

Table 1. Estimated sizes and trends of Antarctic fur seal (*Arctocephalus gazella*) populations.

Site	Pup numbers	Total population	Year of census	Mean annual rate of change	Reference
Macquarie Island	152 <sup>a</sup>		1999/00	increasing (1988/89 to 99/00) <sup>a</sup>	Goldsworthy (pers. comm.)
	165 <sup>a</sup>		2003/04	stable	Goldsworthy (pers. comm.)
	133		2006	+ 7.1%	Lancaster <i>et al.</i> (2006) Goldsworthy (pers. comm.)
Heard Island	248		1987/88	+ 23% (1962/63 to 87/88)	Shaughnessy (1993)
	1,012		2000/01	+ 12.0 % (1986/87 to 2000/01)	Page <i>et al.</i> (2003)
	1,278		2003/04	+ 8.1% (2000/01 to 2003/04) stable (2003/04 – 2007/08)	Goldsworthy (pers. comm.)  Goldsworthy (pers. comm.)
McDonald Island	100	300	1979/80	increasing	Johnstone (1982)
Iles Nuageuses (Iles Kerguelen)	2,500 <sup>e</sup>		1984/85	increasing	Jouventin and Weimerskirch (1990)
	5,000	?	2000	increasing	Lea (pers. comm.)
Courbet Peninsula (Iles Kerguelen)	2	1,332	1984	Increasing	Bester and Roux (1986)
	>200	?	1998	Increasing	Guinet (pers. comm.)
	1,500- 1,700	?	2000	increasing	Lea (pers. comm.)
Ile de la Possession (Iles Crozet)	67	?	1992/93	+ 21.4% (1983 to 92)	Guinet <i>et al.</i> (1994)
	234	?	1999/00	+ 16.9% (1992 to 1999)	Guinet (pers. comm.)
	295	?	2003/04	+ 5.9% (1999/00 to 2003/04)	Guinet (pers. comm.)
Marion Island	251 <sup>c</sup>	1,205 <sup>d</sup>	1994/95	+ 17.0% (1988/89 to 94/95)	Hofmeyr <i>et al.</i> (1997)
	759 <sup>c</sup>	3,821	2003/04	+17.0% (1994/95 to 2003/04)	Hofmeyr <i>et al.</i> (2006)
	1105	5,302	2007	+13.9% (2003/04 to 2007)	De Bruyn (pers. comm., unpublished data)
Prince Edward Island		200	1981/82	increasing	Kerley (1983)
	400	2000 <sup>l</sup>	2001/02	+ 16.2%	Bester <i>et al.</i> (2003)
Nyrøysa (Bouvetøya)	2,000	>9,501	1989/90	+7.0% (1978/79 to 89/90)	Bakken (1991)
	15,523 <sup>c</sup>	66,128	2001/02	+0.1% (1996/97 to 2001/02)	Hofmeyr <i>et al.</i> (2005)
	10,994	46,834	2007/08	- 5.6% (01/02 to 07/08)	Hofmeyr (pers. comm., unpublished data)
South Georgia	<600,000 <sup>e</sup>	2,700,000 <sup>f,g</sup>	1990/91	+ 9.8% (1976/77 to 90/91)	Boyd (1993)
		4,500,000 – 6,200,000 <sup>f,g</sup>	1999/00	+6% to 14% (1990/91 to 99/00)	Boyd (pers. comm.)

South Sandwich Islands	<500 346	<2,000	1962/63 1997/98	? stable	Holdgate (1962) Boyd (pers. comm.)
South Orkney Islands	<1,000		1970/71	?	Laws (1973), Boyd (1993)
South Shetland Islands	9,300  10,057 <sup>h</sup>		1991/92- 95/96  2000/01	+ 11% (1994/95 to 95/96)  + 0.9% (1995/96 to 01/02)	J.L. Bengtson and D. Torres (pers.comm), Aguayo <i>et al.</i> (1992) Goebel <i>et al.</i> (2003)
Cape Shirreff (SSSI No32, S. Shetland Is.)	5,313  8,455  8,577		1991/92  1999/00  2001/02	+ 14% <sup>i</sup> (1986/87 to 91/92) + 6% <sup>i</sup> (1991/92 to 99/00)  +4.6% <sup>i</sup> (1992/93 to 2001/02)	Hucke-Gaete (1999)  Hucke-Gaete (pers. comm.), Vallejos <i>et al.</i> (2000)  Hucke-Gaete <i>et al.</i> (2004)
Cape Shirreff and San Telmo Islets	8,911  8,997  9,067  8,018  9,156 <sup>j</sup>  6,099	21,190 <sup>j</sup>  21,815 <sup>j</sup>  21,652 <sup>j</sup>  22,470 <sup>j</sup>  21,299 <sup>j</sup>  23,167 <sup>j</sup>  14,244	2002/03  2003/04  2004/05  2005/06  2006/07  2007/08	+ 2.9% (total pop. 01/02 to 02/03) - 0.7% (total pop. 02/03 to 03/04) + 3.8% (total pop. 03/04 to 04/05) - 5.2% (total pop. 04/05 to 05/06) + 8.8% (total pop. 05/06 to 06/07) - 38.5% (total pop. 06/07 to 07/08)	Vallejos <i>et al.</i> (2003) Vargas <i>et al.</i> (2004) Vargas <i>et al.</i> (2005) Vargas <i>et al.</i> (2006) Vargas <i>et al.</i> (2007) Torres (pers. comm.)

- a - For populations of both *A. tropicalis* and *A. gazella*  
b - Corrected for observer undercount  
c - Corrected for precount mortality  
d - Recalculated from population values in publication  
e - Number of breeding females  
f - Estimated from the number of breeding females  
g - Standard deviation = 300,000  
h - Standard error = 140  
i - Calculated from pup counts  
j - Estimated through logistic model

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Table 2. Estimated sizes and trends of subantarctic fur seal (*Arctocephalus tropicalis*) populations.

Site	Pup numbers	Total population	Year of census	Mean annual rate of change	Reference
Macquarie Island	152 <sup>a</sup>		1999/00	increasing (1988/89 to 99/00) <sup>a</sup>	Goldsworthy (pers. comm.)
	165 <sup>a</sup>		2003/04	Stable	Goldsworthy (pers. comm.)
	48		2006	+13.6%	Lancaster <i>et al.</i> (2006) Goldsworthy (pers. comm.)
Heard Island	1	13	1987/88	?	Goldsworthy and Shaughnessy (1989)
	1		2000/01		Page <i>et al.</i> (2003)
	1		2003/04	stable (2003/04 – 2007/08)	Goldsworthy (pers. comm.) Goldsworthy (pers. comm.)
Ile Amsterdam	>9,638 <sup>b</sup>		1992/93	+ 0.4% (1981/82 to 92/93) <sup>e</sup>	Guinet <i>et al.</i> (1994)
	(partial census)		2002/03	Stable 1992/93 to 2002/03	Guinet (pers. comm.)
Ile Saint Paul	365		1992/93	+ 23.8% (1984/85 to 92/93) <sup>e</sup>	Guinet <i>et al.</i> (1994)
Ile de la Possession (Iles Crozet)	190		1990/91	+ 21.6% (1978-91) <sup>e</sup>	Guinet <i>et al.</i> (1994)
	251		1999/00	+ 3.1%	Guinet (pers. comm.)
	322		2003/04	(1990/91-1999/00) <sup>e</sup> +6.4% (1999/00-2003/04)	Guinet (pers. comm.)
Marion Island	10,137 <sup>c,d</sup>	48,658	1994/95	+ 1.8% (1988/89 to 94/95)	Hofmeyr <i>et al.</i> (1997)
	14,915 <sup>c,d</sup>	71,591	2003/04	+5.2% 1994/95 to 2003/04	Hofmeyr <i>et al.</i> (2006)
Prince Edward Island	5,372 <sup>c,d</sup>		1988/89	+ 9.7% (1981/82 to 88/89)	Wilkinson and Bester (1990)
	15,000 <sup>f</sup>			+ 9.5% (1987/88 to 2000/01)	Bester <i>et al.</i> (2003)
Gough Island	>53,076 <sup>b,c,d</sup>		1977/78	+ 14.9% (1955 to 1977/78) <sup>e</sup>	Bester (1987)
	>55,187 <sup>g</sup>		2005/06	+3.8% (1977/78 to 2005/06)	Bester <i>et al.</i> (2006)
	>55,538 <sup>g</sup>		2007/08	+0.6% (2005/06 to 2007/08)	Bester (pers. comm.)
Tristan da Cunha	50	250	1993/94	Increasing	C. Glass (pers. comm.)
	?	700	1998/99	Increasing	C. Glass (pers. comm.)
Nightingale Island (Tristan da Cunha Group)	?	>500	1998/99	Increasing	C. Glass (pers. comm.)
Inaccessible Island (Tristan da Cunha Group)	>3	>200	1999/00	Increasing	P.G. Ryan (pers. comm.)

- a - For populations of both *A. tropicalis* and *A. gazella*
- b - Extrapolation based on a proportion of the total populated area
- c - Corrected for observer undercount
- d - Corrected for pre-count mortality
- e - Recalculated from population values in publication
- f – Extrapolated from peak adult male counts, and known adult male:pup ratios, in breeding colonies
- g – Extrapolated from observed 8.4% increase in pup production on southeast coast, and assumption of stable numbers for the rest of the island.

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Table 3. Estimated sizes and trends of southern elephant seal (*Mirounga leonina*) populations within the three stocks of the Southern Ocean.

Stock	Locality	Year of census	Estimated pup production	Percent annual rate of change	Period of change	Trend in population abundance	Reference
South Georgia	South Georgia	1995	113,444	0	1985-1995	Stable	Boyd <i>et al.</i> (1996)
					-2008	Increasing?	Fedak (pers.comm.) anecdotal evidence
	South Orkney Islands	1985	<100	?	1948-1985	Uncertain	McCann (1985)
	Bouvetøya	1998	89	?	-	Uncertain	Kirkman <i>et al.</i> (2001)
	Falkland Islands	1960	approx. 1,000	?	-	Uncertain	Laws (1960)
					-2008	Increasing?	Fedak (pers.comm.) anecdotal evidence
	Sea Lion Island (Falklands)	2001	522	0	1989-2001	Stable	Galimberti <i>et al.</i> (2001), (pers. comm.)
		2003	501	-10.9	2002-2003	Declining ?	Galimberti (pers. comm.)
		2007	532		1989-2007	Stable	Galimberti (pers.comm.)
	Gough Island	1998	18	-3.3	1975-1998	Declining	Bester <i>et al.</i> (2001)
	King George Island	1995	476	-5.7	1980-1995	Declining	Vergani and Stanganelli (1990), Carlini (pers. comm.)
		1999	301	-6.0	1995-1999	Declining	Carlini (pers. comm.)
		2003	290-400	?	1999-2003	Fluctuating	Carlini (pers. comm.)
	Nelson Island (Duthoit Point only)	1985	106	?	-	Uncertain	Vergani <i>et al.</i> (1987)
2003		50-135	?	1985-2003	Fluctuating	Carlini (pers. comm.)	
Valdés Peninsula	1982	6,737	+5.1	1975-1982	Increasing	Vergani <i>et al.</i> (1987)	
	1999	13,655	+3.6	1982-1999	Increasing	Lewis <i>et al.</i> (1998), Lewis (pers. comm.)	
	2001	14,510 <sup>a</sup>	+3.5	1982-2001	Increasing	Lewis (pers.comm.)	
Livingston Island (Cape Shirreff only)	2003	3-84	?	1998-2005	Fluctuating	Goebel (pers. comm.)	
Iles Kerguelen	Marion Island	1994	423	-4.3	1986-1994	Declining	Pistorius <i>et al.</i> (1999)
		1997	423	-2.5	1991-1997	Declining	Pistorius <i>et al.</i> (1999)
		2001	434	0	1994-2001	Stable	Pistorius <i>et al.</i> (2004)
		2005	453	+0.6	1994-2005	Stable	Bester (pers. comm.)
		2007	516	+6.1	2005-2007	Increasing?	Bester (pers.comm.)
	Prince Edward Island	2004	130	-4.0	1977-2004	Declined	Bester & Hofmeyr (2005)
	Heard Island	1985	16,300	~-1.8	1949-1985	Declining	Burton (1986), Slip and Burton (1999)
1992		17,000 to 18,000	?	1985-1992	Increasing?	Slip and Burton (1999)	

	Iles Kerguelen (Courbet)	1977 1992 1997	45,000 43,000 43 782	-4.1 0 +1.1	1970-1977 1984-1992 1987-1997	Declining Stable? Stable/increasing?	Van Aarde (1980) Guinet <i>et al.</i> (1992) Guinet <i>et al.</i> (1999)
	Iles Crozet (Possession)	1976 1992 1997	approx. 3,000 575 570	-5.8 ? 0	1966-1976 1980-1992 1990-1997	Declining Decreasing Stable	Barrat and Mougin (1978) Guinet <i>et al.</i> (1992) Guinet <i>et al.</i> (1999)
Macquarie Island	Macquarie Island	1985 1997 2003 2004	24,000 19,300 22,200 20,374	-2.1 -1.4 +1.6	1949-1985 1988-1997 1997-2003	Declining Declining Increasing Stable to Increasing	Hindell and Burton (1987) Burton (pers. comm.) Burton (pers. comm.) Van den Hoff <i>et al.</i> (2007)
	Campbell Island	1986	5	-8.6	1947-1986	Declining	Taylor and Taylor (1989)
	Antipodes Island	1978	113	?	-	Uncertain	Taylor and Taylor (1989)

a - 4 % mortality added (actual pup production included adult females, weaned pups and dead pups)

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