

Long-term inter- and intraspecific dietary variation in sibling seabird species

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Supporting information

Table S1. Number of diet samples obtained from northern giant petrel *Macronectes halli* and southern giant petrel *M. giganteus* chicks at Bird Island, South Georgia, during three seasons (2014/15–2016/17).

Breeding season	Sampling period	Northern giant petrel	Southern giant petrel
2014/15	Early January	-	-
	Late January	10	-
	Early February	5	5
	Late February	5	5
	Early March	2	5
	Late March	-	5
	Early April	-	-
2015/16	Early January	5	-
	Late January	5	-
	Early February	5	5
	Late February	5	5
	Early March	5	5
	Late March	4	5
	Early April	-	3
2016/17	Early January	5	-
	Late January	5	-
	Early February	5	5
	Late February	10	11
	Early March	-	-
	Late March	5	9
	Early April	-	5

Table S2. Cephalopods identified in the diets of northern giant petrel *Macronectes halli* and southern giant petrel *M. giganteus* chicks at Bird Island, South Georgia (2015–2017). LRL = lower rostral length. Values are means \pm SDs.

Giant petrel species	Cephalopod family	Cephalopod species	<i>n</i>	LRL (mm)
Northern giant petrel	Cranchiidae	<i>Galiteuthis glacialis</i>	1	5.2
	Gonatidae	<i>Gonatus antarcticus</i>	1	6.9
	Histioteuthidae	<i>Histioteuthis eltaninae</i>	1	3.8
	Neoteuthidae	<i>Alluroteuthis antarcticus</i>	1	3.6
	Ommastrephidae	<i>Illex argentinus</i>	2	4.0 \pm 0.4
		<i>Martialia hyadesi</i>	2	3.3
	Onychoteuthidae	<i>Moroteuthopsis longimana</i>	2	11.5 \pm 0.4
	Psychroteuthidae	<i>Psychroteuthis glacialis</i>	1	-
Southern giant petrel	Cranchiidae	<i>Galiteuthis glacialis</i>	7	4.6 \pm 0.8
	Mastigoteuthidae	<i>Mastigoteuthis psychrophila</i>	1	2.7
	Ommastrephidae	<i>Martialia hyadesi</i>	5	4.1 \pm 1.1
	Onychoteuthidae	<i>Moroteuthis knipovitchi</i>	3	5.7 \pm 0.3
		<i>Moroteuthis</i> sp. B (Imber)	1	6.3
		<i>Moroteuthopsis longimana</i>	8	4.9 \pm 1.1
	Psychroteuthidae	<i>Psychroteuthis glacialis</i>	3	4.9 \pm 1.1

Table S3. Diet composition of northern giant petrel *Macronectes halli* chicks at Bird Island, South Georgia most recently provisioned by either a male or female parent in 2015–2017. Percentage frequency of occurrence (%FO) is shown with percentage drained mass (%M_{drained}) of the major important dietary components (see text) in parentheses.

	Male			Female		
	2015 (<i>n</i> = 6)	2016 (<i>n</i> = 5)	2017 (<i>n</i> = 8)	2015 (<i>n</i> = 5)	2016 (<i>n</i> = 4)	2017 (<i>n</i> = 12)
SEAL CARRION	33.3 (15.4)	60.0 (33.4)	37.5 (25.2)	20.0 (16.6)	50.0 (43.4)	16.7 (12.0)
Unidentified seals	40.0	60.0	37.5	20.0	50.0	16.7
PENGUIN	50.0 (32.1)	80.0 (57.4)	12.5 (38.1)	60.0 (42.3)	100.0 (26.3)	83.3 (49.3)
Unidentified penguins	50.0	80.0	12.5	60.0	100.0	83.3
OTHER SEABIRDS	66.6 (24.3)	60.0 (7.8)	62.5 (25.0)	60.0 (23.3)	50.0 (25.1)	25.0 (6.9)
<i>Pachyptila desolata</i>	16.7	-	-	-	-	-
<i>Pelecanoides</i> spp.	-	20.0	12.5	-	25.0	25.0
Unidentified seabirds	33.3	60.0	62.5	60.0	25.0	-
CEPHALOPODS	50.0 (2.1)	-	37.5 (0.7)	60.0 (11.7)	50.0 (0.7)	16.7 (0.7)
<i>Illex argentinus</i>	-	-	-	-	-	8.3
Unidentified cephalopods	50.0	-	37.5	60.0	50.0	8.3
FISHES	33.3 (14.3)	20.0 (0.1)	25.0 (10.3)	20.0 (2.3)	25.0 (0.3)	0.0 (0.0)
Unidentified fishes	33.3	20.0	25.0	20.0	25.0	0.0
CRUSTACEANS	50.0 (9.7)	-	25.0 (0.3)	40.0 (2.5)	-	50.0 (29.2)
<i>Euphausia superba</i>	50.0 (9.7)	-	25.0 (0.3)	20.0 (1.0)	-	50.0 (29.2)
<i>Themisto gaudichaudii</i>	-	-	-	-	-	8.3
Unidentified crustaceans	-	-	-	40.0	-	8.3

Table S4. Diet composition of southern giant petrel *Macronectes giganteus* chicks at Bird Island, South Georgia most recently provisioned by either a male or female parent in 2015–2017. Percentage frequency of occurrence (%FO) is shown with percentage drained mass (%M_{drained}) of the major important dietary components (see text) in parentheses.

	Male			Female		
	2015 (<i>n</i> = 2)	2016 (<i>n</i> = 3)	2017 (<i>n</i> = 6)	2015 (<i>n</i> = 2)	2016 (<i>n</i> = 4)	2017 (<i>n</i> = 10)
SEAL CARRION	50.0 (48.0)	100.0 (94.6)	50.0 (47.7)	-	75.0 (13.0)	-
Unidentified seal	50.0	100.0	50.0	-	75.0	-
PENGUIN	100.0 (33.2)	100.0 (0.5)	66.7 (33.1)	100.0 (24.9)	100.0 (74.3)	100.0 (37.3)
Unidentified penguins	100.0	100.0	66.7	100.0	100.0	100.0
OTHER SEABIRDS	100.0 (10.6)	33.3 (4.7)	83.3 (11.4)	100.0 (7.2)	50.0 (9.3)	40.0 (4.4)
<i>Pachyptila desolata</i>	-	-	-	-	50.0	-
<i>Pelecanoides</i> spp.	-	33.3	16.7	-	-	10.0
Unidentified seabirds	100.0	33.3	66.7	100.0	50.0	30.0
CEPHALOPODS	-	33.3 (0.2)	33.3 (1.0)	-	75.0 (0.2)	30.0 (1.4)
<i>Galiteuthis glacialis</i>	-	-	16.7	-	25.0	-
<i>Moroteuthopsis longimana</i>	-	-	16.7	-	25.0	10.0
<i>Psychroteuthis glacialis</i>	-	-	-	-	-	10.0
Unidentified cephalopods	-	33.3	-	-	25.0	20.0
FISHES	50.0 (7.8)	-	16.7 (6.4)	50.0 (61.4)	25.0 (1.0)	20.0 (2.4)
Unidentified fishes	50.0	-	16.7	50.0	25.0	20.0
CRUSTACEANS	100.0 (0.4)	-	50.0 (0.3)	100.0 (6.5)	25.0 (0.4)	50.0 (54.4)
<i>Euphausia superba</i>	50.0 (0.3)	-	50.0 (0.3)	50.0 (3.1)	-	50.0 (53.6)
Unidentified crustaceans	50.0	-	-	50.0	25.0	10.0