

## Supplement 1

**Table S1.1.** Timing of breeding season events in the three study species in relation to timing of GPS tracking.

	<b>Antarctic petrel</b>	<b>Cape petrel</b>	<b>Southern fulmar</b>	<b>Source</b>
<b>Breeding dates (Mean <math>\pm</math> SD)</b>				
Laying date	23 Nov $\pm$ 2 d	3 Dec $\pm$ 3 d	11 Dec $\pm$ 3 d	Hodum 2000
Hatching date	9 Jan $\pm$ 2 d	17 Jan $\pm$ 3 d	27 Jan $\pm$ 3 d	Hodum 2000
Fledging date	27 Feb $\pm$ 3 d	5 Mar $\pm$ 3 days	20 Mar $\pm$ 3 d	Hodum 2000
<b>GPS Tracking Period (Range)</b>				
Incubation	11 Dec – 15 Jan	14 Dec – 19 Jan	15 Dec – 28 Jan	this study
Chick-rearing	11 Jan – 14 Feb	15 Jan – 19 Feb	28 Jan – 12 Mar	this study

**Table S1.2.** Trip parameters for Antarctic petrels, cape petrels and southern fulmars during incubation and chick-rearing. GPS tracking period gives the time range during which tracking data was collected from each species during the austral summer 2015/16.

	Trip distance (km)		Trip duration (days)		Maximum distance from colony (km)		GPS tracking period	Sample sizes
	Mean $\pm$ SD	Range	Mean $\pm$ SD	Range	Mean $\pm$ SD	Range	Range	Number of trips (number of individuals)
<b>Antarctic petrel</b>								
Incubation	3027 $\pm$ 1387	1020-4353	10.9 $\pm$ 4.4	4.57-15.11	628 $\pm$ 243	264-859	11 Dec – 15 Jan	7(5)
Chick-rearing	765 $\pm$ 137	595–1063	2.3 $\pm$ 0.7	1.34–4.18	260 $\pm$ 25	224–311	11 Jan – 14 Feb	21(8)
<b>Cape petrel</b>								
Incubation	1645 $\pm$ 894	567-3310	5.4 $\pm$ 1.8	1.40-8.61	510 $\pm$ 257	219-947	14 Dec – 19 Jan	36(12)
Chick-rearing	613 $\pm$ 213	68–1429	1.4 $\pm$ 0.6	0.38–4.03	243 $\pm$ 55	103–451	15 Jan – 19 Feb	85(10)
<b>Southern fulmar</b>								
Incubation	1738 $\pm$ 981	700-3398	7.0 $\pm$ 2.1	3.44-10.26	397 $\pm$ 202	216-681	15 Dec – 28 Jan	11(5)
Chick-rearing	1738 $\pm$ 451	140–946	1.2 $\pm$ 0.6	0.20–2.93	185 $\pm$ 52	70–331	28 Jan – 12 Mar	93(10)

## References

Hodum, P. J. 2002. Breeding biology of high-latitude Antarctic fulmarine petrels (Procellariidae). *Journal of Zoology* **256**:139-149.