transfer
32	?	~10 May 1993	24	25	AVI BREED	~10 May 1993 24 Jun 1993	930483	Hatch Death
33	F	27 Apr 1994	17	31	SANDIEGOZ MILLER R	27 Apr 1994 19 Jan 1995	394095 NONE	Hatch lft Transfer
34	M	29 Apr 1994	24	25	AVI BREED STCATHERN WORLDBIRD GLEN OAK	29 Apr 1994 11 Jan 1995 13 Apr 2005 3 Dec 2013	940366 945037 M05007 21003	Hatch Transfer Transfer Transfer
35	M	2 May 1994	24	25	AVI BREED CARVALO J	2 May 1994 19 Dec 2002	940375 NONE	Hatch lft Transfer
36	F	28 Mar 1995	17	31	SANDIEGOZ AVI BREED CHICAGOLP	28 Mar 1995 16 Nov 1995 26 Oct 2000	395072 302099 20312	Hatch Transfer Transfer
37	F	13 May 1995	24	25	STCATHERN NY BRONX WALSRODE	13 May 1995 17 Jan 1996 27 Apr 2005	955005 955005 UNK	Hatch Transfer lft Transfer
38	M	13 May 1995	24	25	STCATHERN NY BRONX SD-WAP CHICAGOLP	13 May 1995 17 Jan 1996 17 Apr 1998 24 Aug 2000	955006 955006 898097 20290	Hatch Transfer Transfer Transfer

39	M	18 May 1995	24	25	STCATHERN	18 May 1995	955008	Hatch
					NY BRONX	17 Jan 1996	955008	Transfer
					MILLER J	18 Mar 1998	BHMO1	Transfer
					CROFT L	10 Nov 1998	980015	Transfer
					SCHROEDER	1 Oct 2003	NONE	Transfer
					EXOTIC EN	24 May 2006	M05007	Transfer
40	M	10 Apr 1996	17	31	SANDIEGOZ	10 Apr 1996	396160	Hatch
					MILLER R	4 Dec 1996	UNK	ltf Transfer
41	M	12 Apr 1996	17	31	SANDIEGOZ	12 Apr 1996	396276	Hatch
					SD-WAP	20 Dec 1996	396276	Transfer
					NY BRONX	1 May 1998	982071	Transfer
					WALSRODE	27 Apr 2005	UNK	ltf Transfer
42	?	24 Mar 1997	17	31	SANDIEGOZ	24 Mar 1997	397116	Hatch
						1 Apr 1997		Death
43	F	30 May 1997	30	18	SD-WAP	30 May 1997	897282	Hatch
						29 Oct 2004		Death
44	?	26 Mar 1998	17	31	SANDIEGOZ	26 Mar 1998	398100	Hatch
						21 May 1998		Death
45	F	11 Apr 1998	28	29	ST LOUIS	11 Apr 1998	980415	Hatch
					CROFT L	27 May 1999	990056	Transfer
					SCHROEDER	1 Oct 2003	NONE	Transfer
						16 Feb 2005		Death
46	M	23 May 1998	30	18	SD-WAP	23 May 1998	898285	Hatch
						15 Feb 1999		Death
47	F	~15 Apr 1999	17	31	SANDIEGOZ	~15 Apr 1999	399165	Hatch
					MILLER R	6 Jan 2000	UNK	ltf Transfer
48	M	21 Jun 1999	30	18	SD-WAP	21 Jun 1999	899190	Hatch
					TUCSON	22 Jun 2004	X45034	Transfer
					GLEN OAK	19 May 2009	21001	Transfer
						22 Aug 2012		Death
49	?	4 Mar 2000	17	31	SANDIEGOZ	4 Mar 2000	300043	Hatch
						9 May 2000		Death
50	?	13 Mar 2001	28	29	ST LOUIS	13 Mar 2001	100844	Hatch
						13 Mar 2001		Death
51	F	9 Jun 2003	41	37	NY BRONX	9 Jun 2003	B03074	Hatch
					TUCSON	29 Jul 2004	X45040	Transfer
					GLEN OAK	19 May 2009	21002	Transfer
52	M	9 Jun 2003	41	37	NY BRONX	9 Jun 2003	B03079	Hatch
					WALSRODE	27 Apr 2005	UNK	ltf Transfer
53	M	~ 1 Apr 2004	41	37	NY BRONX	~ 1 Apr 2004	B04015	Hatch
					WALSRODE	27 Apr 2005	UNK	ltf Transfer
54	?	~ 4 May 2004	38	36	CHICAGOLP	~ 4 May 2004	21250	Hatch
						~26 Jun 2004		Death
55	?	13 May 1999	27	26	CHICAGOLP	13 May 1999	20060	Hatch
						13 May 1999		Death

56	?	29 Jun 2004	38	36	CHICAGOLP	29 Jun 2004	21232	Hatch
						29 Jun 2004		Death
57	M	~7 Jun 2009	38	36	CHICAGOLP	~7 Jun 2009	22336	Hatch
					SANDIEGOZ	14 Apr 2010	309439	Transfer
					JURONG	1 Sep 2010		ltf Transfer
58	F	24 Apr 2010	38	36	CHICAGOLP	24 Apr 2010	22486	Hatch
					SANDIEGOZ	12 May 2011	310271	Transfer
59	M	2 May 2012	38	36	CHICAGOLP	2 May 2012	23022	Hatch
					ATTICA	26 May 2013	UNK	ltf Transfer

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TOTALS: 26.22.11 (59) in 19 institutions

PAPUAN HORNBILL STUDBOOK
(Rhyticeros plicatus)

Restricted to:
Status: Living on 31 Dec 2013
Report ordered by: current/last location (alphabetic)

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Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
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CHICAGOLP - Lincoln Park Zoological Gardens, Chicago, Illinois, USA

36	F	28 Mar 1995	17	31	SANDIEGOZ	28 Mar 1995	395072	Hatch
					AVI BREED	16 Nov 1995	302099	Transfer
					CHICAGOLP	26 Oct 2000	20312	Transfer
38	M	13 May 1995	24	25	STCATHERN	13 May 1995	955006	Hatch
					NY BRONX	17 Jan 1996	955006	Transfer
					SD-WAP	17 Apr 1998	898097	Transfer
					CHICAGOLP	24 Aug 2000	20290	Transfer

Totals: 1.1.0 (2)

EXOTIC EN - Woodland Hills, California, USA

39	M	18 May 1995	24	25	STCATHERN	18 May 1995	955008	Hatch
					NY BRONX	17 Jan 1996	955008	Transfer
					MILLER J	18 Mar 1998	BHMO1	Transfer
					CROFT L	10 Nov 1998	980015	Transfer
					SCHROEDER	1 Oct 2003	NONE	Transfer
					EXOTIC EN	24 May 2006	M05007	Transfer

Totals: 1.0.0 (1)

GLEN OAK- Peoria Zoo, Peoria, IL, USA

34	M	29 Apr 1994	24	25	AVI BREED	29 Apr 1994	940366	Hatch
					STCATHERN	11 Jan 1995	945037	Transfer
					WORLDBIRD	13 Apr 2005	M05007	Transfer
					GLEN OAK	3 Dec 2013	21003	Transfer
51	F	9 Jun 2003	41	37	NY BRONX	9 Jun 2003	B03074	Hatch
					TUCSON	29 Jul 2004	X45040	Transfer
					GLEN OAK	19 May 2009	21002	Transfer

Totals: 1.1.0 (2)

SANDIEGOZ - San Diego Zoological Garden, San Diego, California, USA

58	F	24 Apr 2010	38	36	CHICAGOLP	24 Apr 2010	22486	Hatch
					SANDIEGOZ	12 May 2011	310271	Transfer

Totals: 0.1.0 (1)

SD-WAP- San Diego Wild Animal Park, Escondido, California, USA

27	M	????	WILD	WILD	SE ASIA	????	NONE	Capture
					SCHMIDT R	????	NONE	Transfer
					CHICAGOLP	2 Oct 1990	B9064	Transfer
					SD-WAP	20 Sep 2000	800350	Transfer

Totals: 1.0.0 (1)

ST LOUIS - Saint Louis Zoological Park, St Louis, Missouri, USA

28	M	????	WILD	WILD	SE ASIA	????	NONE	Capture
					SCHMIDT R	????	NONE	Transfer
					ST LOUIS	16 May 1991	910564	Transfer

Totals: 1.0.0 (1)

5.3.0 (8) in 6 institutions

WREATHED HORNBILL

Rhyticeros undulatus

GENERAL INFORMATION

Other common names in use include: Bar-throated wreathed hornbill, Bar-pouched wreathed hornbill, and Northern waved hornbill.

Kemp (1995) summarized the confusion in taxonomy of *Aceros subruficollis* (Plain-pouched wreathed hornbill) which closely resembles the sympatric *A. undulatus*. From 1953 to about 1969, *A. subruficollis* was united with *A. undulatus*. This could have resulted in some misidentification of these two species in older records. Kemp (1995) listed this bird in the genus, *Aceros*. In 2001, Kemp listed this species in the genus *Rhyticeros* in The Handbook of Birds of the World, volume 6 (Del Hoyo et al, 2001)

Juvenile females gradually begin showing black head and neck plumage at around 12-13 months. At around 22 months, the throat pouch gradually changes from yellow to blue (Debbie Belgio, pers. comm).

Captive propagation

The first recorded successful hatching of this species was at the New York Zoological Park in 1977 (Bell and Bruning 1978).

Presently the Regional Collection Plan lists this species in the DERP category. A Population Management Plan (PMP) was completed in May 2005 with the assistance from Colleen Lynch at the Population Management Center.

This studbook covers 140 historical records, of which, 16.13.0 living birds in 15 institutions.

The most current update for the European population is 12.13.0 birds (current thru 31 December 2012) (Cathy King, pers. com.).

Most recent breeding success has come from the pair at Atlanta (#50 & 49;). Noteworthy, in 2008, the pair at St. Catherine's had a five egg clutch of which four eggs hatched and two chicks survived (Debbie Belgio, pers. comm.)!

Wreathed hornbill

Rhyticeros undulatus



STUDBOOK REPORTS

Listed by location

Here are listed the studbook numbers for each of the specimens reported by participating institutions

ATLANTA:	23, 39, 49, 50, 70, 118, 128, 136, 137, 139, 140
AVI BREED:	56, 57, 75
AVTIV:	115
BROWNSVIL:	23, 27, 124, 125
CHICAGOBR:	2
COLUMBIA:	29, 30, 123, 133,
CROFT L:	71, 83, 84, 85, 86, 87
DALLAS:	129,138
FALLBROOK:	88, 89
FRESNO:	18, 28
HOGLE:	25, 40
HOUSTON:	37, 41, 58
GREENVISC:	98, 102,103, 119
JACKSON:	112,113
JACKSONVL:	13, 121, 132
KANSASCTY:	101,109
LAWRENCEM:	105,106,107,108
LOSANGELE:	30
LOUISVILL:	71, 72
LOWRY:	25, 33, 42
MANHATTAN:	47, 73, 75
METROZOO:	37, 41
MONROE:	19,24,65,71
NY BRONX:	8,9,10,11,14,16,17,19,23,28,32,34,35,36, 38, 39, 40, 41, 50, 53, 54, 58, 78
OAKLAND:	55, 59, 88, 89, 95, 126, 133
OKLAHOMA:	45,46,48,49,81,82,91,94,97,98,99, 103, 104, 114,115,116

PARROT TRU:	58
PHILADELP:	1
PROSPECTP	78, 131, 135
PORTLAND:	62, 63
QUEBEC:	20
REDWOOD:	115
RIVERBANKS:	
SAN ANTON:	23, 27, 58, 64, 69, 94, 100
SANDIEGOZ:	3,4,5,6,7,12,21,22,60,61,78, 120, 131
SANFORD:	67,68,74,76,77,79,80,92,95,96,100, 101, 102,113, 138,
SCOT NECK:	65, 75, 115, 130
SD-WAP:	51,52,60,61, 103, 109,110,111,112,113,119, 131,132, 134,135
STATEN IS:	14, 17
SC ISLAND:	19,23,28,32,35,36,39,40,41,58,65,66,69,70,71, 72,73,75,90,117, 121,122,123,127, 128,129, 130, 132,
TRACY AV:	139
TORONTO:	26, 28
TUCSON:	62, 63, 70

WREATHED HORNBILL STUDBOOK
(Rhyticeros undulatus)

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
1	F	????	WILD	WILD	SE ASIA	????	NONE	Capture
					RODGERS W	????	NONE	Transfer
					PHILADELP	11 Jul 1930	20954	Transfer
						2 Apr 1931		Death
2	?	~ 1935	WILD	WILD	SE ASIA	~ 1935	NONE	Capture
					L RUHE	~ 1935	NONE	Transfer
					CHICAGOBR	7 May 1940	26190	Transfer
						26 May 1941		Death
3	?	~ 1938	WILD	WILD	SE ASIA	~ 1938	NONE	Capture
					WEGPEREXP	~ 1938	NONE	Transfer
					SANDIEGOZ	20 Jun 1939	005968	Transfer
						10 Oct 1951		Death
4	F	~ 1938	WILD	WILD	SE ASIA	~ 1938	NONE	Capture
					WEGPEREXP	~ 1938	NONE	Transfer
					SANDIEGOZ	20 Jun 1939	005969	Transfer
						29 Aug 1955		Death
5	F	~ 1938	WILD	WILD	SE ASIA	~ 1938	NONE	Capture
					WEGPEREXP	~ 1938	NONE	Transfer
					SANDIEGOZ	20 Jun 1939	005970	Transfer
						20 Apr 1957		Death
6	M	~ 1939	WILD	WILD	SE ASIA	~ 1939	NONE	Capture
					SURABAYA	~ 1939	UNK	Transfer
					SANDIEGOZ	1 Jan 1940	005971	Transfer
						27 Feb 1958		Death
7	F	~ 1948	WILD	WILD	SE ASIA	~ 1948	NONE	Capture
					GOEBEL L	~ 1948	NONE	Transfer
					SANDIEGOZ	27 Apr 1949	005972	Transfer
						13 Oct 1965		Death
8	?	????	WILD	WILD	SE ASIA	????	NONE	Capture
					TREFFLICH	????	NONE	Transfer
					NY BRONX	10 May 1949	NONE	Transfer
						19 May 1949		Death
9	?	????	WILD	WILD	SE ASIA	????	NONE	Capture
					TREFFLICH	????	NONE	Transfer
					NY BRONX	20 May 1949	NONE	Transfer
						12 Jun 1949		Death
10	M	????	WILD	WILD	SE ASIA	????	NONE	Capture
					MAMI RARE	????	NONE	Transfer
					NY BRONX	6 Sep 1961	NONE	Transfer
						28 Jan 1965		Death
11	F	~ May 1961	WILD	WILD	SE ASIA	~ May 1961	NONE	Capture
					MAMI RARE	~ May 1961	NONE	Transfer
					NY BRONX	6 Sep 1961	NONE	Transfer
						6 Dec 1966		Death
12	M	~ 1962	WILD	WILD	SE ASIA	~ 1962	NONE	Capture
					M+MBIRDA	~ 1962	NONE	Transfer
					SANDIEGOZ	24 Oct 1963	005973	Transfer
						29 Jul 1974		Death

24	F	~ 1971	WILD	WILD	SE ASIA SAIMPORTS MONROE	???? ???? 22 Jun 1976 11 Feb 1981	NONE NONE 152020	Capture Transfer Transfer Death
25	F	????	WILD	WILD	SE ASIA UNKNOWN HOGLE LOWRY HOGLE	???? ???? 21 Apr 1972 11 May 1989 13 Feb 1992 13 Nov 1999	NONE NONE 00628 200589 00628	Capture Transfer Transfer Transfer Death
26	F	????	WILD	WILD	SE ASIA WESTERLO TORONTO	???? ???? 23 Aug 1973 2 Jan 1974	NONE NONE 1580	Capture Transfer Transfer Death
27	M	????	WILD	WILD	SE ASIA WESTERLO TORONTO FRESNO NY BRONX STCATHERN NY BRONX	???? ???? 23 Aug 1973 9 Jul 1976 17 Sep 1982 22 Sep 1982 11 Jul 1984 5 Jun 1989	NONE UNK 1579 5300 822517 822517 822517	Capture Transfer Transfer Transfer Transfer Transfer Death
28	F	????	WILD	WILD	SE ASIA SAN JOSEX BROWNSVIL SAN ANTON	???? ???? 15 Dec 1973 22 Jul 1975 26 Feb 1976	NONE NONE 6515 750786	Capture Transfer Transfer Transfer Death
29	M	~ 1973	WILD	WILD	SE ASIA FREY W COLUMBIA	???? ???? 5 Sep 1974 23 Feb 1975	NONE NONE SJ0505	Capture Transfer Transfer Death
30	F	????	WILD	WILD	SE ASIA LOSANGELE COLUMBIA LOSANGELE	???? ???? 23 Jan 1975 27 Oct 1976	NONE UNK SJ0607 UNK	Capture Transfer Transfer Transfer lft
31	M	~ May 1976	WILD	WILD	SE ASIA MAN AE ROTTERDAM	~ May 1976 ~ Jun 1976 25 Jun 1976 ~ Feb 1981 17 May 2003	NONE NONE 400907 400907	Capture Transfer Transfer Transfer Death
32	F	11 May 1977	17	14	NY BRONX STCATHERN	11 May 1977 25 Sep 1981 26 Oct 1993	772195 772195	Hatch Transfer Death
33	F	~ 1979	WILD	WILD	SE ASIA WSD PETS LOWRY BELLBIRD	???? ???? 17 Jun 1987 25 Apr 1990	NONE NONE 200099 NONE	Capture Transfer Transfer Transfer lft
34	?	9 May 1979	17	16	NY BRONX	9 May 1979 3 Aug 1979	792410	Hatch Death
35	M	6 May 1980	17	16	NY BRONX STCATHERN	6 May 1980 25 Sep 1981 24 Sep 1989	802212 802212	Hatch Transfer Death

36	F	~ Jun 1980	31	15	ROTTERDAM QUARANTIN NY BRONX STCATHERN NY BRONX	~ Jun 1980 15 Jul 1982 16 Aug 1982 22 Sep 1982 11 Jul 1984 24 Dec 1986	408906 NONE 822485 822485 822485	Hatch Transfer Transfer Transfer Transfer Death
37	F	~ Dec 1981	WILD	WILD	SE ASIA HENDEE METROZOO HOUSTON	???? ~ 1983 7 Jun 1983 4 Dec 1992 28 Aug 1994	NONE NONE A00270 14118	Capture Transfer Transfer Transfer Death
38	F	22 May 1981	17	16	NY BRONX ROTTERDAM	22 May 1981 14 Sep 1981	812213 400908	Hatch lft Transfer
39	F	11 Jun 1982	17	16	NY BRONX STCATHERN NY BRONX ATLANTA	11 Jun 1982 12 May 1983 14 May 1987 23 Apr 1998 20 May 2001	822326 822326 822326 980007	Hatch Transfer Transfer Transfer Death
40	M	4 May 1983	17	16	NY BRONX STCATHERN HOGLE	4 May 1983 30 Apr 1984 14 Mar 1988 25 Oct 1988	832116 832116 07038	Hatch Transfer Transfer Death
41	M	25 Feb 1984	17	16	NY BRONX STCATHERN METROZOO HOUSTON	25 Feb 1984 14 Sep 1984 3 Apr 1986 4 Dec 1992 2 May 2001	842405 842405 A01282 14117	Hatch Transfer Transfer Transfer Death
42	M	~ 1986	WILD	WILD	SE ASIA WSD PETS LOWRY	???? ???? 17 Jun 1987 18 Mar 1991	NONE NONE 200098	Capture Transfer Transfer Death
43	M	????	WILD	WILD	SE ASIA WALSR KG	???? ~ 1986 ~ Sep 1992	NONE 0034 0034	Capture Transfer lft Transfer
44	F	????	WILD	WILD	SE ASIA WALSR KG	???? ~ 1986 ~ Sep 1992	NONE 0035 0035	Capture Transfer lft Transfer
45	F	~31 Mar 1988	WILD	WILD	SE ASIA AARDV IMP OKLAHOMA	~31 Mar 1988 ???? 30 Mar 1993 6 Jan 2000	NONE NONE 610103	Capture Transfer Transfer Death
46	F	~31 Mar 1988	WILD	WILD	SE ASIA AARDV IMP OKLAHOMA	~31 Mar 1988 ???? 30 Mar 1993 17 Sep 2002	NONE NONE 610204	Capture Transfer Transfer Death
47	F	~ 1989	WILD	WILD	SE ASIA ROSENTHAL MANHATTAN	???? ???? 1 Apr 1997 20 Feb 1999	NONE NONE 970005	Capture Transfer Transfer Death
48	M	7 Mar 1989	UNK	UNK	MILLER R OKLAHOMA	7 Mar 1989 24 Apr 1991 28 Jun 2006	UNK 551001	Hatch Transfer Death
49	F	18 Apr 1989	UNK	UNK	MILLER R OKLAHOMA ATLANTA	18 Apr 1989 24 Apr 1991 11 Jan 2007	UNK 551102 A60074	Hatch Transfer Transfer

50	M	????	WILD	WILD	SE ASIA V.D.BRINK NY BRONX ATLANTA	???? ???? 2 Aug 1990 23 Apr 1998	NONE NONE 902252 980006	Capture Transfer Transfer Transfer
51	F	~ 1990	WILD	WILD	SE ASIA MCCOY T SD-WAP	???? ???? 22 Nov 1996	NONE NONE 896382	Capture Transfer Transfer
52	M	~ 1990	WILD	WILD	SE ASIA MCCOY T SD-WAP	???? ???? 22 Nov 1996 5 Sep 2006	NONE NONE 896383	Capture Transfer Transfer Death
53	M	????	WILD	WILD	SE ASIA V.D.BRINK NY BRONX	???? ???? 2 Aug 1990 4 Aug 1990	NONE NONE 902251	Capture Transfer Transfer Death
54	F	????	WILD	WILD	SE ASIA V.D.BRINK NY BRONX	???? ???? 2 Aug 1990 5 Sep 1990	NONE NONE 902253	Capture Transfer Transfer Death
55	M	26 Mar 1990	UNK	UNK	MILLER R OAKLAND	26 Mar 1990 20 Aug 1993 13 Nov 2001	UNK 890	Hatch Transfer Death
56	M	????	WILD	WILD	SE ASIA MILLER R AVI BREED MILLER R	???? ???? ~ Feb 1992 19 Jun 1997	NONE NONE 001143 NONE	Capture Transfer Transfer Transfer ltf
57	F	????	WILD	WILD	SE ASIA MILLER R AVI BREED MILLER R	???? ???? ~ Feb 1992 19 Jun 1997	NONE NONE 001144 NONE	Capture Transfer Transfer Transfer ltf
58	F	17 Mar 1991	19	23	STCATHERN NY BRONX SAN ANTON HOUSTON SAN ANTON PARROTTRU SAN ANTON	17 Mar 1991 20 Aug 1992 22 Apr 1994 14 Mar 1995 11 Jul 2001 28 Sep 2001 22 Nov 2002 20 Sep 2003	915015 915015 910370 15613 910370 NONE 910370	Hatch Transfer Transfer Transfer Transfer Transfer Transfer Death
59	F	3 May 1991	UNK	UNK	MILLER R OAKLAND	3 May 1991 8 Mar 1994	UNK 921	Hatch Transfer
60	F	25 Jul 1991	43	44	WALSR KG SANDIEGOZ SD-WAP SANDIEGOZ	25 Jul 1991 10 Jun 1993 10 Jul 1993 24 May 1995 15 Apr 2004	349101 393278 393278 393278	Hatch Transfer Transfer Transfer Death
61	M	2 Aug 1992	43	44	WALSR KG SANDIEGOZ SD-WAP SANDIEGOZ	2 Aug 1992 10 Jun 1993 10 Jul 1993 24 May 1995 11 Jan 1998	349202 393277 393277 393277	Hatch Transfer Transfer Transfer Death
62	M	????	UNK	UNK	MILLER R PORTLAND TUCSON	???? 8 Mar 1994 1 May 1997 6 Jun 2002	UNK 94027 974233	Hatch Transfer Transfer Death

63	F	????	UNK	UNK	MILLER R PORTLAND TUCSON	???? 8 Mar 1994 1 May 1997 2 Jul 1998	UNK 94028 974232	Hatch Transfer Transfer Death
64	F	~ 5 Jan 1993	UNK	UNK	MILLER R SAN ANTON	~ 5 Jan 1993 5 Jan 1996 19 Dec 2002	NONE 960124	Hatch Transfer Death
65	M	1 May 1993	19	23	STCATHERN SC ISLAND SCOT NECK	1 May 1993 1 Jan 2006 30 Apr 2013 12 May 2013	935026 935026 65	Hatch Transfer Transfer Death
66	F	????	UNK	UNK	MILLER R STCATHERN	???? 8 Aug 1994 10 Oct 2003	UNK 945022	Hatch Transfer Death
67	M	????	UNK	UNK	MILLER R SANFORD	???? 22 Dec 1994	UNK 94B493	Hatch Transfer
68	F	????	UNK	UNK	MILLER R SANFORD	???? 22 Dec 1994	UNK 94B494	Hatch Transfer
69	M	29 Mar 1994	19	23	STCATHERN SAN ANTON	29 Mar 1994 19 Apr 1995 1 Sep 2004	945017 940316	Hatch Transfer Death
70	F	29 Mar 1994	19	23	STCATHERN MILLER R STCATHERN TUCSON ATLANTA	29 Mar 1994 19 Apr 1995 5 Jan 1996 16 Dec 1998 25 Oct 2003 17 Jul 2006	945021 NONE 945021 984503 A30013	Hatch Transfer Transfer Transfer Transfer Death
71	F	4 Apr 1995	19	23	STCATHERN LOUISVILL MILLER J CROFT L MCCOY T	4 Apr 1995 1 Dec 1995 9 Jul 1998 10 Nov 1998 1 Jan 1999 16 Aug 2003	955004 201059 NONE 980014 980014 NONE	Hatch Transfer Transfer Transfer Transfer lft Transfer
72	F	6 Apr 1995	19	23	STCATHERN LOUISVILL	6 Apr 1995 1 Dec 1995 6 Sep 1996	955014 201060	Hatch Transfer Death
73	M	9 Apr 1996	19	23	STCATHERN MANHATTAN	9 Apr 1996 18 Mar 1998 2 Oct 2003	965009 980003	Hatch Transfer Death
74	?	13 Apr 1996	67	68	SANFORD	13 Apr 1996 21 Apr 1996	5546	Hatch Death
75	F	3 May 1996	56	57	AVI BREED MANHATTAN STCATHERN SC ISLAND SCOT NECK	3 May 1996 22 Apr 1999 5 Oct 2004 1 Jan 2006 30 Apr 2013	960459 990009 S04068 S04068 75	Hatch Transfer Transfer Transfer Transfer
76	?	7 Apr 1997	67	68	SANFORD	7 Apr 1997 24 Apr 1997	5568	Hatch Death
77	M	10 Apr 1997	67	68	SANFORD	10 Apr 1997 20 Mar 1999	5569	Hatch Death
78	M	17 May 1997	50	39	NY BRONX SANDIEGOZ PROSPECTP	17 May 1997 17 Sep 1998 3 Aug 2011	972131 398370 972131	Hatch Transfer Transfer

79	?	19 Mar 1998	67	68	SANFORD	19 Mar 1998 1 Oct 1998	5590	Hatch Death
80	?	22 Mar 1998	67	68	SANFORD	22 Mar 1998 25 Mar 1998	5591	Hatch Death
81	?	17 Apr 1998	48	49	OKLAHOMA	17 Apr 1998 21 Apr 1998	740805	Hatch Death
82	?	17 Apr 1998	48	49	OKLAHOMA	17 Apr 1998 21 Apr 1998	740806	Hatch Death
83	M	????	WILD	WILD	SE ASIA MCCOY T CROFT L MCCOY T	???? ???? 5 May 1999 15 Aug 2002	NONE NONE 990050 NONE	Capture Transfer Transfer lft Transfer
84	M	????	WILD	WILD	SE ASIA MCCOY T CROFT L MCCOY T	???? ???? 2 Jul 1999 15 Aug 2002	NONE NONE 990057 NONE	Capture Transfer Transfer lft Transfer
85	F	????	WILD	WILD	SE ASIA MCCOY T CROFT L MCCOY T	???? ???? 2 Jul 1999 15 Aug 2002	NONE NONE 990058 NONE	Capture Transfer Transfer lft Transfer
86	M	????	WILD	WILD	SE ASIA MCCOY T CROFT L MCCOY T	???? ???? 2 Jul 1999 15 Aug 2002	NONE NONE 990059 NONE	Capture Transfer Transfer lft Transfer
87	F	????	WILD	WILD	SE ASIA MCCOY T CROFT L MCCOY T	???? ???? 2 Jul 1999 15 Aug 2002	NONE NONE 990060 NONE	Capture Transfer Transfer lft Transfer
88	M	10 Sep 1998	55	59	OAKLAND FALLBROOK	10 Sep 1998 23 Jan 2001	1239 NONE	Hatch Transfer
89	F	10 Sep 1998	55	59	OAKLAND FALLBROOK	10 Sep 1998 23 Jan 2001 25 May 2008	1240 NONE	Hatch Transfer Death
90	?	~ 6 Jun 2000	65	66	STCATHERN	~ 6 Jun 2000 11 Jul 2000	S00044	Hatch Death
91	M	2 Apr 2000	48	49	OKLAHOMA	2 Apr 2000 9 Jun 2001	769207	Hatch Death
92	M	2 Apr 2000	67	68	SANFORD MILLER R	2 Apr 2000 1 Dec 2000	5633 UNK	Hatch lft Transfer
93	F	~ 1995	UNK	UNK	CAVE G KITCHENS WALTHERSD	~ 1996 ~ May 1998 ~ Dec 1999 ~ 2003	NONE NONE NONE	Transfer Transfer Transfer Death
94	M	14 Mar 2001	48	49	OKLAHOMA SAN ANTON	14 Mar 2001 15 Apr 2003	769308 A03042	Hatch Transfer
95	M	26 Mar 2001	67	68	SANFORD OAKLAND	26 Mar 2001 30 Jan 2002	5647 1432	Hatch Transfer
96	?	2 Apr 2001	67	68	SANFORD	2 Apr 2001 3 Apr 2001	5648	Hatch Death

97	?	22 Mar 2001	48	49	OKLAHOMA	22 Mar 2001	769309	Hatch
						27 Mar 2001		Death
98	F	20 Mar 2002	48	49	OKLAHOMA	20 Mar 2002	770410	Hatch
					GREENVISC	12 Nov 2003	XCA058	Transfer
99	?	27 Mar 2002	48	49	OKLAHOMA	27 Mar 2002	770411	Hatch
						10 Apr 2002		Death
100	F	14 Mar 2002	67	68	SANFORD	14 Mar 2002	A2B628	Hatch
					SAN ANTON	29 Jan 2003	J03018	Transfer
101	F	21 Mar 2003	67	68	SANFORD	21 Mar 2003	5672	Hatch
					KANSASCTY	7 Oct 2004	A04048	Transfer
						4 Mar 2013		Death
102	M	~24 Mar 2003	67	68	SANFORD	~24 Mar 2003	5673	Hatch
					GREENVISC	29 Oct 2003	XCA056	Transfer
						10 Jul 2004		Death
103	M	4 Mar 2003	48	49	OKLAHOMA	4 Mar 2003	770912	Hatch
					GREENVISC	27 Jun 2005	XEA008	Transfer
					SD-WAP	21 Apr 2007	807065	Transfer
104	?	5 Mar 2003	48	49	OKLAHOMA	5 Mar 2003	770913	Hatch
						9 Mar 2003		Death
105	M	~ 1993	WILD	WILD	SE ASIA	~ 1993	NONE	Capture
					UNKNOWN	~ 1994	NONE	Transfer
					KNUDSEN D	~ 1995	NONE	Transfer
					LAWRENCEM	23 Oct 2003	NONE	Transfer
								lft
106	F	~ 1993	WILD	WILD	SE ASIA	~ 1993	NONE	Capture
					UNKNOWN	~ 1994	NONE	Transfer
					KNUDSEN D	~ 1995	NONE	Transfer
					LAWRENCEM	23 Oct 2003	NONE	Transfer
						~2008	NONE	Death
107	F	~ 1993	WILD	WILD	SE ASIA	~ 1993	NONE	Capture
					KNUDSEN D	~ 1994	NONE	Transfer
					UNKNOWN	~ 1994	NONE	Transfer
					LAWRENCEM	23 Oct 2003	NONE	Transfer
						~06 Dec 2008	NONE	Death
108	F	~ 1994	WILD	WILD	SE ASIA	~ 1994	NONE	Capture
					AARDV IMP	~ 1995	NONE	Transfer
					KARP B	~ 1996	NONE	Transfer
					LAWRENCEM	3 Dec 2003	NONE	Transfer
								lft
109	M	31 May 2003	52	51	SD-WAP	31 May 2003	803109	Hatch
					KANSASCTY	30 Sep 2004	A04047	Transfer
110	M	1 Jun 2003	52	51	SD-WAP	1 Jun 2003	803211	Hatch
					ROTTERDAM	30 Jun 2005	408806	Transfer
								lft
111	M	2 May 2004	52	51	SD-WAP	2 May 2004	804075	Hatch
					CAMBRON	28 Sep 2005	NONE	Transfer
								lft
112	M	3 May 2004	52	51	SD-WAP	3 May 2004	804250	Hatch
					JACKSON	1 Dec 2005	200472	Transfer
113	F	5 Apr 2005	67	68	SANFORD	5 Apr 2005	5730	Hatch
					JACKSON	1 Dec 2005	200471	Transfer
114	?	8 Mar 2006	48	49	OKLAHOMA	8 Mar 2006	772214	Hatch
						12 Aug 2008		Death

115	M	8 Mar 2006	48	49	OKLAHOMA REDWOOD AVTIV SCOT NECK	8 Mar 2006 1 Nov 2011 25 Nov 2011 8 Oct 2013	772215 UNK NONE 212	Hatch Transfer Transfer Transfer
116	?	16 Mar 2006	48	49	OKLAHOMA	16 Mar 2006 24 Mar 2006	772216	Hatch Death
117	?	3 May 2006	65	75	SC ISLAND	3 May 2006 23 May 2006	SO6016	Hatch Death
118	?	18 Apr 2006	50	70	ATLANTA	18 Apr 2006 9 Sep 2006	A60014	Hatch Death
119	M	29 Apr 2006	52	51	SD-WAP GREENVISC	29 Apr 2006 10 May 2007	806153 XGA006	Hatch Transfer
120	F	~ Jan 1986	WILD	WILD	INDONESIA BIRD CRAZY SANDIEGOZ	???? ~ Jan 1986 17 Oct 2005 22 Apr 2010	NONE NONE 305514	Capture Transfer Transfer Death
121	F	8 May 2008	65	75	SC ISLAND JACKSONVL	8 May 2008 21 Mar 2012	S08022 612306	Hatch Transfer
122	?	10 May 2008	65	75	SC ISLAND	10 May 2008 21 May 2008	S08023	Hatch Death
123	F	14 May 2008	65	75	SC ISLAND COLUMBIA	14 May 2008 10 May 2011	S08024 11180	Hatch Transfer
124	M	????	WILD	WILD	SE ASIA CHASE B BROWNSVIL	???? ???? 21 Apr 1971 5 Dec 1971	NONE NONE 8654	Capture Transfer Transfer Death
125	M	????	WILD	WILD	SE ASIA CHASE B BROWNSVIL	???? ???? 25 Apr 1972 25 Aug 1974	NONE NONE 8655	Capture Transfer Transfer Death
126	?	31 May 2008	95	59	OAKLAND	31 May 2008 31 May 2008	2258	Hatch Death
127	?	15 May 2008	65	75	SC ISLAND	15 May 2008 22 May 2008	S08025	Hatch Death
128	M	11 May 2009	50	49	ATLANTA SC ISLAND	11 May 2009 20 Jun 2010 22 Jun 2010	A90020 S10032	Hatch Transfer Death

129	M	~20 Jun 2009	65	75	SC ISLAND DALLAS	~20 June 2009 12 Jul 2012	S09024 12M264	Hatch Transfer
130	F	17 May 2010	65	75	SC ISLAND SCOT NECK	17 May 2010 30 Apr 2013 6 Jun 2013	S10026 130	Hatch Transfer Death
131	F	13 Apr 2009	103	51	SD-WAP SANDIEGOZ PROSPECTP	13 Apr 2009 27 Aug 2010 3 Aug 2011 14 Aug 2011	809125 809125 P11051	Hatch Transfer Transfer Death
132	M	13 Apr 2009	103	51	SD-WAP SC ISLAND JACKSONVL	13 Apr 2009 23 Sep 2010 21 Mar 2012	809126 S10034 612305	Hatch Transfer Transfer
133	M	09 Jun 2010	95	59	OAKLAND COLUMBIA	09 Jun 2010 17 Mar 2011	2626 11133	Hatch Transfer
134	M	23 Apr 2010	103	51	SD-WAP	23 Apr 2010 16 Nov 2011	810214	Hatch Death
135	F	23 Apr 2010	103	51	SD-WAP PROSPECTP	23 Apr 2010 19 Oct 2011	810215 P11086	Hatch Transfer
136	M	4 May 2011	50	49	ATLANTA	4 May 2011	11B018	Hatch
137	U	11 May 2011	50	49	ATLANTA	11 May 2011 7 Jun 2011	11B020	Hatch Death
138	F	26 Mar 2011	67	68	SANFORD DALLAS	26 Mar 2011 12 Jul 2012	5799 12M272	Hatch Transfer
139	F	16 Apr 2012	50	49	ATLANTA TRACY AV	12 Apr 2012 17 Apr 2013	12B011 2595	Hatch Transfer
140	M	25 Apr 2013	50	49	ATLANTA	25 Apr 2013	13B009	Hatch

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TOTALS: 55.60.25 (140) in 43 institutions

WREATHED HORNBILL STUDBOOK
(Rhyticeros undulates)

Restricted to:
Status: Living on 31 Dec 2013
Report ordered by: current/last location (alphabetic)

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Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
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ATLANTA - Zoo Atlanta, Atlanta, Georgia, USA

50	M	????	WILD	WILD	SE ASIA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					NY BRONX	2 Aug 1990	902252	Transfer
					ATLANTA	23 Apr 1998	980006	Transfer
49	F	18 Apr 1989	UNK	UNK	MILLER R	18 Apr 1989	UNK	Hatch
					OKLAHOMA	24 Apr 1991	551102	Transfer
					ATLANTA	11 Jan 2007	A60074	Transfer
136	M	4 May 2011	50	49	ATLANTA	4 May 2011	11B018	Hatch
140	M	25 Apr 2013	50	49	ATLANTA	25 Apr 2013	13B009	Hatch

Totals: 3.1.0(4)

COLUMBIA - Riverbanks Zoo, Columbia, South Carolina, USA

123	F	14 May 2008	65	75	SC ISLAND	14 May 2008	S08024	Hatch
					COLUMBIA	10 May 2011	11180	Transfer
133	M	09 Jun 2010	95	59	OAKLAND	09 Jun 2010	2626	Hatch
					COLUMBIA	17 Mar 2011	11133	Transfer

Totals: 1.1.0 (2)

DALLAS - Dallas Zoo, Dallas, Texas, USA

129	M	~20 Jun 2009	65	75	SC ISLAND	~20 June 2009	S09024	Hatch
					DALLAS	12 Jul 2012	12M264	Transfer
138	F	26 Mar 2011	67	68	SANFORD	26 Mar 2011	5799	Hatch
					DALLAS	12 Jul 2012	12M272	Transfer

Totals: 1.1.0 (2)

FALLBROOK - Emerald Forest Bird Farm, Fallbrook, California, USA

88	M	10 Sep 1998	55	59	OAKLAND	10 Sep 1998	1239	Hatch
					FALLBROOK	23 Jan 2001	NONE	Transfer

Totals: 1.0.0 (1)

GREENVISC - Greenville Zoo, Greenville, South Carolina, USA

98	F	20 Mar 2002	48	49	OKLAHOMA	20 Mar 2002	770410	Hatch
					GREENVISC	12 Nov 2003	XCA058	Transfer
119	M	29 Apr 2006	52	51	SD-WAP	29 Apr 2006	806153	Hatch
					GREENVISC	10 May 2007	XGA006	Transfer

Totals: 1.1.0 (2)

JACKSON - Jackson Zoological Park, Jackson, Mississippi, USA

112	M	3 May 2004	52	51	SD-WAP	3 May 2004	804250	Hatch
					JACKSON	1 Dec 2005	200472	Transfer
113	F	5 Apr 2005	67	68	SANFORD	5 Apr 2005	5730	Hatch
					JACKSON	1 Dec 2005	200471	Transfer

Totals: 1.1.0 (2)

JACKSONVL- Jacksonville Zoo, Jacksonville, FL

121	F	8 May 2008	65	75	SC ISLAND	8 May 2008	S08022	Hatch
					JACKSONVL	21 Mar 2012	612306	Transfer
132	M	13 Apr 2009	103	51	SD-WAP	13 Apr 2009	809126	Hatch
					SC ISLAND	23 Sep 2010	S10034	Transfer
					JACKSONVL	21 Mar 2012	612305	Transfer

Totals: 1.0.0 (1)

KANSASCTY - The Kansas City Zoo, Kansas City, Missouri, USA

109	M	31 May 2003	52	51	SD-WAP	31 May 2003	803109	Hatch
					KANSASCTY	30 Sep 2004	A04047	Transfer

Totals: 1.0.0 (1)

OAKLAND - Oakland Zoo, Oakland, California, USA

59	F	3 May 1991	UNK	UNK	MILLER R OAKLAND	3 May 1991 8 Mar 1994	UNK 921	Hatch Transfer
95	M	26 Mar 2001	67	68	SANFORD OAKLAND	26 Mar 2001 30 Jan 2002	5647 1432	Hatch Transfer

Totals: 1.1.0 (2)

PROSPECTP - Prospect Park Zoo, Brooklyn, New York, USA

78	M	17 May 1997	50	39	NY BRONX SANDIEGOZ PROSPECTP	17 May 1997 17 Sep 1998 3 Aug 2011	972131 398370 972131	Hatch Transfer Transfer
135	F	23 Apr 2010	103	51	SD-WAP PROSPECTP	23 Apr 2010 19 Oct 2011	810215 P11086	Hatch Transfer

Totals: 1.1.0 (2)

SAN ANTON - San Antonio Zool Gardens & Aquarium, San Antonio, Texas, USA

94	M	14 Mar 2001	48	49	OKLAHOMA SAN ANTON	14 Mar 2001 15 Apr 2003	769308 A03042	Hatch Transfer
100	F	14 Mar 2002	67	68	SANFORD SAN ANTON	14 Mar 2002 29 Jan 2003	A2B628 J03018	Hatch Transfer

Totals: 1.1.0 (2)

SANFORD - Central Florida Zoological Park, Lake Monroe, Florida, USA

67	M	????	UNK	UNK	MILLER R SANFORD	???? 22 Dec 1994	UNK 94B493	Hatch Transfer
68	F	????	UNK	UNK	MILLER R SANFORD	???? 22 Dec 1994	UNK 94B494	Hatch Transfer

Totals: 1.1.0 (2)

TRACY AV - Tracy Aviary, Salt Lake City, Utah, USA

139	F	16 Apr 2012	50	49	ATLANTA	12 Apr 2012	12B011	Hatch
					TRACY AV	17 Apr 2013	2595	Transfer

Totals: 0.1.1.0 (1)

SCOT NECK - Sylvan Heights, Scotland Neck; North Carolina, USA

75	F	3 May 1996	56	57	AVI BREED	3 May 1996	960459	Hatch
					MANHATTAN	22 Apr 1999	990009	Transfer
					STCATHERN	5 Oct 2004	S04068	Transfer
					SCOT NECK	30 Apr 2013	75	Transfer
115	M	8 Mar 2006	48	49	OKLAHOMA	8 Mar 2006	772215	Hatch
					REDWOOD	1 Nov 2011	UNK	Transfer
					AVTIV	25 Nov 2011	NONE	Transfer
					SCOT NECK	8 Oct 2013	212	Transfer

Totals: 1.1.1.0 (2)

SD-WAP - San Diego Zoo Safari Park, Escondido, California, USA

51	F	~ 1990	WILD	WILD	SE ASIA	????	NONE	Capture
					MCCOY T	????	NONE	Transfer
					SD-WAP	22 Nov 1996	896382	Transfer
103	M	4 Mar 2003	48	49	OKLAHOMA	4 Mar 2003	770912	Hatch
					GREENVISC	27 Jun 2005	XEA008	Transfer
					SD-WAP	21 Apr 2007	807065	Transfer

Totals: 1.1.1.0 (2)

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TOTALS: 16.13.0 (29) in 15 Institutions

WHITE-CROWNED HORNBILL

Berenicornis comatus

GENERAL INFORMATION

Other common names in use include: White-crested hornbill, Long-crested hornbill.

Kemp (1995) placed this species in the genus *Aceros* (subgenus *Berenicornis*) but acknowledged that this species might be placed in the monotypic genus, *Berenicornis*. Kemp listed this species in the genus *Berenicornis* in *The Handbook of Birds of the World*, volume 6 (Del Hoyo et al, 2001)

Captive propagation

The first known captive breeding occurred in 1993 at Ornis Mallorca (Strehlow 2001). The only known success in this region occurred at Discovery Island on 11 October 1994 (Atallian et al unpublished).

There are 26 historical records in this studbook. Presently, there are 3.3 living birds in 2 institutions.

White-crowned hornbill

Berenicornis comatus



STUDBOOK REPORTS

Listed by location

Here are listed the studbook numbers for each of the specimens reported by participating institutions

AUDUBON: 12, 13
CHICAGOBR: 1
CROFT L: 20, 21, 22
FRANKLNP: 7, 12, 17, 20, 21, 22, 23, 24
LAKE BUENA: 7, 9, 11, 17, 23
NY BRONX: 2, 3, 11
SANDIEGOZ: 4, 5, 6, 7, 8, 10, 14, 19
SD-WAP: 6, 14, 15, 16, 17, 18, 19
ST AUGUST: 15, 18

WHITE-CROWNED HORNBILL STUDBOOK
(*Berenicornis comatus*)

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
1	M	~ 1932	WILD	WILD	SE ASIA	????	NONE	Capture
					L RUHE	????	NONE	Transfer
					CHICAGOBR	28 May 1937	26231	Transfer
						24 Nov 1940		Death
2	?	~ 1934	WILD	WILD	SE ASIA	????	NONE	Capture
					L RUHE	????	NONE	Transfer
					NY BRONX	1 Jun 1935	UNK	Transfer
						26 May 1959		Death
3	F	????	WILD	WILD	SE ASIA	????	NONE	Capture
					L RUHE	????	NONE	Transfer
					NY BRONX	1 Jun 1935	UNK	Transfer
						20 Mar 1948		Death
4	M	~ 1966	WILD	WILD	SUMATRA	????	NONE	Capture
					CHASE B	????	NONE	Transfer
					SANDIEGOZ	5 Jun 1968	200748	Transfer
						14 Aug 1979		Death
5	M	~ 1967	WILD	WILD	SUMATRA	????	NONE	Capture
					CHASE B	????	NONE	Transfer
					SANDIEGOZ	5 Jun 1968	005979	Transfer
						31 Dec 1970		Death
6	M	~ 1968	WILD	WILD	SUMATRA	????	NONE	Capture
					MOHILEF D	????	NONE	Transfer
					SANDIEGOZ	13 Aug 1970	200749	Transfer
					SD-WAP	16 Jan 1981	200749	Transfer
	31 Dec 1984		Death					
7	F	~ 1969	WILD	WILD	SUMATRA	????	NONE	Capture
					MOHILEF D	????	NONE	Transfer
					SANDIEGOZ	13 Aug 1970	005980	Transfer
					FRANKLINP	15 Mar 1972	72A659	Transfer
					LAKEBUENA	10 Jun 1981	110601	Transfer
	10 Sep 1997		Death					
8	?	~ 1969	WILD	WILD	SUMATRA	????	NONE	Capture
					MOHILEF D	????	NONE	Transfer
					SANDIEGOZ	13 Aug 1970	005981	Transfer
						31 Dec 1975		Death
9	?	????	WILD	WILD	SUMATRA	????	NONE	Capture
					PET FARM	????	NONE	Transfer
					LAKEBUENA	25 Sep 1973	000343	Transfer
	13 Dec 1990		Death					
10	F	~ 1974	WILD	WILD	SUMATRA	????	NONE	Capture
					GLEND CA	????	NONE	Transfer
					SANDIEGOZ	15 May 1975	005982	Transfer
	4 Jul 1975		Death					
11	F	~ 1974	WILD	WILD	SE ASIA	????	NONE	Capture
					LAKEBUENA	????	UNK	Transfer
					NY BRONX	31 May 1986	862178	Transfer
					LAKEBUENA	13 Aug 1986	UNK	Transfer

12	M	~ 1975	WILD	WILD	SUMATRA MOHILEF D AUDUBON FRANKLINP	???? ???? 1 Aug 1976 7 Jun 1978 1 Aug 1980	NONE NONE 012 78A278	Capture Transfer Transfer Transfer Death Page 73
13	M	~ 1975	WILD	WILD	SUMATRA MOHILEF D AUDUBON	???? ???? ~ 1976 17 Jan 1978	NONE NONE 100440	Capture Transfer Transfer Death
14	F	~ 1976	WILD	WILD	SUMATRA FERNDALÉ LAKEBUENA SANDIEGOZ SD-WAP SANDIEGOZ SD-WAP MILLER R DISNEY AK	???? ~ 1977 1 Jan 1978 12 Mar 1993 12 Apr 1993 24 May 1995 10 Jun 1995 11 Sep 1997 19 Feb 2003 11 Jun 2003	NONE NONE 080103 393110 393110 393110 393110 NONE 030013	Capture Transfer Transfer Transfer Transfer Transfer Transfer Transfer Transfer Death
15	F	~ 1988	WILD	WILD	SUMATRA V.D.BRINK SD-WAP ST AUGUST	???? ???? 17 Feb 1990 6 Feb 2013	NONE NONE 890033 A1303	Capture Transfer Transfer Transfer
16	M	~ 1988	WILD	WILD	SE ASIA V.D.BRINK SD-WAP AZUA J KOBERT	???? ???? 17 Feb 1990 6 Feb 1992 1 Jul 1992	NONE NONE 890034 NONE NONE	Capture Transfer Transfer Transfer Transfer ltf
17	M	~ 1988	WILD	WILD	SUMATRA V.D.BRINK SD-WAP LAKEBUENA FRANKLINP	???? ???? 17 Feb 1990 5 Feb 1992 23 Nov 1999	NONE NONE 890035 220201 99A501	Capture Transfer Transfer Transfer Transfer
18	M	~ 1988	WILD	WILD	SUMATRA V.D.BRINK SD-WAP ST AUGUST	???? ???? 17 Feb 1990 6 Feb 2013	NONE NONE 890036 A1302	Capture Transfer Transfer Transfer
19	M	~ 1990	WILD	WILD	SUMATRA V.D.BRINK SANDIEGOZ SD-WAP SANDIEGOZ SD-WAP SANDIEGOZ	???? ???? 6 Nov 1991 6 Dec 1991 8 Mar 1993 12 Apr 1993 24 May 1995 16 Jul 1995	NONE NONE 490179 490179 490179 490179 490179	Capture Transfer Transfer Transfer Transfer Transfer Transfer Death
20	M	1 Jan 1990	WILD	WILD	SE ASIA MCCOY T CROFT L FRANKLINP	???? ???? 4 Jul 1999 21 Jul 2004	NONE NONE NONE A04437	Capture Transfer Transfer Transfer
21	F	1 Jan 1990	WILD	WILD	SE ASIA MCCOY T CROFT L FRANKLINP	???? ???? 4 Jul 1999 21 Jul 2004	NONE NONE NONE A04438	Capture Transfer Transfer Transfer

22	F	1 Jan 1990	WILD	WILD	SE ASIA MCCOY T CROFT L FRANKLIN	???? ???? 4 Jul 1999 21 Jul 2004	NONE NONE NONE A04439	Capture Transfer Transfer Transfer
23	F	11 Oct 1994	17	7	LAKEBUENA FRANKLIN	11 Oct 1994 17 May 1995 16 Aug 2002	241011 94A311	Hatch Transfer Death
24	F	1 Jan 1990	WILD	WILD	SE ASIA MCCOY T CROFT L FRANKLIN	???? ???? 4 Jul 1999 21 Jul 2004 3 Feb 2011	NONE NONE NONE A04440	Capture Transfer Transfer Transfer Death
25	M	~1970	WILD	WILD	SE ASIA CHASE B BROWNSVIL	???? ~1971 24 Nov 1971 8 Dec 1971	NONE NONE 8657	Capture Transfer Transfer Death
26	M	~1971	WILD	WILD	SE ASIA FERNDAL BROWNSVIL	???? ~1972 25 Apr 1972 20 Sep 1972	NONE NONE 8658	Capture Transfer Transfer Death

=====
TOTALS: 13.10.3 (26) in 11 institutions

WHITE-CROWNED HORNBILL STUDBOOK
(*Berenicornis comatus*)

Restricted to:
Status: Living on 31 Dec 2013
Report ordered by: current/last location (geographic)

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Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
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St. Augustine Alligator Farm, St. Augustine, Florida, USA

15	F	~ 1988	WILD	WILD	SUMATRA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SD-WAP	17 Feb 1990	890033	Transfer
					ST AUGUST	6 Feb 2013	A1303	Transfer
18	M	~ 1988	WILD	WILD	SUMATRA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SD-WAP	17 Feb 1990	890036	Transfer
					ST AUGUST	6 Feb 2013	A1302	Transfer

Totals: 1.1.0 (2)

Zoo New England (Franklin Pk), Boston, Massachusetts, USA

17	M	~ 1988	WILD	WILD	SUMATRA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SD-WAP	17 Feb 1990	890035	Transfer
					LAKEBUENA	5 Feb 1992	220201	Transfer
20	M	1 Jan 1990	WILD	WILD	SE ASIA	????	NONE	Capture
					MCCOY T	????	NONE	Transfer
					CROFT L	4 Jul 1999	NONE	Transfer
					FRANKLINP	21 Jul 2004	A04437	Transfer
21	F	1 Jan 1990	WILD	WILD	SE ASIA	????	NONE	Capture
					MCCOY T	????	NONE	Transfer
					CROFT L	4 Jul 1999	NONE	Transfer
					FRANKLINP	21 Jul 2004	A04438	Transfer
22	F	1 Jan 1990	WILD	WILD	SE ASIA	????	NONE	Capture
					MCCOY T	????	NONE	Transfer
					CROFT L	4 Jul 1999	NONE	Transfer
					FRANKLINP	21 Jul 2004	A04439	Transfer

Totals: 2.2.0 (4)

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TOTALS: 3.3.0 (6) in 2 Institutions

HORNBILL NEST ADOPTION PROGRAM

We all share a great interest in hornbills. This interest goes beyond just keeping them in captivity and putting together population management plans. If we cannot also help preserve habitat and conserve the various species, there will be no pleasure in having the last hornbill in captivity. We all need to look into more fund raising opportunities in order to support present and future "action plans". Wilkinson (in Lum & Poonswad 2005, pp.25-35) gives a nice review of how zoos support hornbill conservation and research.

Since 1994, the Hornbill Research Foundation (HRF) has maintained a successful nest adoption program in southern Thailand. Villagers surrounding Budo-Sungai Padi National Park have turned from ex-poachers to nest guardians. One hundred percent of the money raised from donors goes to these villagers. This is a win-win situation for all parties involved: the HRF obtains valuable data on the breeding biology of 6 species of hornbills; the villagers get much needed income; the hornbills get protected; and the donors have an opportunity to help with hornbill conservation. See Poonswad et al 2012 for an updated review of this project.

Since 1999, Woodland Park Zoo has established a designated "hornbill account" from where money is wire transferred to Thailand two times per year. This saves conservation dollars at both ends by minimizing bank wire transfer fees. Several AZA institutions and AAZK chapters have sent money to this account. For more information, please contact eric.kowalczyk.org.

Here is a partial list of AZA and AAZK institutions that have adopted nests in 2012 and 2013 Audubon Park Zoo, Brevard Zoo, Dallas AAZK, East Bay Zoological Society, Milwaukee County Zoo, Phoenix Zoo, Sacramento Zoo, Santa Barbara Zoo, St. Augustine's Alligator Farm, Greater Kansas City Zoo AAZK, South Florida AAZK, New Mexico BioPark Society, and Toledo Zoo.

An extension of this successful hornbill conservation effort was the establishment in 2004 of the Budo Hornbill Conservation and Education Center (BHCEC). This center provides many educational programs to local schools and villages. Partial support for staffing and providing equipment for the BHCEC comes from several zoological institutions: Woodland Park Zoo, Chester Zoo (UK), East Bay Zoological Society (Gotliffe et al 2010), Phoenix Zoo.

For updated information (photos and videos) on past and present work with hornbill field work and conservation in Thailand, see the Thailand Hornbill Project Facebook page.



INSTITUTIONAL LISTING

MNEMONIC	INSTITUTION	CONTACT
ATLANTA	Zoo Atlanta 800 Cherokee Avenue S.E. Atlanta, GA 30315-1440 James Balance,	(404) 624-5691 jballance@zooatlanta.org
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BREVARD	Brevard Zoo 8225 N. Wickham Rd. Melbourne, FL. 32940-7924 Michelle Smurl	(321) 254-9453 (#217) msmurl@brevardzoo.org
CHICAGOLP	Lincoln Park Zoological Gardens 2001 N. Clark St. Chicago, IL 60614-4757 Sunny Nelson	(312) 742-7924 snelson@lpzoo.org
COAL VAL	Niabi Zoo 13010 Niabi Zoo Road Coal Valley, IL 61240-9468 Amanda Reffett	(309) 799-5108 areffett@niabizoo.com

COLUMBIA	Riverbanks Zoo and Garden PO Box 1060 Columbia, SC 29202 Colleen Lynch	(803) 978-1059 clynch@riverbanks.org
DALLAS	Dallas Zoo & Children's Aquarium 650 S.R.L. Thornton Freeway Dallas, Texas 75203 Chris Brown	(469) 554-7240 chris.brown@dallaszoo.com
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FORTWORTH	Fort Worth Zoological Park 1989 Colonial Pkwy. Fort Worth, TX 76110-6640 Katy Cussen	(817) 759-7170 kcussen@fortworthzoo.org
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For updated information (photos and videos) on past and present work with hornbill field work and conservation in Thailand, see the Thailand Hornbill Project Facebook page

APPENDIX

WRITHED HORNBILL

Aceros leucocephalus

GENERAL INFORMATION

Other common names in use include: Mindano wrinked hornbill, White-headed hornbill, Wrinkled hornbill.

Captive propagation.

The first known captive breeding of this species occurred in 1989 at Miami Metrozoo (Jung 1991). Myers (2000) wrote about the successful breeding at Audubon Park and Zoological Garden. This pair had hatched nine and fledged eight birds. Unfortunately, the breeding female died 11 May 1998. All the surviving offspring (2.2 presently) are in European collections (Parque El Retiro in Malaga, Spain and Chester Zoo in the United Kingdom). Barcena et al (in Lum & Poonswad, 2005, pp. 37-43) report on the captive breeding at Ornithological Park El Retiro in Malaga, Spain in 2000.

San Diego Zoo had a pair of birds, the female having been captive hatched at Miami Metro Zoo in 1989. She first reproduced when she was four years old. In 1999, one chick was hand reared from this pair. There are 28 historical records. Presently there are no individuals in this region.

Wreathed hornbill

Aceros leucocephalus



WRITHED HORNBILL STUDBOOK

(Aceros leucocephalus)

Stud #	Sex	Hatch Date	Sire	Dam	Location	Date	Local ID	Event
1	?	????	WILD	WILD	SE ASIA	????	NONE	Capture
					UNKNOWN	????	NONE	Transfer
					NY BRONX	20 Aug 1932	UNK	Transfer
						14 Aug 1933		Death
2	?	????	WILD	WILD	SE ASIA	????	NONE	Capture
					UNKNOWN	????	NONE	Transfer
					NY BRONX	26 Jun 1963	UNK	Transfer
						7 Jul 1969		Death
3	F	????	WILD	WILD	SE ASIA	????	NONE	Capture
					UNKNOWN	????	NONE	Transfer
					NY BRONX	26 Jun 1963	UNK	Transfer
					STATEN IS	20 Apr 1970	000042	Transfer
						11 May 1986		Death
4	M	????	WILD	WILD	SE ASIA	????	NONE	Capture
					ZOO IMPRT	????	NONE	Transfer
					METROZOO	23 Jan 1985	A00884	Transfer
						11 Feb 1991		Death
5	F	~ 1981	[WILD	WILD	SE ASIA	????	NONE	Capture
					ZOO IMPRT	????	NONE	Transfer
					METROZOO	23 Jan 1985	A00885	Transfer
					W PALM BE	26 Aug 1992	NONE	Transfer
					AUDUBON	28 Jan 1993	1864	Transfer
						11 May 1998		Death
6	M	~ 1986	WILD	WILD	SE ASIA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	3 Feb 1989	389064	Transfer
					METROZOO	14 Mar 1991	A03226	Transfer
					AUDUBON	28 Jan 1993	1863	Transfer
					SD-WAP	9 Dec 1998	389064	Transfer
						1 Sep 2002		Death
7	M	~ 1986	WILD	WILD	SE ASIA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	3 Feb 1989	389061	Transfer
						1 Jun 2002		Death
8	M	~ 1986	WILD	WILD	SE ASIA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	3 Feb 1989	389062	Transfer
						20 Dec 1989		Death
9	M	~ 1986	WILD	WILD	SE ASIA	????	NONE	Capture
					V.D.BRINK	????	NONE	Transfer
					SANDIEGOZ	3 Feb 1989	389063	Transfer
						16 May 1990		Death
10	?	3 May 1988	4	5	METROZOO	3 May 1988	A02226	Hatch
						10 May 1988		Death
11	F	20 Apr 1989	4	5	METROZOO	20 Apr 1989	A02577	Hatch
						29 Jan 1990		Death
12	F	20 Apr 1989	4	5	METROZOO	20 Apr 1989	A02574	Hatch
						23 Jun 1990	390637	Transfer
						14 Mar 1991	390637	Transfer
						14 Jun 2001		Death

13	?	22 Jul 1990	4	5	METROZOO	22 Jul 1990 23 Aug 1990	A03084	Hatch Death
14	M	22 May 1993	6	5	AUDUBON CHURRIANA	22 May 1993 25 Jun 1996	1890 B00033	Hatch Transfer
15	M	24 May 1993	6	5	AUDUBON	24 May 1993 8 Jan 1995	1896	Hatch Death
16	?	1 Jun 1993	7	12	SANDIEGOZ	1 Jun 1993 6 Jul 1993	393250	Hatch Death
17	?	1 Jun 1993	7	12	SANDIEGOZ	1 Jun 1993 7 Jul 1993	393251	Hatch Death
18	?	9 May 1994	6	5	AUDUBON	9 May 1994 10 Jun 1994	1985	Hatch Death
19	F	6 May 1995	6	5	AUDUBON CHURRIANA	6 May 1995 25 Jun 1996 3 Jun 1997	2079 B00034	Hatch Transfer Death
20	F	8 May 1995	6	5	AUDUBON CHURRIANA	8 May 1995 25 Jun 1996 8 May 1998	2080 B00035	Hatch Transfer Death
21	F	16 May 1995	6	5	AUDUBON CHURRIANA	16 May 1995 25 Jun 1996	2085 B00036	Hatch Transfer ltf
22	?	29 Apr 1997	6	5	AUDUBON	29 Apr 1997 9 Jul 1997	2233	Hatch Death
23	F	2 May 1997	6	5	AUDUBON CHESTER	2 May 1997 17 Dec 1997	2234 980025	Hatch Transfer ltf
24	M	12 May 1997	6	5	AUDUBON CHESTER	12 May 1997 17 Dec 1997	2235 980024	Hatch Transfer ltf
25	F	22 Sep 1997	UNK	20	CHURRIANA	22 Sep 1997	UNK	ltf Hatch
26	M	28 Oct 1998	7	12	SANDIEGOZ	28 Oct 1998 2 Nov 1998	498182	Hatch Death
27	F	7 Apr 1999	7	12	SANDIEGOZ SD-WAP	7 Apr 1999 3 Oct 1999 25 May 2004	499029 499029	Hatch Transfer Death
28	F	~21 Jul 2000	UNK	25	CHURRIANA	~21 Jul 2000	UNK	ltf Hatch

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TOTALS: 9.11.8 (28)

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