



Agreement on the Conservation of Albatrosses and Petrels

Fourth Meeting of Advisory Committee

Cape Town, South Africa, 22 – 25 August 2008

Gap Analysis of Remote Tracking Data

Author: BirdLife International

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Submitted by: BirdLife International

1. INTRODUCTION

The Global Procellariiform Tracking Database was established in 2003 through the collaboration of scientists from around the world, incorporating around 90% of existing remote tracking data for albatross and petrel species. Initial results from analysis of the database were published in *Tracking Ocean Wanderers* (BirdLife International 2004). Since 2003, the database has continued to grow as new datasets have been added, and it has proven a vital conservation tool. In particular, the database has facilitated analysis of the global distribution of ACAP species, and overlap with fisheries. Analyses of tracking data have been presented to CCAMLR and to all five of the world's tuna commissions in relation to overlap with their fishing effort. In 2008, further analyses will be presented to the Western and Central Pacific Fisheries Commission (WCPFC) and the International Commission for the Conservation of Atlantic Tunas (ICCAT).

2. DATA HELD WITHIN THE TRACKING DATABASE

Remote tracking data submitted to the Global Procellariiform Tracking Database represent 20 of the 22 species of albatross, both species of giant-petrel, and several species of petrel and shearwater. Table 1 indicates the data currently held in the tracking database in relation to ACAP species and the North Pacific albatross species. Some gaps are currently being filled by ongoing research. Where we are aware of research in progress, these are indicated in the table with an asterisk.

The data shown in Table 1 indicate great success in tracking of ACAP species. However, key data gaps remain for some species and sites, which influence overall estimates of albatross and petrel distribution. Overall, fewer data exist on the non-breeding distribution of birds, particularly in relation to juvenile and immature life history stages. Based on Table 1, additional key gaps include remote tracking data for Salvin's Albatross, Light-mantled Albatross; Indian Yellow-nosed Albatross; Grey-headed Albatross in relation to breeding sites in the Indian Ocean; the non-breeding distribution of Waved Albatross; for both species of giant-petrel; and for all five ACAP petrel species. Ideally, analysis of distribution would be based on at least 10-15 tracks for each breeding stage, and preferably each sex, before results would be considered to approach reliability, though the effect of sample size varies between species (BirdLife International 2004). Increases in sample sizes for some species and sites would be of great value.

References

BirdLife International. 2004. *Tracking Ocean Wanderers: the global distribution of albatrosses and petrels. Results from the Global Procellariiform Tracking Workshop, 1-5 September 2003, Gordon's Bay, South Africa*. BirdLife International, Cambridge, UK: 100 pp.

Table 1. Remote tracking data held within the Global Procellariiform Tracking Database in relation to ACAP listed species and the three North Pacific albatross species. All tracks are satellite tracking (PTT) data unless otherwise specified. PTT = Platform Terminal Transmitter (satellite), GLS = Geolocator, GPS = Global Positioning System. Blank cells indicate no data held in the tracking database. Values in brackets indicate tracks in the process of being incorporated in the Tracking Database. Asterisks indicate where research is understood to be in progress.

Species (IUCN Threat Status)	Site	Annual Breeding Pairs	% Global Popn	Adult Breeding	Number of Tracks			Non- breeding Total
					Adult Non- breeding	Juveniles/ Immatures	Unknown age	
Amsterdam Albatross (Critically Endangered)	Ile Amsterdam	17	100%	15*		*		
	Total	17		15				
Antipodean Albatross (Vulnerable)	Antipodes Is.	5,180	47%	79	25	3		28
	Auckland Is.	5,831	53%	43	22			22
	Campbell Is.	6	<1%					
	Unknown					1		1
	Total	11,017		122	48	3		51
Atlantic Yellow-nosed Albatross (Endangered)	Gough Is.	5,250	15%	(38GLS)	(38GLS)			38
	Tristan da Cunha Is.	29,750	85%	*	*			
	Total	35,000		38	38			38
Black-browed Albatross (Endangered)	Antipodes Is.	115	<1%					
	Campbell Is.	140	<1%					
	Chile	122,870	20%	165+10GLS	5GLS			5
	Iles Crozet	880	<1%					
	Falkland Islands (Islas Malvinas) ¹	399,416	66%	206+78GLS*	1+38GLS*	3		42
	Heard & McDonald Is.	679	<1%					
	Iles Kerguelen	4,270	1%	26*	*			
	Macquarie Is.	186	<1%	7				
	Snares Is.	1	<1%					
	South Georgia (Islas Georgias del Sur) ¹	74,296	12%	365+148GLS	3+49GLS			52
	Unknown					2	6	8
Total	602,853		1,005	98	9		107	
Black-footed Albatross (Endangered)	Hawaiian Is.	59,115	96%	99	1+24GLS	10		35
	Ogasawara Gunto (Bonin Is.)	978	2%	*				
	Senkaku Retto	56	<1%					
	Torishima (Izu Shoto)	1,560	3%					
	Unknown					20	13	33
Total	61,709		99	45	23		68	
Buller's Albatross (Near Threatened)	Chatham Is.	18,150	57%	*	*			
	Solander Is.	4,912	15%	49	8		129	137
	Snares Is.	8,713	27%	180	24+19GPS	73		116
	Three Kings	8	<1%					
	Total	31,783		229	51	73	129	253

¹ A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Islas Malvinas), South Georgia and South Sandwich Islands (Islas Georgias del Sur e Islas Sandwich del Sur) and the surrounding maritime areas.

Species (IUCN Threat Status)	Site	Annual Breeding Pairs	% Global Popn	Adult Breeding	Number of Tracks			Non- breeding Total	
					Adult Non- breeding	Juveniles/ Immatures	Unknown age		
Campbell Albatross (Vulnerable)	Campbell Is.	21,000	100%	10					
	Total	21,000		10					
Chatham Albatross (Critically Endangered)	Chatham Is.	4,575	100%	16+3GPS	17	2		19	
	Total	4,575		19	17	2		19	
Grey-headed Albatross (Vulnerable)	Campbell Is.	7,800	8%	5					
	Chile	16,408	18%	67	1			1	
	Iles Crozet	5,940	6%						
	Iles Kerguelen	7,905	9%						
	Macquarie Is.	84	<1%	9					
	Prince Edward Is.	6,314	7%	6	*				
	South Georgia (Islas Georgias del Sur) ¹	47,674	52%	299+34GLS	4+22GLS			26	
	Total	92,125		420	27			27	
Indian Yellow-nosed Albatross (Endangered)	Ile Amsterdam	25,000	73%	34	*				
	Iles Crozet	4,430	13%						
	Iles Kerguelen	50	<1%						
	Prince Edward Is.	4,870	14%						
	Ile St. Paul	12	<1%						
	Total	34,362		34					
Laysan Albatross (Vulnerable)	Hawaiian Is.	590,496	100%	102	12+28GLS*			40	
	Isla de Guadalupe	337	<1%	101	*				
	Isla Clarión	17	<1%						
	San Benedicto	49	<1%						
	Rocas Alijos	3	<1%						
	Ogasawara Gunto (Bonin Is.)	23	<1%						
	Unknown						*	18	18
	Total	590,925		203	40			18	58
Light-mantled Albatross (Near Threatened)	Antipodes Is.	169	1%						
	Auckland Is.	5,000	25%						
	Campbell Is.	1,600	8%						
	Iles Crozet	2,421	12%						
	Heard & McDonald Is.	350	2%						
	Iles Kerguelen	4,000	20%						
	Macquarie Is.	1,250	6%	10					
	Prince Edward Is.	245	1%						
	South Georgia (Islas Georgias del Sur) ¹	5,000	25%	42*	*				
Total	20,035		52						
Northern Royal Albatross (Endangered)	Enderby Is. (Auckland Is.)	2	<1%						
	Chatham Is.	6,750	100%	28*	15*			15	
	Taiaroa Head	20	<1%	3+50GPS*	2*	14		16	
	Total	6,772		81	17	14		31	

Species (IUCN Threat Status)	Site	Annual Breeding Pairs	% Global Popn	Adult Breeding	Number of Tracks			Non- breeding Total
					Adult Non- breeding	Juveniles/ Immatures	Unknown age	
Salvin's Albatross (Vulnerable)	Bounty Is.	30,752	96%					
	Iles Crozet	4	<1%					
	Snares Is.	1,210	4%	*				
	Total	31,966						
Short-tailed Albatross (Vulnerable)	Torishima (Izu Shoto)	325	84%	8	14	1		15
	Minami-kojima (Senkaku Retto)	60	16%					
	Unknown				3*	6		9
	Total	385		8	17	7		24
Shy Albatross (Near Threatened)	Albatross Is.	5,128	40%	58	*	3+(10)		13
	Mewstone	7,358	58%	2	3	(11)		14
	Pedra Branca	268	2%	4	2	(5)		7
	Total	12,754		64	5	29		34
Sooty Albatross (Endangered)	Ile Amsterdam	350	3%					
	Iles Crozet	2,620	21%	26	*			
	Gough Is.	5,000	41%	6+(≈30GLS)	(≈30GLS)			30
	Iles Kerguelen	4	<1%					
	Prince Edward Is.	1,280	10%					
	Ile St. Paul	20	<1%					
	Tristan da Cunha Is.	2,925	24%					
	Total	12,199		62	30			30
Southern Royal Albatross (Vulnerable)	Auckland Is.	86	1%					
	Campbell Is.	8,400	99%	7				
	Total	8,486		7				
Tristan Albatross (Critically Endangered)	Gough Is.	2,400	100%	128+(6GLS)	(≈30GLS)			30
	Inaccessible Is.	1	<1%					
	Total	2,401		134	30			30
Wandering Albatross (Vulnerable)	Iles Crozet	2,062	26%	204	1*	*		1
	Iles Kerguelen	1,094	14%	11				
	Macquarie Is.	11	<1%					
	Prince Edward Is.	3,123	40%	20	3*			3
	South Georgia (Islas Georgias del Sur) ¹	1,553	20%	222+66GPS	4+(51GLS)	(15GLS)		70
	Unknown					5		5
	Total	7,843		523	64	15		79
White-capped Albatross (Near Threatened)	Auckland Is.	74,733	100%	(13GLS)	(13GLS)			13
	Antipodes Is.	18	<1%					
	Chatham Is.	1	<1%					
	Unknown						5	5
	Total	74,752		13	13	5		18
Waved Albatross (Critically Endangered)	Islas Galápagos	10,475	100%	44+21GPS	*			
	Isla de la Plata	10	<1%					
	Total	10,485		65				

Species (IUCN Threat Status)	Site	Annual Breeding Pairs	% Global Popn	Number of Tracks				
				Adult Breeding	Adult Non- breeding	Juveniles/ Immatures	Unknown age	Non- breeding Total
Northern Giant-petrel (Near Threatened)	Antipodes Is.	233	2%					
	Auckland Is.	100	1%					
	Campbell Is.	234	2%					
	Chatham Is.	2,336	21%					
	Iles Crozet	1,060	10%					
	Iles Kerguelen	1,400	13%					
	Macquarie Is.	950	9%					
	Prince Edward Is.	479	4%					
	South Georgia (Islas Georgias del Sur) ¹	4,310	39%	18+25GLS*				
Total		11,102		43				
Southern Giant-petrel (Near Threatened)	Antarctic Continent	290	1%					
	Antarctic Peninsula	6,500	14%					
	Argentina	2,542	5%	16	6	4		10
	Chile	290	1%					
	Iles Crozet	1,060	2%					
	Falkland Islands (Islas Malvinas) ¹	19,810	42%					
	Gough Is.	235	<1%					
	Heard & McDonald Is.	3,150	7%					
	Iles Kerguelen	4	<1%					
	Macquarie Is.	2,150	5%	*				
	Prince Edward Is.	1,754	4%					
	South Georgia (Islas Georgias del Sur) ¹	4,654	10%	11+29GLS*				
	South Orkney Is.	3,400	7%					
	South Sandwich Is. (Islas Sandwich del Sur) ¹	1,550	3%					
Total		47,389		56	6	4		10
Grey Petrel (Near Threatened)	Ile Amsterdam	10						
	Antipodes Is.	53,000	*					
	Campbell Is.	80						
	Iles Crozet	several thousand						
	Gough Is.	> 10,000						
	Iles Kerguelen	several thousand						
	Macquarie Is.	80						
	Prince Edward Is.	several thousand						
	Tristan da Cunha Is.	?						
Total		?						
Parkinson's Petrel (Vulnerable)	Great Barrier Is.	2,500	96%	*	*			
	Little Barrier Is.	100	4%					
	Total		2,600					

Species (IUCN Threat Status)	Site	Annual Breeding Pairs	% Global Popn	Number of Tracks				
				Adult Breeding	Adult Non- breeding	Juveniles/ Immatures	Unknown age	Non- breeding Total
Spectacled Petrel (Vulnerable)	Tristan da Cunha Is.	11,500	100%	*	*			
	Total	11,500						
Westland Petrel (Vulnerable)	Punakaiki	2,000	100%	20				
	Total	2,000		20				
White-chinned Petrel (Vulnerable)	Antipodes Is.	100,000		*				
	Auckland Is.	100,000						
	Campbell Is.	10,000						
	Iles Crozet	23,600		16				
	Falkland Islands (Islas Malvinas) ¹	55						
	Iles Kerguelen	200,000		*	*			
	Macquarie Is.	?						
	Prince Edward Is.	?						
	South Georgia (Islas Georgias del Sur) ¹	2,000,000		23	10GLS			10
	Total	?		39	10			10
TOTAL				3,361	556	184	147	887

Acknowledgements

Albatross and petrel tracking data presented in this report are from the Global Procellariiform Tracking Database, which exists thanks to the collaboration of scientists worldwide. Data holders are listed below. The database is managed by BirdLife International. The presentation of material in this report does not imply any expression of opinion on the part of BirdLife International concerning the legal status of any country, territory or area.

Name	Affiliation
Henri Weimerskirch	Centre d'Etudes Biologiques de Chizé, France
John Croxall, Richard Phillips, Jacob Gonzalez-Solis, Andy Wood	British Antarctic Survey, UK
Scott A. Shaffer, Michelle Kappes, Yann Tremblay, Dan P. Costa, Bill Henry, Don A. Croll	University of California Santa Cruz, USA
Dave J. Anderson, Jill Awkerman	Wake Forest University, USA
David Hyrenbach	University of California San Diego, USA
Michelle Hester, David Hyrenbach	Oikonos - Ecosystem Knowledge & Duke University, USA
Rob Suryan, Karen Fischer	Oregon State University, USA
Greg Balogh,	U.S. Fish & Wildlife Service, USA
Kiyooki Ozaki, Fumio Sato	Yamashina Institute for Ornithology, Japan
Shiho Kanie	Nature Conservation Bureau, Ministry of Environment, Japan
Nigel Brothers, April Hedd, Rosemary Gales, Aleks Terauds, Rachel Alderman	Department of Primary Industries, Water and Environment (DPIWE), Tasmania
Christopher J.R. Robertson, Kath Walker, Graeme Elliott	Department of Conservation, New Zealand
David G. Nicholls, M.D. Murray, E.C. Butcher	New Zealand
David G. Nicholls	New Zealand
A. Freeman, K-J Wilson	Lincoln University
J.A. Bartle	Museum of New Zealand, New Zealand
N. Klomp, M.Schultz	Charles Sturt University, Australia
Deon Nel, Peter Ryan, Samantha Petersen	Percy FitzPatrick Institute, South Africa
Graham Robertson	Australian Antarctic Division, Australia
Richard Cuthbert	Royal Society for the Protection of Birds, UK
Flavio Quintana	Centro Nacional Patagonico, Argentina
Nic Huin	Falklands Conservation
Jean-Claude Stahl	Museum of New Zealand Te Papa Tongarewa, New Zealand
Paul Sagar	National Institute of Water and Atmospheric Research, New Zealand
Javier Arata	Universidad Austral de Chile, Chile
John Croxall, Richard Phillips, Janet Silk, Dirk Briggs	British Antarctic Survey, UK
Susan Waugh	Ministry of Fisheries, New Zealand
Akira Fukuda	Faculty of Engineering, Shizuoka University, Japan
Makio Suzuki	School of Marine Science and Technology, Tokai University, Japan
Jacob Gonzalez-Solis	Spain