

Appendix 1. Literature review of stable isotope ratios, in relation to sexual size dimorphism in seabirds and trophic/spatial segregation, during the breeding season. D = dimorphism, M = monomorphism, T = tropical, NT = No tropical, B= blood, F = feather, M = muscle, P = plasma. Order: Cha = Charadriiformes, Pha = Phaethontiformes, Pro = Procellariiformes, Sph = Sphenisciformes, Sul = Suliformes, * = segregation only by $\delta^{13}\text{C}$ values.

Common name	Scientific name	Order	SSD	SI Dif sex	Region	Tissue	Area	References
Razorbill	<i>Alca torda</i>	Cha	M	yes	NT	B	Gulf of St. Lawrence, Canada	Lavoie et al. (2012)
Dovekie	<i>Alle alle</i>	Cha	D	no	NT	B	Spitsbergen, Norway	Harding et al. (2008)
Dovekie	<i>Alle alle</i>	Cha	D	no	NT	M	Northwater Polynya, Canada	Hobson and Bond (2012)
Black noddy	<i>Anous minutus</i>	Cha	M	no	T	B	Fernando de Noronha Archipelago, Brazil	This study
Black noddy	<i>Anous minutus</i>	Cha	M	no	T	B	São Pedro and São Paulo Archipelago	This study
Brown noddy	<i>Anous stolidus</i>	Cha	M	no	T	B	Abrolhos Archipelago, Brazil	This study
Brown noddy	<i>Anous stolidus</i>	Cha	M	no	T	B	Atol das Rocas, Brazil	This study
Brown noddy	<i>Anous stolidus</i>	Cha	D	no	T	B	São Pedro and São Paulo Archipelago	This study
Marble murrelet	<i>Brachyramphus</i>	Cha	M	no	NT	F	Monterey Bay, USA	Becker et al. (2007)

	<i>marmoratus</i>								
	<i>Catharacta a.</i>								
Brown skua	<i>lonnbergi</i>	Cha	D	no	NT	B	South Georgia Is.	Anderson et al. (2008)	
Black guillemot	<i>Cepphus grylle</i>	Cha	M	yes	NT	M	Northwater Polynya, Canada	Hobson and Bond (2012)	
Tufted puffin	<i>Fratercula cirrhata</i>	Cha	D	no	NT	B	Kodiak Is., Alaska	Williams et al. (2008)	
Herring gull	<i>Larus argentatus</i>	Cha	D	yes	NT	B	Gulf of St. Lawrence, Canada	Lavoie et al. (2012)	
Audouin's gull*	<i>Larus audouinii</i>	Cha	M	yes	T	B	Erbo Delta, Spain	Navarro et al. (2010)	
Glaucos gull	<i>Larus hyperboreus</i>	Cha	D	yes	NT	M	Northwater Polynya, Canada	Hobson and Bond (2012)	
Great black-backed gull	<i>Larus marinus</i>	Cha	D	yes	NT	B	Gulf of St. Lawrence, Canada	Lavoie et al. (2012)	
	<i>Onychoprion</i>								
Sooty tern	<i>fuscatus</i>	Cha	D	no	T	B	Atol das Rocas, Brazil	This study	
Ivory gull	<i>Pagophila eburnea</i>	Cha	M	no	NT	M	Northwater Polynya, Canada	Hobson and Bond (2012)	
Black-legged kittiwake	<i>Rissa tridactyla</i>	Cha	D	no	NT	M	Northwater Polynya, Canada	Hobson and Bond (2012)	
Black-legged kittiwake	<i>Rissa tridactyla</i>	Cha	D	no	NT	B	Gulf of St. Lawrence, Canada	Lavoie et al. (2012)	
Common tern	<i>Sterna hirundo</i>	Cha	M	yes	NT	F	Massachussts, USA	Nisbet et al. (2002)	
Arctic tern	<i>Sterna paradisaea</i>	Cha	D	no	NT	B	Nasarvuallik, Nunavut, Canada	Boadway (2012)	
Thick-billed murre	<i>Uria lomvia</i>	Cha	M	yes	NT	M	Northwater Polynya, Canada	Hobson and Bond (2012)	
Thick-billed murre	<i>Uria lomvia</i>	Cha	M	no	NT	P	Nunavut, Canada	Woo et al. (2008)	

Red-billed tropicbird	<i>Phaethon aethereus</i>	Pha	D	no	T	B	Abrolhos Archipelago, Brazil	This study
Cory's shearwater	<i>Calonectris borealis</i>	Pro	D	yes	NT	B, F	Chafarinas Archipelago, Mediterranean Sea	Navarro et al. (2009a)
Scopoli's shearwater*	<i>Calonectris d. diomedea</i>	Pro	D	yes	NT	F	Mediterranean Archipelago	Ramos et al. (2009)
Scopoli's shearwater	<i>Calonectris d. diomedea</i>	Pro	D	yes	NT	B, F	Chafarinas Archipelago, Mediterranean Sea	Navarro et al. (2009a)
Cory's shearwater	<i>Calonectris d. borealis</i>	Pro	D	no	T	B	Gran Canaria, Canary Is., NE Atlantic Ocean	Navarro et al. (2009b)
Cory's shearwater*	<i>Calonectris d. borealis</i>	Pro	D	yes	NT	F	Canary Is. Northeast Atlantic Ocean,	Ramos et al. (2009)
Cape Verde shearwater*	<i>Calonectris edwardsii</i>	Pro	D	yes	NT	F	Cape Verde Archipelago, NE Atlantic Ocean	Ramos et al. (2009)
Wandering albatross*	<i>Diomedea exulans</i>	Pro	D	yes	NT	B	Bird Is., South Georgia Is.	Ceia et al. (2012)
Wandering albatross	<i>Diomedea exulans</i>	Pro	D	no	NT	B	South Georgia Is.	Phillips et al. (2011)
Northern fulmar	<i>Fulmarus glacialis</i>	Pro	D	yes	NT	M	Northwater Polynya, Canada	Hobson and Bond (2012)
Southern giant petrel	<i>Macronectes giganteus</i>	Pro	D	yes	NT	B	South Georgia Is.	Forero et al. (2005)

Southern giant petrel	<i>Macronectes giganteus</i>	Pro	D	yes	NT	B	Patagonia, Argentina	Forero et al. (2005)
Southern giant petrel	<i>Macronectes giganteus</i>	Pro	D	yes	NT	B	Observatorio Is., Argentina	Rey et al. (2012)
Southern giant petrel	<i>Macronectes giganteus</i>	Pro	D	yes	NT	B	South Georgia Is.	Rey et al. (2012)
Northern giant petrel	<i>Macronectes halli</i>	Pro	D	yes	NT	B	South Georgia Is.	González-Solís and Croxall (2005)
Northern giant petrel*	<i>Macronectes halli</i>	Pro	D	yes	NT	B	South Georgia Is.	Phillips et al. (2011)
Leach's storm-petrel	<i>Oceanodroma leucorhoa</i>	Pro	M	no	NT	F	Newfoundland, Canada	Hedd and Montevecchi (2006)
Thin-billed prion	<i>Pachyptila belcheri</i>	Pro	M	yes	NT	B	Falkland/Malvinas Is.	Quillfeldt et al. (2008)
Antarctic prion	<i>Pachyptila desolata</i>	Pro	M	no	NT	B	South Georgia Is.	Phillips et al. (2011)
South Georgian diving-petrel	<i>Pelecanoides georgicus</i>	Pro	M	no	NT	B	South Georgia Is.	Phillips et al. (2011)
Common diving petrel	<i>Pelecanoides urinatrix</i>	Pro	M	no	NT	B	South Georgia Is.	Phillips et al. (2011)
Waved albatross*	<i>Phoebastria irrorata</i>	Pro	D	yes	T	B	Galapagos Is.	Awkerman et al. (2007)

Cook's petrel	<i>Pterodroma cookii</i>	Pro	M	yes	NT	B	New Zealand	Rayner et al. (2008)
Black-browed albatross	<i>Thalassarche melanophris</i>	Pro	D	no	NT	B	South Georgia Is.	Phillips et al. (2011)
King penguin	<i>Aptenodytes patagonicus</i>	Sph	D	yes	NT	B	Crozet Archipelago, Indian Ocean	Vaillant et al. 2013
Macaroni penguin	<i>Eudyptes chrysolophus</i>	Sph	D	no	NT	B	South Georgia Is.	Bearhop et al. (2006)
Southern rockhopper penguin	<i>Eudyptes chrysocome</i>	Sph	D	yes	NT	B	Falkland/Malvinas Is. Atlantic Ocean	Ludynia et al. (2013)
Little penguin	<i>Eudyptula minor</i>	Sph	M	no	NT	B	Philip Is., Australia	Chiaradia et al. (2011)
Little penguin	<i>Eudyptula minor</i>	Sph	M	no	NT	B	St. Kilda Is., Scotland	Chiaradia et al. (2011)
Northern rockhopper penguin	<i>Eudyptes moseleyi</i>	Sph	D	yes	NT	B	Tristan da Cunha Arch., Atlantic Ocean	Booth and McQuaid (2013)
Gentoo penguin	<i>Pygoscelis papua</i>	Sph	D	yes	NT	B	South Georgia Is., Atlantic Ocean	Bearhop et al. (2006)
Magellanic penguin	<i>Spheniscus magellanicus</i>	Sph	D	yes	NT	B	Patagonia, Argentina, in 9 different colonies	Forero et al. (2002)
Great frigatebird	<i>Fregata minor</i>	Sul	D	no	T	B	Europa Is., Indian Ocean	Cherel et al. (2008)
Great frigatebird	<i>Fregata minor</i>	Sul	D	no	T	B, F	Palmyra Atoll, Pacific Ocean	Young et al. (2010a)

Northern gannet	<i>Morus bassanus</i>	Sul	M	yes	NT	B	Grassholm, UK, Atlantic Ocean	Stauss et al. (2012)
South Georgian shag	<i>Phalacrocorax a. georgianus</i>	Sul	D	yes	NT	B	South Georgia Is., Atlantic Ocean	Bearhop et al. (2006)
Imperial shag	<i>Phalacrocorax atriceps</i>	Sul	D	yes	NT	B	Falkland/Malvinas Is., Atlantic Ocean	Michalik et al. (2012)
Blue-eyed shag*	<i>Phalacrocorax verrucosus</i>	Sul	D	yes	NT	B	Kerguelen Is., Indian Ocean	Cook et al. (2013)
Masked booby	<i>Sula dactylatra</i>	Sul	D	no	T	B, F	Palmyra Atoll, Pacific Ocean	Young et al. (2010b)
Masked booby	<i>Sula dactylatra</i>	Sul	D	no	T	B, F	Palmyra Atoll, Pacific Ocean	Young et al. (2010a)
Masked booby	<i>Sula dactylatra</i>	Sul	D	no	T	B	Abrolhos Archipelago, Brazil	This study
Masked booby	<i>Sula dactylatra</i>	Sul	D	no	T	B	Fernando de Noronha, Brazil	This study
Masked booby	<i>Sula dactylatra</i>	Sul	D	no	T	B	Atol das Rocas, Brazil	This study
Brown booby	<i>Sula leucogaster</i>	Sul	D	no	T	B	Baja California, Mexico	Weimerskirch et al. (2009)
Brown booby	<i>Sula leucogaster</i>	Sul	D	yes	T	B, F	Palmyra Atoll, Pacific Ocean	Young et al. (2010a)
Brown booby	<i>Sula leucogaster</i>	Sul	D	no	T	B	Abrolhos Archipelago	This study
Brown booby	<i>Sula leucogaster</i>	Sul	D	no	T	B	Fernando de Noronha, Brazil	This study
Brown booby	<i>Sula leucogaster</i>	Sul	D	no	T	B	Atol das Rocas, Brazil	This study

Brown booby	<i>Sula leucogaster</i>	Sul	D	no	T	B	São Pedro and São Paulo Arch., Brazil	This study
Blue-footed booby	<i>Sula nebouxii</i>	Sul	D	no	T	B	Baja California, Mexico	Weimerskirch et al. (2009)
Blue-footed booby	<i>Sula nebouxii</i>	Sul	D	no	T	B	Galapagos Is., Ecuador	Cruz et al. (2012)
Red-footed booby	<i>Sula sula</i>	Sul	D	yes	T	B	Europa Is. Indian Ocean	Cherel et al. (2008)
Red-footed booby	<i>Sula sula</i>	Sul	D	no	T	B, F	Palmyra Atoll, Pacific Ocean	Young et al. (2010a)
Red-footed booby	<i>Sula sula</i>	Sul	D	no	T	B, F	Palmyra Atoll, Pacific Ocean	Young et al. (2010b)

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