

***NORTH AMERICA AND EUROPE STUDBOOK  
FOR  
BROWN KIWI  
Apteryx mantelli  
Current to date:  
January 2022***



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## ***STUDBOOK FORMAT***

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*The Kiwi Studbook uses ZIMS for Animal Record Keeping program.*

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***STUD #:** Birds permanent studbook number. Each institution should enter the studbook number into their records for all animals that they have held.*

***SEX:** M= male    F= female    U= unknown*

***HATCH DATE:** Birds hatch date. At tilde mark '~' before the date indicates an approximate date. '?' indicates that the hatch date is unknown.*

***SIRE and DAM:** By Studbook numbers if known. Wild indicates either the chick or the egg was removed from the wild, since 1994 with Operation Nest Egg eggs taken from the wild are from known parents.*

***CURRENT LOCATION:** The facility that has acquired the bird. An alphabetical listing of current holding locations as well as all historic holding sites including addresses is included at the end of the studbook. If a bird is no longer traceable, 'ltf' (lost to follow up) will appear to the right of the last known location.*

***EVENT'S & TRANSFER:** captive or wild*

***LOCAL ID:** The facilities local identification number*

***CURRENT STATUS:** Alive or dead in transaction reports for Historical data.*

## **INTRODUCTION**

*The formation of the North American and Europe Studbook for the Brown Kiwi (*Apteryx mantelli*) was approved by WCMC (Wildlife Conservation and Management Committee) in 2006. WCMC operates under AZA (American Zoos and Aquariums). The kiwi studbook documents all known (living and dead, that are known to the Studbook Keeper) kiwi found outside of New Zealand. There are no kiwi in private collections. There are currently (January 2022) 61 living birds (37.24.0) in seventeen institutions. In the historical and living records there are kiwi given studbook numbers that reside in New Zealand, this was done for accurate record data, these birds (if not already deceased) are now counted as lost to follow up. An International Brown Kiwi Studbook was maintained in New Zealand but due to management issues that made it difficult to assist the overseas birds (all birds outside of New Zealand), the International Studbook has become Regional only and this Studbook will now maintain the records for the overseas*

*birds. A copy of this studbook will be sent to the New Zealand Studbook (Todd Jenkinson, ZAA), keeper every year it is published. Assistance and cooperation between the Studbook Keepers will be a priority. Hatch dates for the wild birds came from the New Zealand Studbook or the zoological parks that they were sent from. Assumptions had to be made for several New Zealand sires, but discussions with the zoological parks that sent the offspring could state with authority that the males were wild caught.*



*Photo Credit Megan Murphy SNZP*

### **Brown Kiwi Living Population**

### 37.24.0 at 17 Institutions

#### ALPHEN

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
177	Male	Mar 11, 2012	47	75	Birth/Hatch	Mar 11, 2012	NZP-CRC	216074
					Transfer	Aug 01, 2014	ALPHEN	14743
180	Male	May 14, 2012	58	64	Birth/Hatch	May 14, 2012	BERLINZOO	B12-00008
					Transfer	Mar 10, 2016	ALPHEN	15555
214	Female	Feb 03, 2019	27	183	Birth/Hatch	Feb 03, 2019	NZP-CRC	216780
					Transfer	Oct 27, 2020	ALPHEN	18462
211	Male	Sep 18, 2018	177	85	Birth/Hatch	Sep 18, 2018	ALPHEN	17286

#### BERLIN

58	Male	Feb 07, 1998	34	40	Birth/Hatch	Feb 07, 1998	FRANKFURT	38440
					Transfer	Aug 20, 1999	BERLINZOO	990172
204	Male	Apr 17, 2015	58	64	Birth/Hatch	Apr 17, 2015	BERLINZOO	B15-00012

**BERLIN**

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<b>168</b>	Female	Jan 26, 2008	WILD	WILD	Birth/Hatch	Jan 26, 2008	AUCKLAND	A80007
					Transfer	Apr 29, 2010	SAN YSIDR	215867
					Transfer	Jun 01, 2010	NZP-CRC	215867
					Transfer	Nov 17, 2010	FRANKFURT	43955
					Transfer	May 20, 2017	BERLINZOO	B08-00119
<b>160</b>	Male	Mar 07, 2010	58	64	Birth/Hatch	Mar 07, 2010	BERLINZOO	B10-00006
<b>186</b>	Male	Mar 20, 2014	58	64	Birth/Hatch	Mar 20, 2014	BERLINZOO	B14-00012
<b>174</b>	Female	Dec 11, 2011	27	54	Birth/Hatch	Dec 11, 2011	NZP-WASH	216032
					Transfer	Mar 20, 2013	BERLINZOO	B11-00005
<b>200</b>	Female	May 15, 2015	58	64	Birth/Hatch	May 15, 2015	BERLINZOO	B15-00027

### COLUMBUS

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
195	Male	Jun 01, 2016	162	164	Birth/Hatch	Jun 01, 2016	NZP-CRC	216503
					Transfer	Jun 06, 2017	COLUMBUS	117046
203	Male	Jun 22, 2017	162	164	Birth/Hatch	Jun 22, 2017	COLUMBUS	117047



Haka at Columbus Zoo



Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<u>FRANKFURT</u>								
34	Male	Mar 24, 1987	28	19	Birth/Hatch	Mar 24, 1987	FRANKFURT	21768
83	Male	Jan 29, 2004	34	40	Birth/Hatch	Jan 29, 2004	FRANKFURT	41370
223	Female	Apr 05, 2020	192	190	Birth/Hatch	Apr 05, 2020	FRANKFURT	46449
190	Female	Mar 19, 2015	83	65	Birth/Hatch	Mar 19, 2015	FRANKFURT	45145
16	Male	~>Jan 01, 1980	WILD	WILD	Birth/Hatch	~>Jan 01, 1980	New Zealand / North Isla	-
					Wild Capture	~>Jan 01, 1980	New Zealand / North Isla	-
					Transfer	~>Jan 01, 1980	OTOROHANG	NONE
					Transfer	May 05, 1984	AUCKLAND	AA0181
					Transfer	Sep 02, 1984	AUCKLAND	AA0181
					Transfer	Sep 06, 1986	BERLINZOO	860121
					Transfer	Feb 27, 1998	FRANKFURT	38414
					Transfer	Oct 07, 2004	ANTWERP	13858
					Transfer	Mar 24, 2006	FRANKFURT	38414
228	Female	Mar 06, 2021	192	190	Birth/Hatch	Mar 06, 2021	FRANKFURT	46631

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<u>FRANKFURT</u>								
185	Female	Apr 20, 2014	163	168	Birth/Hatch	Apr 20, 2014	FRANKFURT	44864
65	Female	Jan 16, 1999	16	51	Birth/Hatch	Jan 16, 1999	FRANKFURT	38870
					Transfer	Sep 23, 1999	SAARBRUCK	NONE
					Transfer	Apr 03, 2006	FRANKFURT	38870
229	Female	Mar 30, 2021	192	190	Birth/Hatch	Mar 30, 2021	FRANKFURT	46633
192	Male	May 06, 2015	163	168	Birth/Hatch	May 06, 2015	FRANKFURT	45226
<u>FRANKLINP</u>								
227	Male	Dec 28, 2020	27	183	Birth/Hatch	Dec 28, 2020	FRANKLINP	F20436
181	Female	Jul 22, 2012	47	75	Birth/Hatch	Jul 22, 2012	MEMPHIS	23495
					Transfer	Jul 22, 2012	MEMPHIS	23495
					Transfer	Jul 16, 2014	FRANKLINP	A14497

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
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### LESNA

68	Male	Jan 10, 2000	16	51	Birth/Hatch	Jan 10, 2000	FRANKFURT	39385
					Transfer	Sep 30, 2016	LESNA	216187
213	Female	Jan 09, 2019	27	183	Birth/Hatch	Jan 09, 2019	NZP-CRC	216779
					Transfer	Oct 20, 2020	LESNA	220408

### METROZOO

216	Male	Apr 09, 2019	27	183	Birth/Hatch	Apr 09, 2019	METROZOO	19B394
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### NY BRONX

101	Male	Jan 03, 1980	142	208	Birth/Hatch	Jan 03, 1980	AUCKLAND	AA0180
					Transfer	Aug 06, 1983	ANTWERP	10109A
					Transfer	Aug 17, 2009	SANDIEGOZ	309337
					Transfer	May 12, 2011	NY BRONX	B11051
199	Female	Feb 27, 2016	83	65	Birth/Hatch	Feb 27, 2016	FRANKFURT	45402
					Transfer	Sep 19, 2018	NY BRONX	B18217
23	Male	Nov 03, 1981	WILD	WILD	Birth/Hatch	Nov 03, 1981	OTOROHANG	24804
					Transfer	Aug 04, 1982	CHICAGOBR	24804
					Transfer	Oct 26, 1988	SANDIEGOZ	488498
					Transfer	May 12, 2011	NY BRONX	B11052

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<u>NZP-CRC</u>								
9	Male	Jan 22, 1975	8	5	Birth/Hatch	Jan 22, 1975	NZP-WASH	203567
					Transfer	May 18, 2017	NZP-CRC	203567
176	Male	Mar 07, 2012	27	54	Birth/Hatch	Mar 07, 2012	NZP-WASH	216070
					Transfer	Apr 10, 2018	NZP-CRC	216070
226	Male	Sep 04, 2020	27	183	Birth/Hatch	Sep 04, 2020	NZP-CRC	217080
225	Male	Jun 14, 2020	27	183	Birth/Hatch	Jun 14, 2020	NZP-CRC	217014
27	Male	~ from Jan 01, 1984 to Dec 31, 1984	WILD	WILD	Birth/Hatch	~ from Jan 01, 1984 to Dec 31, 1984	North Island (NZ)	-
					Transfer	~ from Jan 01, 1984 to Dec 31, 1984	OTOROHANG	R34143
					Wild Capture	~ from Jan 01, 1984 to Dec 31, 1984	North Island (NZ)	-
					Transfer	Oct 05, 1991	NZP-WASH	212220
					Transfer	Sep 25, 1995	CHICAGOBR	950208
					Transfer	Apr 28, 2005	NZP-WASH	212220
					Transfer	May 18, 2017	NZP-CRC	212220
197	Male	Jul 31, 2016	162	164	Birth/Hatch	Jul 31, 2016	NZP-CRC	216543

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<b>NZP-CRC</b>								
<b>7</b>	Male	Jan 01, 1971 +/- 6 month	WILD	WILD	Birth/Hatch	Jan 01, 1971 +/- 6 month	North Island (NZ)	-
					Wild Capture	Jan 01, 1971 +/- 6 month	North Island (NZ)	-
					Transfer	Jan 01, 1971	AUCKLAND	19773
					Transfer	Jul 18, 1972	NZP-WASH	201094
					Transfer	Dec 13, 1972	CHICAGOBR	22401
					Transfer	Oct 18, 1995	NZP-WASH	201094
					Transfer	May 13, 2004	COLUMBUS	104099
					Transfer	Aug 26, 2007	NZP-WASH	201094
					Transfer	Aug 26, 2007	NZP-CRC	201094
<b>74</b>	Male	Feb 22, 2001	34	40	Birth/Hatch	Feb 22, 2001	FRANKFURT	40041
					Transfer	Jul 18, 2002	CHICAGOBR	832
					Transfer	Jul 19, 2002	SAN YSIDR	NONE
					Transfer	Aug 19, 2002	SANDIEGOZ	302413
					Transfer	Sep 30, 2003	SD-WAP	302413
					Transfer	Sep 15, 2010	NZP-CRC	216017
					Transfer	Sep 15, 2011	NZP-CRC	216017
<b>183</b>	Female	Jan 31, 2013	47	75	Birth/Hatch	Jan 31, 2013	NZP-CRC	216225
<b>205</b>	Female	Jul 30, 2017	162	164	Birth/Hatch	Jul 30, 2017	NZP-CRC	216638

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<u>OSAKA</u>								
116	Female	Oct 29, 1988	118	117	Birth/Hatch	Oct 29, 1988	RAINBOW S	_____
					Transfer	Jul 15, 1991	OSAKA	386
115	Male	~>Jan 01, 1982	WILD	WILD	Birth/Hatch	~>Jan 01, 1982	OTOROHANG	_____
					Transfer	Jul 03, 1982	OSAKA	383
<u>PAIGNTON</u>								
171	Male	Apr 03, 2011	83	65	Birth/Hatch	Apr 03, 2011	FRANKFURT	44059
					Transfer	Jul 11, 2013	ERFURT	4285
					Transfer	Mar 07, 2014	FRANKFURT	44059
					Transfer	Mar 17, 2016	PAIGNTON	14739
<u>PINOLA</u>								
209	Male	Mar 09, 2018	83	65	Birth/Hatch	Mar 09, 2018	FRANKFURT	45968
					Transfer	Sep 19, 2018	PINOLA	kiwi1801
217	Male	May 20, 2019	162	164	Birth/Hatch	May 20, 2019	PINOLA	Pinola
220	Female	Mar 24, 2020	27	183	Birth/Hatch	Mar 24, 2020	PINOLA	46470

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<b><u>SANDIEGOZ</u></b>								
<b>109</b>	Male	Mar 26, 2008	58	64	Birth/Hatch	Mar 26, 2008	BERLINZOO	081106
					Transfer	Mar 29, 2011 +/- 1 d	SAN YSIDR	NONE
					Transfer	Apr 22, 2011	SANDIEGOZ	B11028
<b>104</b>	Male	Mar 16, 2007	58	64	Birth/Hatch	Mar 16, 2007	BERLINZOO	031109
					Transfer	Mar 29, 2011 +/- 1 d	SAN YSIDR	NONE
					Transfer	Apr 22, 2011	SANDIEGOZ	B11027
<b>21</b>	Female	~ from Sep 01, 1	WILD	WILD	Birth/Hatch	~ from Sep 01, 1981	New Zealand / North Isla	-
					Wild Capture	Oct 03, 1981	New Zealand / North Isla	-
					Transfer	Oct 30, 1981	AUCKLAND	810009
					Transfer	Jun 14, 1984	LOSANGELE	001884
					Transfer	Jan 06, 2000	SANDIEGOZ	300006
<b>218</b>	Female	Jun 06, 2019	104	10	Birth/Hatch	Jun 06, 2019	SANDIEGOZ	1000553

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<b><u>SD-WAP</u></b>								
<b>194</b>	Male	May 10, 2016	162	164	Birth/Hatch	May 10, 2016	NZP-CRC	216479
					Transfer	May 15, 2017	SD-WAP	817187
					Transfer	Jun 15, 2017	SD-WAP	817187
<b><u>SD-WAP</u></b>								
<b>198</b>	Female	Feb 22, 2016	83	65	Birth/Hatch	Feb 22, 2016	FRANKFURT	45399
					Transfer	Sep 19, 2018	SD-WAP	818223

<b><u>SYRACUSE</u></b>								
<b>79</b>	Male	Feb 10, 2003	34	40	Birth/Hatch	Feb 10, 2003	FRANKFURT	40930
					Transfer	Oct 01, 2003	COLUMBUS	103137
					Transfer	Nov 06, 2011	MEMPHIS	23363
					Transfer	Jul 16, 2014	ZOONEWENG	A14496
					Transfer	Sep 15, 2019	SYRACUSE	B19150



Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<u>TOLEDO</u>								
47	Male	Aug 09, 1993	34	37	Birth/Hatch	Aug 09, 1993	FRANKFURT	35980
					Transfer	Oct 01, 2003	COLUMBUS	103138
					Transfer	Jul 09, 2013	TOLEDO	8731
215	Female	Mar 21, 2019	27	183	Birth/Hatch	Mar 21, 2019	TOLEDO	13849
<u>TOLEDO</u>								
6	Male	~ from Jan 01, 1968	WILD	WILD	Birth/Hatch	~ from Jan 01, 1968	New Zealand / North Island	
					Wild Capture	Oct 25, 1968	New Zealand / North Island	
					Transfer	Oct 25, 1968	MT BRUCE	JILL
					Transfer	Oct 25, 1968	WHANGAREI	NONE
					Transfer	Jun 15, 1969	AUCKLAND	701
					Transfer	Jun 16, 1969	SANDIEGOZ	200004
					Transfer	Oct 30, 1988	CHICAGOBR	880382
					Transfer	Oct 15, 2003	SANDIEGOZ	200004
					Transfer	Jan 12, 2012	NATAVPGH	8009
					Transfer	Jun 26, 2013	TOLEDO	8695

Studbook ID	Sex	Hatch Date	Sire	Dam	Event Type	Date	Location	Local ID
<u>WALSRODE</u>								
179	Female	Apr 20, 2012	58	64	Birth/Hatch	Apr 20, 2012	BERLINZOO	B12-00007
					Transfer	Oct 14, 2020	WALSRODE	Z20216
221	Female	Mar 21, 2020	83	65	Birth/Hatch	Mar 21, 2020	FRANKFURT	46432
					Transfer	Sep 14, 2021	WALSRODE	Z2194
184	Male	Apr 05, 2014	163	168	Birth/Hatch	Apr 05, 2014	FRANKFURT	44856
					Transfer	Sep 15, 2021	WALSRODE	Z2193
222	Female	Mar 27, 2020	192	190	Birth/Hatch	Mar 27, 2020	FRANKFURT	46433
					Transfer	Sep 14, 2021	WALSRODE	Z2195



Gerry Lesna



*Photo credit: Berlin Zoo*



*Photo credits: Megan Murphy SNZP, Jim Jenkins FONZ photo club*



## Historical Brown Kiwi *Apteryx mantelli* Population

### Studbook Animals

Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
1	SANDIEGOZ	BELLE	041791	Undetermined	Jan 01, 1952	Dead	WILD	WILD	16Y,6M,14D	Wild Birth/ Hatch	Jul 15, 1968
2	SANDIEGOZ	Nancy	041792	Female	Jan 01, 1963 to Dec 31, 1963	Dead	WILD	WILD	5Y,0M,13D	Wild Birth/ Hatch	Jul 15, 1968
3	SANDIEGOZ	TOA I	041793	Male	Jan 01, 1966 to Dec 31, 1966	Dead	WILD	WILD	6Y,4M,5D	Wild Birth/ Hatch	Nov 07, 1972
4	SANDIEGOZ	TOA II	200005	Male	Jan 01, 1967 to Dec 31, 1967	Dead	WILD	WILD	18Y,3M,23D	Wild Birth/ Hatch	Oct 25, 1985
5	NZP-WASH	RUA	33484	Female	Jan 01, 1960 to Dec 31, 1960	Dead	WILD	WILD	14Y,10M,7D	Wild Birth/ Hatch	May 08, 1975
6	TOLEDO	Piwi	8695	Male	Jan 01, 1968 to Oct 01, 1968	Alive	WILD	WILD	53Y,7M,15D	Wild Birth/ Hatch	
7	NZP-CRC	Pops	201094	Male	Jan 01, 1971 +/- 6 month	Alive	WILD	WILD	51Y,0M,0D	Wild Birth/ Hatch	
8	LOSANGELE		990139	Male	Jan 01, 1971 to Jan 31, 1971	Dead	WILD	WILD	29Y,6M,5D	Wild Birth/ Hatch	Jul 21, 2000
9	NZP-CRC	Toru	203567	Male	Jan 22, 1975	Alive	8	5	46Y,11M,10D	Captive Birth/ Hatch	
10	SANDIEGOZ	103	202909	Female	Jan 01, 1978	Dead	WILD	WILD	42Y,0M,14D	Wild Birth/ Hatch	Jan 15, 2020
11	SANDIEGOZ	104	202910	Female	Jan 01, 1977 to Dec 31, 1977	Dead	WILD	WILD	25Y,11M,23D	Wild Birth/ Hatch	Jun 25, 2003
12	FRANKFURT		21762	Female	Aug 18, 1977	Dead	WILD	WILD	5Y,11M,4D	Captive Birth/ Hatch	Jul 22, 1983
13	FRANKFURT		21763	Male	Sep 14, 1977	Dead	WILD	WILD	5Y,10M,29D	Captive Birth/ Hatch	Aug 12, 1983
14	FRANKFURT		21764	Undetermined	Jan 01, 1978	Dead	WILD	WILD	0Y,9M,21D	Captive Birth/ Hatch	Oct 22, 1978
15	BERLINZOO	281	860122	Female	Jan 01, 1982	Dead	WILD	WILD	7Y,8M,1D	Wild Birth/ Hatch	Sep 02, 1989
16	FRANKFURT	APTERYX	38414	Male	~> Jan 01, 1980	Alive	WILD	WILD	42Y,0M,0D	Wild Birth/ Hatch	

Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
17	LOSANGELE	81.7	001883	Male	Jan 01, 1980 to Dec 31, 1980	Dead	WILD	WILD	10Y,1M,3D	Wild Birth/Hatch	Aug 04, 1990
18	BERLINZOO	RUDI	980037	Male	Jan 01, 1981	Dead	WILD	WILD	32Y,6M,22D	Wild Birth/Hatch	Jul 23, 2013
19	FRANKFURT		21766	Female	Jan 01, 1980 to Nov 30, 1980	Dead	WILD	WILD	7Y,2M,13D	Wild Birth/Hatch	Aug 29, 1987
20	STUTTGAART	3	V0009	Female	Jan 01, 1980 to Dec 31, 1980	Dead	WILD	WILD	7Y,7M,11D	Wild Birth/Hatch	Feb 12, 1988
21	SANDIEGOZ	81.14	300006	Female	Sep 01, 1981 to Sep 30, 1981	Alive	WILD	WILD	40Y,3M,17D	Wild Birth/Hatch	
22	CHICAGOBR		24799	Female	Nov 01, 1981	Dead	WILD	WILD	1Y,0M,19D	Captive Birth/Hatch	Nov 20, 1982
23	NY BRONX	Haka	B11052	Male	Nov 03, 1981	Alive	WILD	WILD	40Y,1M,29D	Captive Birth/Hatch	
24	CHICAGOBR	FIONA	24803	Female	Dec 03, 1981	Dead	WILD	WILD	18Y,6M,12D	Captive Birth/Hatch	Jun 15, 2000
25	SD-WAP	82.2	395317	Male	Feb 14, 1982	Dead	88	89	21Y,5M,8D	Captive Birth/Hatch	Jul 22, 2003
26	SANDIEGOZ		083584	Female	Apr 22, 1983	Dead	8	10	0Y,0M,20D	Captive Birth/Hatch	May 12, 1983
27	NZP-CRC	MAORI	212220	Male	Jan 01, 1984 to Dec 31, 1984	Alive	WILD	WILD	37Y,6M,0D	Wild Birth/Hatch	
28	FRANKFURT	2	21767	Male	Jan 01, 1981 to Jan 31, 1981	Dead	WILD	WILD	8Y,11M,0D	Wild Birth/Hatch	Dec 16, 1989
29	SANDIEGOZ		029056	Female	May 18, 1985	Dead	8	10	0Y,0M,2D	Captive Birth/Hatch	May 20, 1985
30	SANDIEGOZ		034758	Female	May 15, 1986	Dead	8	10	0Y,0M,1D	Captive Birth/Hatch	May 16, 1986
31	NZP-WASH	MAIA	209774	Female	Jun 03, 1986	Dead	8	10	6Y,1M,6D	Captive Birth/Hatch	Jul 09, 1992
32	FRANKFURT		595	Undetermined	Oct 26, 1986	Dead	28	19	0Y,0M,0D	Captive Birth/Hatch	Oct 26, 1986
33	FRANKFURT		31789	Undetermined	Feb 27, 1987	Dead	28	19	0Y,0M,0D	Captive Birth/Hatch	Feb 27, 1987
34	FRANKFURT	TIPENI	21768	Male	Mar 24, 1987	Alive	28	19	34Y,9M,8D	Captive Birth/Hatch	
35	FRANKFURT	FOREIGNER = NOSE	21769	Male	Jul 31, 1987	Dead	28	19	18Y,0M,19D	Captive Birth/Hatch	Aug 19, 2005
36	FRANKFURT		21770	Female	Aug 15, 1987	Dead	28	19	0Y,0M,18D	Captive Birth/Hatch	Sep 02, 1987
37	FRANKFURT	Keriana	21772	Female	Sep 25, 1987	Dead	41	93	6Y,0M,18D	Captive Birth/	Oct 13, 1993

Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
										Hatch	
38	COLUMBUS	Baxter	107031	Male	Jul 12, 1988	Dead	8	10	21Y,7M,11D	Captive Birth/ Hatch	Feb 23, 2010
39	CHICAGOBR	KAPITI	910232	Female	Sep 27, 1988	Dead	102	92	3Y,6M,1D	Captive Birth/ Hatch	Mar 28, 1992
40	FRANKFURT	DIEGA	34024	Female	Mar 26, 1989	Dead	8	10	21Y,8M,25D	Captive Birth/ Hatch	Dec 21, 2010
41	SANDIEGOZ		300007	Male	Jan 01, 1978 to Dec 31, 1978	Dead	WILD	WILD	30Y,5M,21D	Wild Birth/ Hatch	Dec 23, 2008
42	LOSANGELE		003810	Female	May 26, 1990	Dead	8	10	1Y,7M,5D	Captive Birth/ Hatch	Dec 31, 1991
43	MEMPHIS		11788	Male	Jun 16, 1990	Dead	8	10	3Y,0M,15D	Captive Birth/ Hatch	Jul 01, 1993
44	SANDIEGOZ		391164	Male	Mar 15, 1991	Dead	8	10	0Y,0M,19D	Captive Birth/ Hatch	Apr 03, 1991
45	SANDIEGOZ		391224	Female	Apr 09, 1991	Dead	8	10	3Y,3M,23D	Captive Birth/ Hatch	Aug 01, 1994
46	SANDIEGOZ		392308	Undetermined	May 05, 1992	Dead	23	11	0Y,0M,12D	Captive Birth/ Hatch	May 17, 1992
47	TOLEDO	Koru	8731	Male	Aug 09, 1993	Alive	34	37	28Y,4M,23D	Captive Birth/ Hatch	
48	POZNAN	STROMER	B01405	Male	Dec 24, 1993	Dead	34	37	10Y,11M,24D	Captive Birth/ Hatch	Dec 18, 2004
49	SANDIEGOZ		494073	Male	Apr 25, 1994	Dead	23	11	0Y,0M,1D	Captive Birth/ Hatch	Apr 26, 1994
50	FRANKFURT		36629	Undetermined	Jul 08, 1994	Dead	34	40	0Y,0M,13D	Captive Birth/ Hatch	Jul 21, 1994
51	FRANKFURT	FOUL EGG	36795	Female	Oct 29, 1994	Dead	34	40	6Y,10M,19D	Captive Birth/ Hatch	Sep 17, 2001
52	SD-WAP		495062	Female	May 08, 1995	Dead	23	11	13Y,5M,25D	Captive Birth/ Hatch	Nov 02, 2008
53	FRANKFURT		37343	Female	Oct 23, 1995	Dead	34	40	0Y,0M,2D	Captive Birth/ Hatch	Oct 25, 1995
54	NZP-WASH	NESSUS	215360	Female	May 25, 1996	Dead	23	11	19Y,5M,5D	Captive Birth/ Hatch	Oct 30, 2015
55	SANDIEGOZ		496213	Male	Sep 16, 1996	Dead	23	11	0Y,0M,11D	Captive Birth/ Hatch	Sep 27, 1996
56	FRANKFURT		37945	Undetermined	Mar 06, 1997	Dead	34	40	0Y,0M,8D	Captive Birth/ Hatch	Mar 14, 1997
57	SANDIEGOZ		497027	Male	Mar 09, 1997	Dead	23	11	0Y,0M,3D	Captive Birth/ Hatch	Mar 12, 1997

Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
58	BERLINZOO	EREN	990172	Male	Feb 07, 1998	Alive	34	40	23Y,10M,25D	Captive Birth/Hatch	
59	FRANKFURT		38441	Undetermined	Feb 22, 1998	Dead	34	40	0Y,0M,0D	Captive Birth/Hatch	Feb 22, 1998
60	SANDIEGOZ		498066	Female	May 07, 1998	Dead	23	11	0Y,8M,25D	Captive Birth/Hatch	Feb 01, 1999
61	SANDIEGOZ		498144	Female	Jul 30, 1998	Dead	23	11	0Y,0M,1D	Captive Birth/Hatch	Jul 31, 1998
62	NZP-WASH	Epuni	214455	Female	Dec 02, 1998	Dead	34	40	3Y,6M,16D	Captive Birth/Hatch	Jun 18, 2002
63	ANTWERP	Ekaapa	13121	Female	Dec 20, 1998	Dead	34	40	6Y,5M,28D	Captive Birth/Hatch	Jun 17, 2005
64	BERLINZOO	FAUSTO	990173	Female	Jan 02, 1999	Dead	16	51	17Y,4M,20D	Captive Birth/Hatch	May 22, 2016
65	FRANKFURT	FELICITAS	38870	Female	Jan 16, 1999	Alive	16	51	22Y,11M,16D	Captive Birth/Hatch	
66	SANDIEGOZ		399160	Female	Apr 25, 1999	Dead	23	11	0Y,0M,19D	Captive Birth/Hatch	May 14, 1999
67	SANDIEGOZ		499129	Female	Aug 29, 1999	Dead	23	11	0Y,2M,5D	Captive Birth/Hatch	Nov 03, 1999
68	LESNA	GERRY	216187	Male	Jan 10, 2000	Alive	16	51	21Y,11M,22D	Captive Birth/Hatch	
69	FRANKFURT		39386	Undetermined	Jan 28, 2000	Dead	16	51	0Y,0M,14D	Captive Birth/Hatch	Feb 11, 2000
70	FRANKFURT	GONZO	39387	Male	Feb 06, 2000	Dead	34	40	3Y,7M,12D	Captive Birth/Hatch	Sep 18, 2003
71	FRANKFURT	DIEGO	40760	Male	Apr 17, 2000	Dead	23	11	10Y,4M,14D	Captive Birth/Hatch	Aug 31, 2010
72	LESNA	HANK	_____	Male	Feb 14, 2001	Dead	34	40	14Y,4M,1D	Captive Birth/Hatch	Jun 15, 2015
73	FRANKFURT		40040	Undetermined	Feb 21, 2001	Dead	16	51	0Y,0M,4D	Captive Birth/Hatch	Feb 25, 2001
74	NZP-CRC	Iwi	216017	Male	Feb 22, 2001	Alive	34	40	20Y,10M,10D	Captive Birth/Hatch	
75	COLUMBUS	GRUEN	103139	Female	May 09, 2001	Dead	16	51	11Y,9M,20D	Captive Birth/Hatch	Mar 01, 2013
76	FRANKFURT	PINK-BLUE	40127	Female	May 12, 2001	Dead	34	40	12Y,3M,2D	Captive Birth/Hatch	Aug 14, 2013
77	SANDIEGOZ		401072	Male	May 23, 2001	Dead	23	11	0Y,0M,6D	Captive Birth/Hatch	May 29, 2001
78	FRANKFURT		40128	Undetermined	Jun 02, 2001	Dead	16	51	0Y,1M,6D	Captive Birth/Hatch	Jul 08, 2001



Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
										Hatch	
79	SYRACUSE	Justus	B19150	Male	Feb 10, 2003	Alive	34	40	18Y,10M,22D	Captive Birth/Hatch	
80	SANDIEGOZ		403018	Male	Mar 11, 2003	Dead	23	11	0Y,0M,12D	Captive Birth/Hatch	Mar 23, 2003
81	BERLINZOO	Kaha	B03-00004	Male	Apr 20, 2003	Dead	58	64	16Y,0M,26D	Captive Birth/Hatch	May 16, 2019
82	BERLINZOO	WAI	Wai	Male	May 10, 2003	Dead	58	64	9Y,6M,11D	Captive Birth/Hatch	Nov 21, 2012
83	FRANKFURT	KELSEY	41370	Male	Jan 29, 2004	Alive	34	40	17Y,11M,3D	Captive Birth/Hatch	
84	BERLINZOO	MRS. X	_____	Female	May 03, 2004	Dead	58	64	6Y,2M,8D	Captive Birth/Hatch	Jul 11, 2010
85	ALPHEN	Lincoln	11227	Female	Nov 01, 2005	Dead	71	76	12Y,9M,4D	Captive Birth/Hatch	Aug 05, 2018
86	NZP-WASH	Manaia	215510	Male	Feb 13, 2006	Dead	27	54	6Y,3M,13D	Captive Birth/Hatch	May 26, 2012
87	BERLINZOO		_____	Undetermined	Mar 01, 2006 +/- 15 day	Dead	58	64	0Y,0M,0D	Captive Birth/Hatch	Mar 01, 2006 +/- 15 day
88	AUCKLAND		AA8127	Male	Mar 07, 1978	Dead	142	208	8Y,3M,7D	Captive Birth/Hatch	Jun 14, 1986
89	AUCKLAND		AAW122	Female	Apr 01, 1978 to Apr 01, 1978	Dead	WILD	WILD	11Y,3M,23D	Wild Birth/Hatch	Jul 24, 1989
90	AUCKLAND		19532	Male	Jul 02, 1969	Dead	WILD	WILD	10Y,8M,8D	Wild Birth/Hatch	Mar 10, 1980
91	AUCKLAND		19786	Female	Mar 20, 1974	Dead	WILD	WILD	13Y,6M,29D	Wild Birth/Hatch	Oct 19, 1987
92	OTOROHANG		R25635	Female	Jan 01, 1982 to Dec 31, 1982	Undetermined (Lost to follow up)	WILD	WILD	7Y,5M,30D	Wild Birth/Hatch	
93	SYDNEY	TIOTIO	910288	Female	Oct 10, 1977	Dead	WILD	WILD	16Y,2M,26D	Wild Birth/Hatch	Jan 05, 1994
95	ALPHEN	NIKAU	11834	Female	Feb 04, 2007	Dead	71	76	1Y,11M,12D	Captive Birth/Hatch	Jan 16, 2009
96	ALPHEN	NAITI	11835	Male	Mar 14, 2007	Dead	34	40	7Y,3M,26D	Captive Birth/Hatch	Jul 10, 2014
97	MOANA KOT		R28314	Male	Jan 01, 1971	Dead	WILD	WILD	25Y,6M,8D	Wild Birth/Hatch	Jul 09, 1996
98	WELLINGTN		R29699	Female	Jan 01, 1976	Dead	WILD	WILD	16Y,0M,0D	Wild Birth/Hatch	Jan 01, 1992
99	ANTWERP	Tipene	11603	Female	Jun 10, 1989	Dead	151	152	2Y,7M,26D	Captive Birth/Hatch	Feb 05, 1992

Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
100	ANTWERP	81.11	10109B	Female	Oct 08, 1981 to Oct 08, 1981	Dead	WILD	WILD	5Y,3M,13D	Wild Birth/Hatch	Jan 21, 1987
101	NY BRONX	STEWIE	B11051	Male	Jan 03, 1980	Alive	142	208	41Y,11M,29D	Captive Birth/Hatch	
102	OTOROHANG		32090	Male	Oct 17, 1983	Dead	WILD	WILD	17Y,6M,15D	Wild Birth/Hatch	May 02, 2001
103	WALSRODE	KIA ORA	AAN1	Male	Feb 27, 2007	Dead	58	64	12Y,11M,19D	Captive Birth/Hatch	Feb 15, 2020
104	SANDIEGOZ	AWA	B11027	Male	Mar 16, 2007	Alive	58	64	14Y,9M,16D	Captive Birth/Hatch	
105	BERLINZOO		890116	Undetermined	Jan 07, 1989	Dead	16	15	0Y,0M,0D	Captive Birth/Hatch	Jan 07, 1989
106	BERLINZOO		890117	Undetermined	Aug 26, 1989	Dead	16	15	0Y,0M,6D	Captive Birth/Hatch	Sep 01, 1989
107	BERLINZOO		880087	Female	Dec 22, 1988	Dead	16	15	3Y,3M,24D	Captive Birth/Hatch	Apr 15, 1992
108	NZP-WASH	Koa	215725	Male	Mar 07, 2008	Dead	27	54	6Y,1M,18D	Captive Birth/Hatch	Apr 25, 2014
109	SANDIEGOZ	CLAUDIUS	B11028	Male	Mar 26, 2008	Alive	58	64	13Y,9M,6D	Captive Birth/Hatch	
110	OTOROHANG	Raki	830001	Female	Jan 01, 1983 to Jan 31, 1983	Undetermined (Lost to follow up)	WILD	WILD	5Y,10M,1D	Wild Birth/Hatch	
111	OSAKA	kioto	385	Male	Mar 27, 1986	Dead	102	110	16Y,4M,20D	Captive Birth/Hatch	Aug 16, 2002
112	OSAKA	1	380	Male	~> Jan 01, 1969	Dead	WILD	WILD	24Y,3M,9D	Wild Birth/Hatch	Apr 10, 1993
113	OSAKA	Land	381	Female	~> Jan 01, 1970	Dead	WILD	WILD	0Y,9M,19D	Wild Birth/Hatch	Oct 20, 1970
114	OSAKA	3	382	Male	~> Jan 01, 1982	Dead	UND	UND	9Y,6M,10D	Captive Birth/Hatch	Jul 11, 1991
115	OSAKA	jun	383	Male	~> Jan 01, 1982	Alive	WILD	WILD	40Y,0M,0D	Captive Birth/Hatch	
116	OSAKA	Pukunui	386	Female	Oct 29, 1988	Alive	118	117	33Y,2M,3D	Captive Birth/Hatch	
117	RAINBOW S		944416	Female	~< Jun 01, 1977	Dead	WILD	WILD	18Y,2M,13D	Wild Birth/Hatch	Aug 14, 1995
118	RAINBOW S		944420	Male	Oct 24, 1979	Dead	WILD	WILD	12Y,0M,25D	Wild Birth/Hatch	Nov 18, 1991
119	OSAKA	5	384	Female	~> Jan 01, 1982	Dead	WILD	WILD	3Y,1M,9D	Wild Birth/Hatch	Feb 10, 1985
120	DOMBES	Ao	VA6057	Male	Mar 15, 2009	Dead	58	64	10Y,7M,23D	Captive Birth/Hatch	Nov 07, 2019

Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
										Hatch	
121	PHILADELPHIA		21930	Undetermined	~> Jan 01, 1897	Dead	WILD	WILD	1Y,7M,25D	Wild Birth/ Hatch	Aug 26, 1898
122	LONDON RP		6132	Undetermined	~> Jan 01, 1905	Dead	WILD	WILD	0Y,9M,12D	Wild Birth/ Hatch	Oct 13, 1905
123	LONDON RP		6131	Undetermined	~> Jan 01, 1905	Dead	WILD	WILD	0Y,11M,27D	Wild Birth/ Hatch	Dec 28, 1905
124	LONDON RP		6130	Undetermined	~> Jan 01, 1905	Dead	WILD	WILD	0Y,11M,2D	Wild Birth/ Hatch	Dec 03, 1905
125	LONDON RP		6129	Undetermined	~> Jan 01, 1905	Dead	WILD	WILD	0Y,11M,2D	Wild Birth/ Hatch	Dec 03, 1905
126	LONDON RP		6128	Undetermined	~> Jan 01, 1905	Dead	WILD	WILD	0Y,9M,20D	Wild Birth/ Hatch	Oct 21, 1905
127	LONDON RP		6127	Undetermined	~> Jan 01, 1905	Dead	WILD	WILD	0Y,8M,26D	Wild Birth/ Hatch	Sep 27, 1905
128	LONDON RP		6126	Undetermined	~> Jan 01, 1905	Dead	WILD	WILD	0Y,7M,4D	Wild Birth/ Hatch	Aug 05, 1905
129	LONDON RP		6135	Undetermined	Jan 01, 1905 +/- 6 month	Dead	WILD	WILD	13Y,7M,6D	Wild Birth/ Hatch	Aug 07, 1918
130	LONDON RP		6134	Undetermined	Jan 01, 1905	Dead	WILD	WILD	1Y,9M,23D	Wild Birth/ Hatch	Oct 24, 1906
131	LONDON RP		6133	Undetermined	~> Jan 01, 1905	Dead	WILD	WILD	1Y,1M,13D	Wild Birth/ Hatch	Feb 14, 1906
132	VIENNA		Undetermined	Undetermined	~> Jan 01, 1909	Undetermined (Lost to follow up)	WILD	WILD	1Y,4M,23D	Wild Birth/ Hatch	
133	ROTTERDAM		403963	Male	Jan 01, 1976 to Dec 31, 1976	Dead	WILD	WILD	5Y,6M,12D	Captive Birth/ Hatch	Jan 13, 1982
134	VIENNA		Indeterminate	Undetermined	~> Jan 01, 1908	Dead	WILD	WILD	2Y,4M,24D	Wild Birth/ Hatch	~> May 25, 1910
135	LONDON RP		6139	Undetermined	Jan 01, 1908 +/- 6 month	Dead	WILD	WILD	2Y,3M,12D	Wild Birth/ Hatch	Apr 13, 1910
136	LONDON RP		6142	Undetermined	Jan 01, 1912 to Jan 31, 1912	Dead	WILD	WILD	8Y,4M,9D	Wild Birth/ Hatch	May 25, 1920
137	LONDON RP		6143	Undetermined	~> Jan 01, 1914	Dead	WILD	WILD	0Y,6M,2D	Wild Birth/ Hatch	Jul 03, 1914
138	LONDON RP		6144	Undetermined	~> Jan 01, 1922	Dead	WILD	WILD	0Y,11M,16D	Wild Birth/ Hatch	Dec 17, 1922
139	LONDON RP	NGAPUHI	6145	Female	~> Jan 01, 1953	Dead	WILD	WILD	2Y,7M,8D	Wild Birth/ Hatch	Aug 09, 1955
140	LONDON RP		6146	Female	Jan 01, 1958	Dead	WILD	WILD	3Y,10M,15D	Wild Birth/ Hatch	Nov 16, 1961

Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
141	AUCKLAND		AA9536	Female	Jan 01, 1963 +/- 6 month	Dead	WILD	WILD	14Y,1M,24D	Wild Birth/Hatch	Feb 25, 1977
142	AUCKLAND	Whitehead	AA9532	Male	Jan 01, 1969	Dead	WILD	WILD	11Y,2M,9D	Wild Birth/Hatch	Mar 10, 1980
143	LONDON RP	Typical	6148	Female	Jan 01, 1973 to Dec 31, 1973	Dead	WILD	WILD	13Y,5M,8D	Wild Birth/Hatch	Dec 10, 1986
144	ROTTERDAM		403962	Female	Oct 01, 1978 to Oct 31, 1978	Dead	WILD	WILD	3Y,6M,16D	Wild Birth/Hatch	May 02, 1982
145	ROTTERDAM		403961	Female	Jan 01, 1979 +/- 15 day	Dead	WILD	WILD	1Y,2M,2D	Wild Birth/Hatch	Mar 03, 1980
146	ROTTERDAM	81.15	400005	Male	Jan 01, 1981 +/- 6 month	Dead	WILD	WILD	9Y,10M,23D	Wild Birth/Hatch	Nov 24, 1990
147	ROTTERDAM	81.13	400006	Female	Sep 01, 1981 +/- 15 day	Dead	WILD	WILD	6Y,7M,18D	Wild Birth/Hatch	Apr 19, 1988
148	MOANA KOT	Hoppy	NONE	Male	May 01, 1977 to May 31, 1977	Undetermined (Lost to follow up)	WILD	WILD	16Y,3M,1D	Wild Birth/Hatch	
149	WHANG KH	Dinkum	NONE	Female	Dec 04, 1978 +/- 15 day	Dead	WILD	WILD	15Y,1M,28D	Wild Birth/Hatch	Feb 01, 1994
150	STUTTART		V0699	Female	May 04, 1988	Dead	148	149	5Y,4M,4D	Captive Birth/Hatch	Sep 08, 1993
151	MOANA KOT		NONE	Male	Apr 01, 1971 to Apr 30, 1971	Dead	WILD	WILD	25Y,3M,25D	Wild Birth/Hatch	Aug 09, 1996
152	WELLINGTN	CLUBFOOT	B336	Female	Jul 01, 1976 to Jul 31, 1976	Dead	WILD	WILD	15Y,5M,16D	Wild Birth/Hatch	Jan 01, 1992
153	LONDON RP	Riki	B524	Male	May 17, 1985	Dead	151	152	4Y,7M,1D	Captive Birth/Hatch	Dec 18, 1989
154	LONDON RP	TE AHU	6149	Male	Sep 04, 1982	Dead	151	152	5Y,2M,18D	Captive Birth/Hatch	Nov 22, 1987
155	JURONG	Hoia	J16	Male	Apr 16, 1985	Dead	151	152	12Y,5M,24D	Captive Birth/Hatch	Oct 10, 1997
156	BERLINZOO	RAWIRI	900171	Female	Aug 31, 1989	Dead	41	93	5Y,2M,28D	Captive Birth/Hatch	Nov 28, 1994
157	ROTTERDAM		403964	Male	Jan 01, 1976 to Dec 31, 1976	Dead	WILD	WILD	3Y,8M,7D	Captive Birth/Hatch	Mar 08, 1980
158	LONDON RP	TAMAKI	6147	Male	Jan 03, 1976	Dead	WILD	WILD	7Y,9M,29D	Captive Birth/Hatch	Nov 01, 1983
159	LONDON RP		6125	Undetermined	~> Jan 01, 1905	Dead	WILD	WILD	0Y,6M,7D	Wild Birth/Hatch	Jul 08, 1905
160	BERLINZOO	Manu	B10-00006	Male	Mar 07, 2010	Alive	58	64	11Y,9M,25D	Captive Birth/Hatch	
161	WALSRODE	Hiri	AAN002	Female	Mar 30, 2010	Dead	27	54	8Y,7M,29D	Captive Birth/Hatch	Nov 28, 2018

Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
										Hatch	
162	NZP-CRC	Ngati Hine Tahi	215863	Male	Jan 22, 2005	Dead	WILD	WILD	15Y,1M,14D	Captive Birth/Hatch	Mar 07, 2020
163	FRANKFURT	Ngati Hine Rima	43954	Male	Jan 27, 2008	Dead	WILD	WILD	7Y,4M,28D	Captive Birth/Hatch	Jun 24, 2015
164	NZP-CRC	Ngati Hine Rua	216865	Female	Feb 12, 2005	Dead	WILD	WILD	15Y,0M,25D	Captive Birth/Hatch	Mar 08, 2020
165	SD-WAP	NGATI HINE TORU	810175	Female	Mar 21, 2006	Dead	167	166	5Y,1M,9D	Captive Birth/Hatch	Apr 30, 2011
166	AUCKLAND	Omeka	AA1081	Female	~> Jan 01, 1979	Dead	WILD	WILD	39Y,8M,14D	Wild Birth/Hatch	Sep 15, 2018
167	AUCKLAND	Kahu	100337	Male	Sep 28, 1987	Undetermined (Lost to follow up)	102	110	22Y,3M,4D	Captive Birth/Hatch	
168	BERLINZOO	WHA	B08-00119	Female	Jan 26, 2008	Alive	WILD	WILD	13Y,11M,6D	Captive Birth/Hatch	
169	NZP-WASH	Areta	215884	Female	Jun 15, 2010	Dead	27	54	0Y,7M,30D	Captive Birth/Hatch	Feb 14, 2011
170	COLUMBUS	Ariki	111013	Male	Mar 22, 2011	Dead	47	75	5Y,11M,8D	Captive Birth/Hatch	Mar 02, 2017
171	PAIGNTON	MANU	14739	Male	Apr 03, 2011	Alive	83	65	10Y,8M,29D	Captive Birth/Hatch	
172	COLUMBUS	Toa	111045	Male	Jun 23, 2011	Dead	47	75	5Y,7M,28D	Captive Birth/Hatch	Feb 20, 2017
173	NY BRONX	RANUI	B12105	Female	Jul 17, 2011	Dead	47	75	5Y,4M,1D	Captive Birth/Hatch	Nov 18, 2016
174	BERLINZOO	Omana	B11-00005	Female	Dec 11, 2011	Alive	27	54	10Y,0M,21D	Captive Birth/Hatch	
175	ALPHEN	MARANGA	Undetermined	Male	Jan 21, 2012	Dead	83	65	2Y,10M,26D	Captive Birth/Hatch	Dec 17, 2014
176	NZP-CRC	Pip	216070	Male	Mar 07, 2012	Alive	27	54	9Y,9M,25D	Captive Birth/Hatch	
177	ALPHEN	Pokey	14743	Male	Mar 11, 2012	Alive	47	75	9Y,9M,21D	Captive Birth/Hatch	
178	CENTRALPK		C12038	Female	Mar 28, 2012	Dead	47	75	0Y,0M,13D	Captive Birth/Hatch	Apr 10, 2012
179	WALSRODE	Tea	Z20216	Female	Apr 20, 2012	Alive	58	64	9Y,8M,12D	Captive Birth/Hatch	
180	ALPHEN	Mister X	15555	Male	May 14, 2012	Alive	58	64	9Y,7M,18D	Captive Birth/Hatch	
181	FRANKLINP	Aria	A14497	Female	Jul 22, 2012	Alive	47	75	9Y,5M,10D	Captive Birth/Hatch	

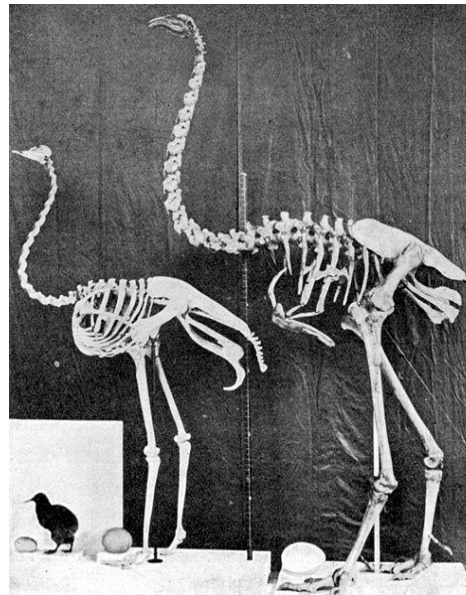
Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
182	TOLEDO		8269	Female	Jan 12, 2013	Dead	47	75	0Y,2M,16D	Captive Birth/Hatch	Mar 28, 2013
183	NZP-CRC	Manawa Ora	216225	Female	Jan 31, 2013	Alive	47	75	8Y,11M,1D	Captive Birth/Hatch	
184	WALSRODE	KAIMI	Z2193	Male	Apr 05, 2014	Alive	163	168	7Y,8M,27D	Captive Birth/Hatch	
185	FRANKFURT	MAHURU	44864	Female	Apr 20, 2014	Alive	163	168	7Y,8M,12D	Captive Birth/Hatch	
186	BERLINZOO	Taku	B14-00012	Male	Mar 20, 2014	Alive	58	64	7Y,9M,12D	Captive Birth/Hatch	
187	FRANKFURT	KAYTEE	45805	Male	Apr 14, 2014	Dead	58	64	5Y,8M,30D	Captive Birth/Hatch	Jan 13, 2020
188	SANDIEGOZ		414092	Male	Oct 23, 2014	Dead	109	21	0Y,0M,14D	Captive Birth/Hatch	Nov 06, 2014
190	FRANKFURT	PUAWEI	45145	Female	Mar 19, 2015	Alive	83	65	6Y,9M,13D	Captive Birth/Hatch	
191	FRANKFURT		45165	Undetermined	Apr 05, 2015	Dead	163	168	0Y,0M,0D	Captive Birth/Hatch	Apr 05, 2015
192	FRANKFURT	HARI	45226	Male	May 06, 2015	Alive	163	168	6Y,7M,26D	Captive Birth/Hatch	
193	NZP-CRC	Timata	216647	Female	Mar 11, 2016	Dead	109	21	5Y,5M,14D	Captive Birth/Hatch	Aug 25, 2021
194	SD-WAP	Kaha	817187	Male	May 10, 2016	Alive	162	164	5Y,7M,22D	Captive Birth/Hatch	
195	COLUMBUS	Hari	117046	Male	Jun 01, 2016	Alive	162	164	5Y,7M,0D	Captive Birth/Hatch	
196	SANDIEGOZ		416058	Female	Jun 04, 2016	Dead	109	21	0Y,2M,20D	Captive Birth/Hatch	Aug 24, 2016
197	NZP-CRC	Kake	216543	Male	Jul 31, 2016	Alive	162	164	5Y,5M,1D	Captive Birth/Hatch	
198	SD-WAP	ROA	818223	Female	Feb 22, 2016	Alive	83	65	5Y,10M,10D	Captive Birth/Hatch	
199	NY BRONX	ANAHERA	B18217	Female	Feb 27, 2016	Alive	83	65	5Y,10M,5D	Captive Birth/Hatch	
200	BERLINZOO	Tarita	B15-00027	Female	May 15, 2015	Alive	58	64	6Y,7M,17D	Captive Birth/Hatch	
201	BERLINZOO		600008	Undetermined	Mar 24, 2016	Dead	58	64	0Y,0M,0D	Captive Birth/Hatch	Mar 24, 2016
202	FRANKLINP	Kirihimete	A20410	Male	Dec 14, 2016	Dead	162	164	3Y,4M,16D	Captive Birth/Hatch	Apr 30, 2020
203	COLUMBUS	Haka	117047	Male	Jun 22, 2017	Alive	162	164	4Y,6M,10D	Captive Birth/	

Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
										Hatch	
204	BERLINZOO	Tamati	B15-00012	Male	Apr 17, 2015	Alive	58	64	6Y,8M,15D	Captive Birth/ Hatch	
205	NZP-CRC	Whetu	216638	Female	Jul 30, 2017	Alive	162	164	4Y,5M,2D	Captive Birth/ Hatch	
206	NZP-WASH		216230	Undetermined	Apr 02, 2013	Dead	27	54	0Y,0M,0D	Captive Birth/ Hatch	Apr 02, 2013
207	NZP-WASH		215919	Undetermined	Dec 25, 2010	Dead	27	54	0Y,0M,0D	Captive Birth/ Hatch	Dec 25, 2010
208	AUCKLAND		AA9786	Female	~< Mar 20, 1974	Dead	WILD	WILD	13Y,6M,29D	Wild Birth/ Hatch	Oct 19, 1987
209	PINOLA	RONGO	kiwi1801	Male	Mar 09, 2018	Alive	83	65	3Y,9M,23D	Captive Birth/ Hatch	
210	ALPHEN		17060	Undetermined	Jun 29, 2018	Dead	177	85	0Y,0M,12D	Captive Birth/ Hatch	Jul 11, 2018
211	ALPHEN	Tuatahi	17286	Male	Sep 18, 2018	Alive	177	85	3Y,3M,14D	Captive Birth/ Hatch	
212	ALPHEN	Rua	17323	Male	Oct 07, 2018	Dead	177	85	0Y,5M,1D	Captive Birth/ Hatch	Mar 08, 2019
213	LESNA	Maia	UNDETERMINED	Female	Jan 09, 2019	Alive	27	183	2Y,11M,23D	Captive Birth/ Hatch	
214	ALPHEN		18462	Female	Feb 03, 2019	Alive	27	183	2Y,10M,29D	Captive Birth/ Hatch	
215	TOLEDO	Ta'ne Mahuta	13849	Female	Mar 21, 2019	Alive	27	183	2Y,9M,11D	Captive Birth/ Hatch	
216	METROZOO	Paora	19B394	Male	Apr 09, 2019	Alive	27	183	2Y,8M,23D	Captive Birth/ Hatch	
217	PINOLA	Toro	Pinola	Male	May 20, 2019	Alive	162	164	2Y,7M,12D	Captive Birth/ Hatch	
218	SANDIEGOZ		1000553	Female	Jun 06, 2019	Alive	104	10	2Y,6M,26D	Captive Birth/ Hatch	
219	FRANKFURT	Tapu	46253	Male	Mar 25, 2019	Dead	83	65	0Y,7M,25D	Captive Birth/ Hatch	Nov 19, 2019
220	PINOLA	Rangatira	46470	Female	Mar 24, 2020	Alive	27	183	1Y,9M,8D	Captive Birth/ Hatch	
221	WALSRODE	WHETU	Z2194	Female	Mar 21, 2020	Alive	83	65	1Y,9M,11D	Captive Birth/ Hatch	
222	WALSRODE	RIWAKA	Z2195	Female	Mar 27, 2020	Alive	192	190	1Y,9M,5D	Captive Birth/ Hatch	
223	FRANKFURT	Mangari	46449	Female	Apr 05, 2020	Alive	192	190	1Y,8M,27D	Captive Birth/ Hatch	



Studbook ID	Current Location	House Name	Current Local ID	Sex Type	Hatch Date	Current Status	Sire	Dam	Age	Birth Type	Death Date
224	NZP-CRC		216981	Undetermined	Apr 28, 2020	Dead	162	164	0Y,0M,19D	Captive Birth/Hatch	May 17, 2020
225	NZP-CRC		217014	Male	Jun 14, 2020	Alive	27	183	1Y,6M,18D	Captive Birth/Hatch	
226	NZP-CRC		217080	Male	Sep 04, 2020	Alive	27	183	1Y,3M,28D	Captive Birth/Hatch	
227	FRANKLINP		F20436	Male	Dec 28, 2020	Alive	27	183	1Y,0M,4D	Captive Birth/Hatch	
228	FRANKFURT		46631	Female	Mar 06, 2021	Alive	192	190	0Y,9M,26D	Captive Birth/Hatch	
229	FRANKFURT		46633	Female	Mar 30, 2021	Alive	192	190	0Y,9M,2D	Captive Birth/Hatch	

Kiwi Ostrich South Island Moa





### Current Institutions

Institution Name	Mnemonic	Country	State/Province	Species360 Member	ZIMS Institution
Bronx Zoo/Wildlife Conservation Society	NY BRONX	United States	New York	YES	YES
Columbus Zoo and Aquarium	COLUMBUS	United States	Ohio	YES	YES
Osaka Tennoji Zoo	OSAKA	Japan	Ôsaka	YES	YES
Paignton Zoo Environmental Park	PAIGNTON	United Kingdom	Devon	YES	YES
Pinola Conservancy	PINOLA	United States	Louisiana	YES	YES
Rosamond Gifford Zoo at Burnet Park	SYRACUSE	United States	New York	YES	YES
San Diego Zoo	SANDIEGOZ	United States	California	YES	YES
San Diego Zoo Safari Park	SD-WAP	United States	California	YES	YES
Smithsonian Conservation Biology Institute	NZP-CRC	United States	Virginia	YES	YES
Toledo Zoological Gardens	TOLEDO	United States	Ohio	YES	YES
Vogelpark Avifauna	ALPHEN	Netherlands	Zuid-Holland	YES	YES
Weltvogelpark Walsrode	WALSRODE	Germany	Niedersachsen	YES	YES
Zoo Miami	METROZOO	United States	Florida	YES	YES
Zoo New England, Franklin Park Zoo	FRANKLINP	United States	Massachusetts	YES	YES
Zoologicka Garden & Chateau Zlin-Lesna	LESNA	Czechia	South Moravia	YES	YES
Zoologischer Garten Berlin AG	BERLINZOO	Germany	Berlin	YES	YES
Zoologischer Garten Frankfurt	FRANKFURT	Germany	Hessen	YES	YES



Kiwi at SCBI



## **NATURAL HISTORY**

Kiwi have only been found in New Zealand both historically and presently. New Zealand's seclusion from other landmasses for almost 65 (possibly 80 million years) million years created a unique landmass for birds. The most important fact would be the lack of mammals, with the exception of three small bat species the land evolved without mammal interference. Thus, one finds some of the most interesting bird species on the planet. The kiwi has become known as the Honorary Mammal of New Zealand, their physical and behaviors are much like a badger than birds. Kiwi are the oldest surviving avian species in New Zealand. Kiwi are believed to have been on New Zealand for at least 65 million years and possibly longer. Humans came to New Zealand about 1000 years ago and introduced both rats and dogs, thus starting the loss of a variety of bird life on the islands.

**Taxonomy (taken from Kiwi (*Apteryx spp.*) Recovery Plan 2018-2028**

Kiwi have been classified into five species, all of which are endemic to New Zealand (see Table 1). They belong to a distinct family of ratite birds, the Apterygidae, which is generally placed in its own order, Apterygiformes (Germano, et al., 2018), but sometimes grouped with other ratites and tinamous in the Struthioniformes (Germano, et al., 2018). Brown kiwi are a single species with four distinct regional populations in Northland, Coromandel, eastern North Island and western North Island (Weir et al., 2016).

Kiwi biology has become much more complicated than anyone previously thought which in turn has created a more complex way of dealing with the conservation of the birds in New Zealand. Due to ongoing research, the life cycles and behavior of kiwi differ greatly from one species to another. This will impact on how we manage our kiwi in captive situations. It has not been decided on how many species or subspecies of kiwi should or will be recognized but as a precaution different subspecies will be managed separately. As far as these impacts, the overseas population is negligible, by going through the historical data the majority of kiwi sent overseas has been from the Northland. With this in mind, the five new kiwi that came into our population in 2010 were all from eggs collected from the Northland.

### **Brown Kiwi (4 varieties)**

Previously the species was referred to as 'North Island Brown Kiwi'. Since the formal description of Rowi and Haast tokoeka, (formerly referred to as 'South Island Brown Kiwi'), the species is confined to the North Island, and hence the 'North Island' epithet is now superfluous.

- Northland brown kiwi
- Coromandel brown kiwi
- Western brown kiwi
- Eastern brown kiwi.

New Zealand list brown kiwi as: At risk-declining Population about 25,000 in 2008. The population is declining by about 2-3% a year. Without ongoing support, experts estimate brown kiwi will be extinct in the wild with two generations. Dogs are the primary threat to kiwi.

Brown kiwi are classified as 'nationally vulnerable' - (Miskelly et al., 2008) and as Vulnerable in the IUCN Red List (Birdlife International (2017)).

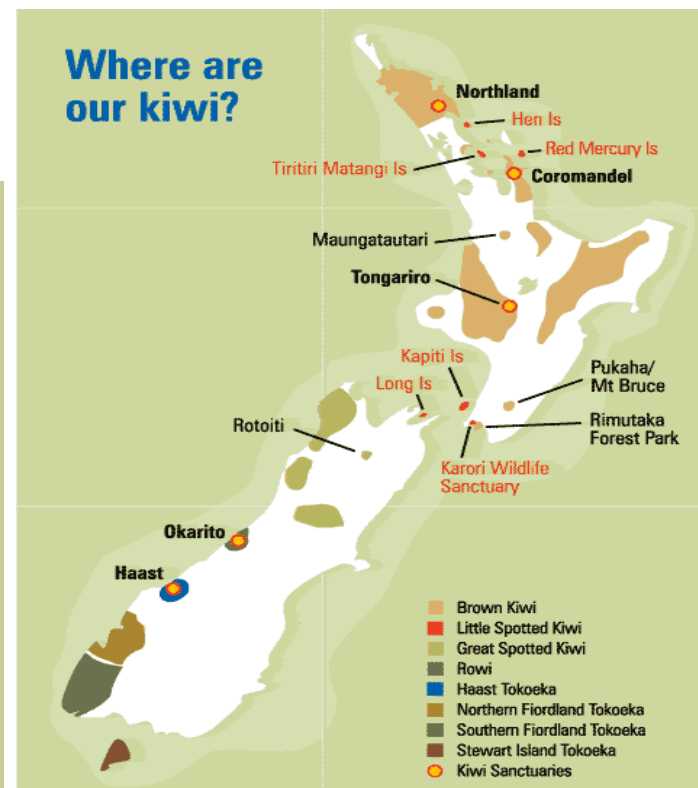
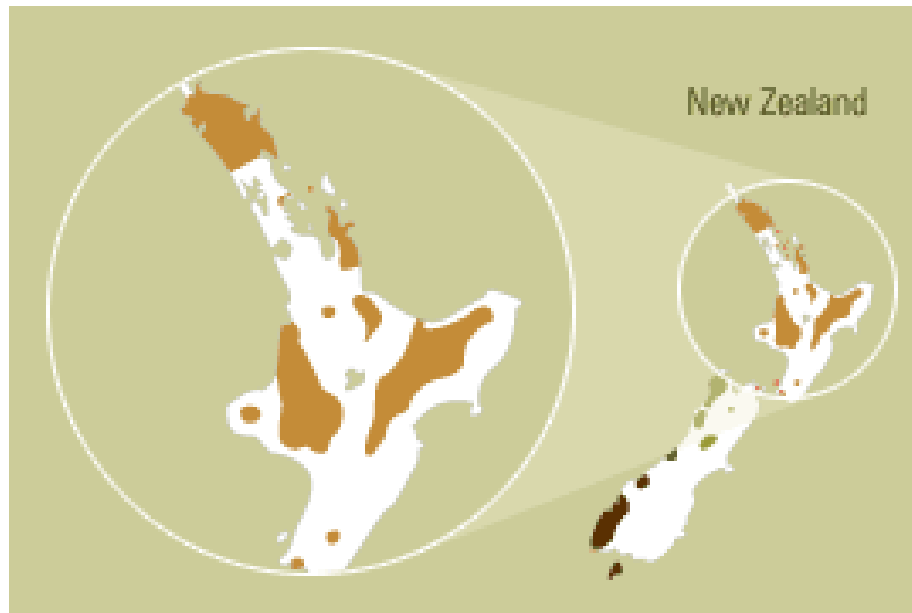
For the overseas kiwi the division of the brown kiwi will have little or no impact on our breeding situations with the exception that New Zealand considers our population as non-returnable for conservation purposes.

The brown kiwi is the only species kept in overseas institutions and is the most understood of the different kiwi species. This species is the one that has closer contact with human habitation, which has increased the bird's vulnerability. This species breeds faster and larger numbers than other species of kiwi but it has suffered huge losses in areas not managed, their numbers are halving every 15 years.

For more information on kiwi conservation programs see: 2018 Captive Management Plan for Kiwi 2018-2023  
[file:///C:/Users/BraderK/Desktop/2018\\_FINAL\\_ZAA\\_DOC\\_kiwi\\_cmp.pdf](file:///C:/Users/BraderK/Desktop/2018_FINAL_ZAA_DOC_kiwi_cmp.pdf)

Kiwi are known hardware eaters. The SSP recommends having a hand held metal detector. It is recommended that you scan your kiwi every month unless the male is incubating or the female is gravid.

### Brown Kiwi Distribution



The preferred habitat appears to be lowland and coastal indigenous forest, but due to the changes of native habitats kiwi have become more adaptable. Today they are found in many types of vegetation including reclaimed old farmland and exotic forests. In the Coromandel, Bay of Plenty and inland Taranaki kiwi are found in exotic pine forests. With little undergrowth and a more acidic soil, this is quite different from the native environment.

### **Kiwi Evolution and other interesting Facts**

Ancient Kiwi probably arrived on New Zealand about 65 million years ago and was only one species. New Zealand spilt from Gondwanaland about 80 million years ago. At various times the three major islands that make up New Zealand have come together and spilt apart. As the land-changed groups of kiwi were separated by many barriers, this caused isolated groups to evolve differently.

Recently (2016) newly published research by Jason Weir et. al shows that there were 17 species of kiwi, six of which are extinct, the remaining 11 identified are not known at this time to be separate species or races.

As stated earlier DNA has changed how we classify the various species of kiwi. What was thought of the brown kiwi has become several different species and varieties. This has also brought on new understanding of kiwi relatives. They are considered a ratite, a diverse group of flightless birds. Kiwi shared New Zealand with the now extinct moa's (eleven known species). It was once believed that kiwi and the moa's were closely related but DNA has shown that kiwi is more closely related to the extinct elephant bird from Madagascar. Most researchers now believe that the moa ancestor was aboard New Zealand when it spilt from Gondwanaland and the kiwi migrated later. Most people believe that the kiwi crossed over to New Zealand over a series of islands that have since disappeared. Other theories include that the kiwi ancestor was on New Zealand before it spilt off. The least likely explanation is that kiwi actually flew to New Zealand, but the coincidence that all ratites lost the ability to fly (with the exception of the tinamous) is unlikely, and it is more logical to assume that they had a flightless ancestor. Another thought is that the kiwi ancestor was a much larger bird due to the size of the kiwi's egg. The size of the kiwi egg suggests a bird that would have been as large as the cassowary, which would have been too large to fly across the Tasman Sea even when New Zealand was closer to Australia. Kiwi are flightless, have only vestigial wings and no external tail. They are largely nocturnal and make loud (very far carrying) repeated shrill (male) or guttural (female) calls, mainly in the two hours after dark and again before dawn. Daytime dens and nests are made in burrows, hollow logs or under dense vegetation.



There are eight characteristics that make the kiwi more like a mammal than a bird.

**First)** the kiwi is the only bird in the world with external nostrils at the tip of its beak. Its sense of smell is second only the condor and not by much. They can locate food by smell alone. The bill also has specialized vibration/pressure-sensing nerve endings at its tip to detect prey movement.

**Second)** the kiwi's sense of hearing is well developed, its ear openings are large and visible, much like a dog cocking its head the kiwi can be seen cocking its head to direct its ear to soft or distant noises.

**Third)** the kiwi shape is cone shaped with a strong neck and small head. It does not have a keel and the bones are marrow filled. The legs make up one third of the birds weight. Unlike other ratites, the kiwi has four toes. They also have fleshy footpads, so they can walk quite silently.

**Fourth)** the kiwi eye sockets are not separated by a plate as most birds are. Instead, they are divided by large nasal cavities. Their eyes are small and built for nocturnal habits. However, they see quite well in daylight and the Southern Tokoeka on Stewart Island emerges from their burrows to forage by day.

**Fifth)** they have a lower blood temperature than other birds with a range of 37-38C.

**Sixth)** females have two functioning ovaries, if a female produces more than one egg, ovulation occurs in alternative ovaries.

**Seventh)** they create burrows for nesting and sleeping.

**Eighth)** its plumage is shaggy and hair like and has cat-like (rictal bristal) whiskers on its face and the around the base of its bill, much like a mammal.

Kiwi are strong runners and are capable of swimming rivers.

The female kiwi is about 20% larger than the male and is the dominant bird in the relationship. The female has a slightly curved beak than the male.

Average brown kiwi Weights

Male: 1.5 kg – 2.2 kg

Female: 2.0 kg – 3.0 kg

Females tend to gain quite a bit of weight prior to egg laying with some females going over 4.0kg.

Obesity in captive males can be problem and weights should be monitored. If you have an obese kiwi weighing once a month unless the bird is breeding, kiwi like other species will gain weight prior to breeding.

Male and female kiwi have very different vocalizations:

Male: <https://www.doc.govt.nz/globalassets/documents/conservation/native-animals/birds/kiwi-cd/male-ni-brown-kiwi.mp3>

Female: <https://www.doc.govt.nz/globalassets/documents/conservation/native-animals/birds/kiwi-cd/female-ni-brown-kiwi.mp3>

Kiwi are territorial birds, especially males and fiercely protect their areas. Their fights have led to deaths. Generally, once a territory is established the disputes are resolved by afar, by vocalizations. The size of territories varies from 2 hectares to 100 hectares, depending on the food supply. The brown kiwi live only with their mates, their offspring are independent and move off their parents turf any where's from 30 days to six months.

Kiwi tend to stay with their mates for life long (occasionally divorces do occur; studies have shown pairs being together in the wild as long 25 years. We now know that kiwi have a long life, time will tell us exactly how long that is, but 30 – 60 years might not be unusual. They are monogamous.



As stated above the brown kiwi can lay up to 4 eggs a season without ill effects. They give no care to their offspring. Kiwi do not imprint as other birds so no harm is done by hand rearing. Research by Department of Conservation and others have shown that the Operation Nest Egg offspring showed no disadvantage after being released back into the wild.

### Kiwi Diet

Kiwi are omnivores with the majority of their diets made up of invertebrates. Kiwi in the wild have huge menu of native insects and the size of what they can devour would surprise some. With their nostrils located at the tip of their bill (the only bird in the world) and the second best sense of smell of all (the condor bases on the size of the olfactory bulbs) these birds are more like a mammal hunting for their food. They spend a good portion of their night looking under leaf piles, digging into soil for tasty insects.

Diet in the wild includes: worms (178 native worms and 14 introduced species), including one giant species the size of a garden hose, spiders, slugs, snails, woodlice, centipedes, millipedes, beetle larvae, caterpillars, wetas, crickets, ants cicada nymphs. Kiwi will also hunt and eat crayfish (known as freshwater lobsters up to 10 centimeters long), frogs, and native black cockroaches. Kiwi have been seen foraging in stream and rivers to hunt for aquatic insects, Koura (native freshwater crayfish) and occasionally baby eels).

The invertebrates contribute to the protein in their diet, for vitamins and nutrients kiwi will eat a variety of native fruit, usually berries and the seeds of various native trees and bushes. In the Northland, kiwi will eat fungus.

Kiwi must be given access to fresh water daily though in the wild kiwi probably drink small amounts of water due to the high content of water found in worms. Kiwis are good swimmers and have been known to swim across large rivers to get to feeding grounds.

Kiwi also need a small amount of pebbles and or grit to aid in their digestion.

The New Zealand captive kiwi management group is coming out with a recommended captive diet (based on nutrition studies there) for their captive institutions. As soon as it becomes available, the SSP will be send the diet out to the overseas institutions.

### Breeding Biology

The sexes of kiwi have no sexual dichromatism but substantial sexual dimorphism with the female of the species being larger and the dominant of the pair. The female choose their mate. The females have two functioning ovaries and can lay up to four or five eggs in a

season. Captive kiwi seem to stick to the New Zealand time as far as the higher percentage of egg laying is from November to March (New Zealand's spring/summer) but can lay any month of the year. The male of the species will do all of the incubation which can last anywhere from 63 up to 90 days of incubation, though typically it's about 80 days with artificial incubation. Most zoos' will leave the egg under the male for the first 30 days of natural incubation and then pull the egg to finish. It is highly recommended to follow the protocol for kiwi eggs developed for Operation Nest Egg.

Kiwi form a very long term if not lifelong pair bonds. Courtship is not well documented, though males in captivity have been seen leaping and hopping around their enclosures just before breeding season. Copulation takes place a few weeks before laying. The male initiates the mating by approaching the female from behind and tapping or stroking her neck. There are soft grunting noises or mewing from one or both birds. The female then crouches low with her head and neck extended and bill resting on the ground. The male mounts her and will grasp the female's back feathers to keep his balance.

Egg laying will take place in about 2-3 weeks with the male doing all the incubation and the female may return in 22-25 days later to lay a second egg.

The females are in top condition for the breeding season and will use stored reserves of their body weight to help grow their large egg, which is one of the largest eggs per weight of any bird species. The female in the last few days before laying may choose to stand in water and will stop eating before laying. The egg contains between 60-65 percent of yolk. The chick will emerge fully feathered but extremely fragile. The yolk sac inside of the young bird will sustain the chick for several weeks. The young birds cannot even stand until 4-5 days old and are extremely fragile. The young chicks have been described as an egg without a shell. The chicks will venture out of the burrow after about a week or slightly longer. They will leave the parents' territory anywhere from 30 days up to six months but receive no parental care. Dispersal of juveniles is often local but some have been tracked up to 30km from their natal site. Juveniles grow very slowly, taking 3-5 years to reach adult size.

Kiwi do not imprint so hand rearing is the best option of captive kiwi to ensure greater success of hatching and the success of the young.

Kiwi Vet Manual: <https://www.doc.govt.nz/globalassets/documents/science-and-technical/sap245entire.pdf>

Operation Nest Egg chick Manual: <https://www.doc.govt.nz/Documents/conservation/native-animals/birds/operation-nest-egg-protocols.pdf>

Please email SB keeper for copies of husbandry manual: [braderk@si.edu](mailto:braderk@si.edu)

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