

Supplement: References

- Al-Habsi, S. H., Sweeting, C. J., Polunin, N. V. C. and Graham, N. A. J. 2008. $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ elucidation of size-structured food webs in a Western Arabian Sea demersal trawl assemblage. *Marine Ecology Progress Series* 353:55-63.
- Anderson, O.R.J., Phillips, R.A., McDonald, R.A., Shore, R.F., McGill, R.A.R. and Bearhop, S. 2009. Influence of trophic position and foraging range on mercury levels within a seabird community. *Marine Ecology Progress Series* 375:277-288.
- Atwell L., Hobson K.A. and Welch H.E. 1993. Biomagnification and Bioaccumulation of mercury in an arctic marine food web, insights from stable nitrogen isotope analysis. *Canadian Journal of Fisheries and Aquatic Sciences* 55:1114-1121.
- Badalamenti, F., D'Anna, G., Pinnegar, J. and Polunin, N. 2002. Size-related trophodynamic changes in three target fish species recovering from intensive trawling. *Marine Biology* 141:561-570.
- Bearhop, S., Phillips, R.A., McGill, R., Cherel, Y., Dawson, D.A. and Croxall, J.P. 2006. Stable isotopes indicates sex-specific and long-term individual foraging specialisation in diving seabirds. *Marine Ecology Progress Series* 311:157-164.

Ben-David, M., McColl, C.J., Boonstra, R. and Karels, T.J. 1999. $\delta^{15}\text{N}$ signatures do not reflect body conditions in Arctic ground squirrels. *Canadian Journal of Zoology* 77:1373-1378.

Bentzen, T.W., Follmann, E.H., Amstrup, S.C., York, G.S., Wooller, M.J. and O'Hara, T.M. 2007. Variation in winter diet of southern Beaufort Sea polar bears inferred from stable isotope analysis. *Canadian Journal of Zoology* 85:596-608.

Born, E.W., Outridge, P., Riget, F.F., Hobson, K.A., Dietz, R., Øien, N. and Haug, T. 2003. Population substructure of North Atlantic minke whales (*Balaenoptera acutorostrata*) inferred from regional variation of elemental and stable isotopic signatures in tissues. *Journal of Marine Systems* 42:1-17.

Burns, J.M., Trumble, S.J., Castellini, M.Z. and Testa, J.W. 1998. The diet of Weddell seals in McMurdo Sound, Antarctica as determined from scat collections and stable isotope analysis. *Polar Biology* 19:272-282.

Camusso, M., Balestrini, R., Martinotti, W. and Arpini, M. 1999. Spatial variations in trace metal and stable isotope content of autochthonous organisms and sediments in the river Po system (Italy). *Aquatic Ecosystem Health and Management* 2:39-53.

Chambellant, M. 2010. Hudson Bay Ringed Seal, Ecology in a Warming Climate. Pages 137-158 In, Ferguson SH et al., (eds.) A little less Arctic, Top predators in the World's Largest Northern Inland Sea, Hudson Bay.

Cherel, Y. and Hobson, K.A. 2002. Diet and feeding ecology of blue petrels *Halobaena caerulea* at Iles Kerguelen, Southern Indian Ocean. *Marine Ecology Progress Series* 28:283-299.

Cherel, Y., Putz K., and Hobson K.A. 2002. Summer diet of king penguins (*Aptenodytes patagonicus*) at the Falkland Islands, southern Atlantic Ocean. *Polar Biology* 25:898-906.

Cherel, Y. and Hobson, K.A. 2007. Geographical variation in carbon stable isotope signatures of marine predators, a tool to investigate their foraging areas in the southern ocean. *Marine Ecology Progress Series* 320:281-281.

Cherel, Y., Hobson, K.A., Guinet C. and Vanpe C. 2007. Stable isotopes document seasonal changes in trophic niches and winter foraging individual specialization in diving predators from the Southern Ocean. *Journal of Animal Ecology* 76:826-836.

Cherel, Y., Ducatez, S., Fontaine, C., Richard, P. and Guinet, C. 2008. Stable isotopes reveal the trophic position and mesopelagic fish diet of female southern elephant

seals breeding on the Kerguelen Islands. *Marine Ecology Progress Series* 370:239-247.

Cherel, Y., Fontaine, C., Richard, P. and Labat, J-P. 2010. Isotopic niches and trophic levels of myctophid fishes and their predators in the Southern Ocean. *Limnology and Oceanography* 55(1):324-332.

Cherel, Y., Koubbi P., Giraldo C., Penot F., Tavernier E., Moteki, M., Ozouf-Costaz, C., Causse, R., Chartier, A. and Hosie G. 2011. Isotopic niches of fishes in coastal, neritic and oceanic waters off Adelie land, Antarctica. *Polar Science*. doi, 10.1016/j.polar.2010.12.004.

Corbisier, T.N., Petti, M.A.V., Skowronski, S.P. and Brito, T.A.S. 2004. Trophic relationships in the nearshore zone of Martel Inlet (King George Island, Antarctica), $\delta^{13}\text{C}$ stable-isotope analysis. *Polar Biology* 27:75-82.

Craven, K.F., Bird, M.I., Austin, W.E.N. and Wynn, J. 2008. Isotopic variability in the intertidal acorn barnacle *Semibalanus balanoides*, a potentially novel sea-level proxy indicator. *Geological society* 303:173-185.

Dahl, T.M., Falk-Petersen, S., Gabrielsen, G.W., Sargent, J.R. and Hop, H. 2003. Lipids and stable isotopes in common eider, black-legged kittiwake and northern fulmar, a trophic study from an Arctic fjord. *Marine Ecology Progress Series* 256:257-269.

Das, K., Lepoint, G., Leroy, Y. and Bouquigneau, J.M. 2003. Marine mammals from the southern North Sea, feeding ecology data from $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ measurements. *Marine Ecology Progress Series* 263:287-298.

Davenport, S.R. and Bax, N.J. 2002. A trophic study of a marine ecosystem off southeastern Australia using stable isotopes of carbon and nitrogen. *Canadian Journal of Fisheries and Aquatic Sciences* 59:214-230.

Deegan, L.A. and Garritt, R.H. 1997. Evidence for spatial variability in estuarine food webs. *Marine Ecology Progress Series* 147:31-47.

Dehn, L-A., Follmann, E.H., Rosa, C., Duffy, L.K., Thomas, D.L., Bratton, G.R., Taylor, R.J. and O'Hara, T.M. 2006. Stable isotope and trace element status of subsistence-hunted bowhead and beluga whales in Alaska and gray whales in Chukotka. *Marine Pollution Bulletin* 55:301-319.

Dehn, L-A., Sheffield, G.G., Follmann, E.H., Duffy, L.K., Thomas, D.L. and O'Hara, T.M. 2007. Feeding ecology of phocid seals and some walrus in the Alaskan and Canadian Arctic as determined by stomach contents and stable isotope analysis. *Polar Biology* 30:167-181.

- Dennard, S.T., McMeans, B.C. and Fisk, A.T. 2009. Preliminary assessment of Greenland halibut diet in Cumberland Sound using stable isotopes. *Polar Biology* 32:941-945.
- Ducatez, S., Dalloyau, S., Richard, P., Guinet, C. and Cherel, Y. 2008. Stable isotopes document winter trophic ecology and maternal investment of adult female southern elephant seals (*Mirounga leonine*) breeding at the Kerguelen Islands. *Marine Biology* 155:413-420.
- Dunton, K.H. 2001. $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ Measurements of Antarctic Peninsula Fauna, Trophic Relationships and Assimilation of Benthic Seaweeds. *American Zoologist* 41:99-112.
- Endo, T., Hisamichi, Y., Kimura, O., Haraguchi, K., Lavery, S., Dalebout, M.L., Funahashi, N. and Baker, C.S. 2010. Stable isotope ratios of carbon and nitrogen and mercury concentrations in 13 toothed whale species taken from the western pacific ocean off japan. *Environmental Science and Technology* 44(7):2675-2681.
- Estrada, J.A., Rice, A.N., Lutcavage, M.E. and Skomal, G.B. 2003. Predicting trophic positions of sharks of the north-west Atlantic Ocean using stable isotope analysis. *Journal of the Marine Biological Association of the United Kingdom* 83:1347-1350.

Fantle, M.S., Dittle, A.I., Schwalm, S.M., Epifanio, C.E. and Fogel, M. L. 1999. A food web analysis of the juvenile blue crab, *Callinectes sapidus*, using stable isotopes in whole animals and individual amino acids. *Oecologia* 120:416-426.

Felicetti, L.A., Schwartz, C.C., Rye, R.O., Haroldson, M.A., Gunther, K.A., Phillips, D.L. and Robbins, C.T. 2003. Use of sulfur and nitrogen stable isotopes to determine the importance of whitebark pine nuts to Yellowstone grizzly bears. *Canadian Journal of Zoology* 81:763-770.

Fisk, A.T., Tittlemier, S.A., Pranschke, J.L. and Norstrom, R.J. 2002. Using anthropogenic contaminants and stable isotopes to assess the feeding ecology of Greenland sharks. *Ecology* 83(8):2162-2172.

Frazer, T.K. 1996. Stable isotope composition ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) of larval krill, *Euphausia superba*, and two of its potential food sources in winter. *Journal of Plankton Research* 18(8):1413-1426.

Fredriksen, S. 2003. Food web studies in a Norwegian kelp forest based on stable isotope ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) analysis. *Marine ecology progress series* 260:71-81.

Fry, B. 1988. Food web structure on Georges Bank from stable C, N, and S isotopic compositions. *Limnology and Oceanography* 33:1182-1190.

Fry, B., Mumford, P.L., Tam, F., Fox, D.D., Warren, G.L., Havens, K.E. and Steinman, A.D. 1999. Trophic position and individual feeding histories of fish from Lake Okeechobee, Florida. *Canadian Journal of Fisheries and Aquatic Sciences* 56:590-600.

Garvie-Lok, S. 2001. Loaves and Fishes, A Stable Isotope Reconstruction of Diet in Medieval Greece, Ph.D. Thesis, Department of Anthropology, University of Calgary.

Gillies, C.L. and Stark, J. 2008. Stable isotope analysis of invertebrate epifauna collected around Casey station, East Antarctica, for the TRENZ program.
http://data.aad.gov.au/aadc/metadata/metadata_redirect.cfm?md=AMD/AU/ASAC_2948_TRENZ_Stable_Isotopes

Gorbatenko, K.M., Kiyahko, S.I., Lazhentsev, A.Ye., Nadtochil, V.A. and Savin, A.B. 2008. Benthic-pelagic trophic interactions within the fish assemblage in the western Bering sea shelf Area according to stomach Content analysis and ratios of C and N Stable Isotopes. *Russian Journal of Marine Biology* 34(7):497-506.

Hall-Aspland, S.A., Hall, A.P. and Rogers, T.L. 2005. A new approach to the solution of the linear mixing for a single isotope, application to the case of an opportunistic predator. *Oecologia* 143:143-147.

- Hill, J.M. and McQuaid, C.D. 2008. $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ biogeographic trends in rocky intertidal communities along the coast of South Africa, Evidence of strong environmental signatures. *Estuarine, Coastal and Shelf science* 80:261-268.
- Hobson, K.A., Ambrose, W.G. and Renaud, P.E. 1995. Sources of primary production, benthic-pelagic coupling, and trophic relationships within the Northeast Water Polynya, insights from $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ analysis. *Marine Ecology Progress Series* 128:1-10.
- Hobson, K.A., Fisk, A., Karnovsky, N., Holst, M., Gagnon, J-M. and Fortier, M. 2002. A stable isotope ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$) model for the North Water food web, implications for evaluating trophodynamics and the flow of energy and contaminants. *Deep-Sea Research II* 49:5131-5150.
- Hodum, P.J. and Hobson, K.A. 2000. Trophic relationships among Antarctic fulmarine petrels, insights into dietary overlap and chick provisioning strategies inferred from stable-isotope ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) analysis. *Marine Ecology Progress Series* 198:273-281.
- Hoekstra, P.F., Dehn, L.A., George, J.C., Solomon, K.R., Muir, D.C.G. and O'Hara, T.M. 2002. Trophic ecology of bowhead whales (*Balaena mysticetus*) compared with that of other arctic marine biota as interpreted from carbon-, nitrogen, and sulfur-isotope signatures. *Canadian Journal of Zoology* 80:223-231.

- Hoekstra, P.F., Braune, B.M., O'Hara, T.M., Elkin, B., Solomon, K.R. and Muir, D.C.G. 2003. Oranochlorine contaminant and stable isotope profiles in Arctic fox (*Alopex lagopus*) from the Alaskan and Canadian Arctic. *Environmental Pollution* 122:423-433.
- Hoffman, J.C., Limburg, K.E., Bronk, D.A., and Olney, J.E. 2008. Overwintering habitats of migratory juvenile American shad in Chesapeake Bay. *Environmental Biology of Fishes* 81:329-345.
- Jacob, U., Brey, T., Fetzer, I., Kaehler, S., Mintenbeck, K., Dunton, K., Beyer, K., Struck, U., Pakhomov, E.A. and Arntz, W.E. 2006. Towards the trophic structure of the Bouvet Island marine ecosystem. *Polar Biology* 29:106-113.
- Jennings, S., Pinnegar, J.K., Polunin, N.V.C. and Boon, T.W. 2001. Weak cross-species relationships between body size and trophic level belie powerful size-based trophic structuring in fish communities. *Journal of Animal Ecology* 70:934-944.
- Kaehler, S. and Pakhomov, E.A. 2001. Effects of storage and preservation on the $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ signatures of selected marine organisms. *Marine Ecology Progress Series* 219:299-304.

Kakela, A., Furness, R.W., Kelly, A., Strandberg, U., Waldron, S. and Kakela, R. 2007.

Fatty acid signatures and stable isotopes as dietary indicators in North sea seabirds.

Marine ecology progress series 342:291-301.

Kelly, B.C., Ikonou, M.G., Blair, J.D. and Gobas, F.A.P.C. 2008. Bioaccumulation

behaviour of polybrominated diphenyl ethers (PBDEs) in a Canadian Arctic marine

food web. Science of the Total Environment 401:60-72.

Krahn, M.M., Hanson, M.B., Baird, R.W., Boyer, R.H., Burrows, D.G., Emmons, C.K.,

Ford, J.K.B., Jones, L.L., Noren, D.P., Ross, P.S., Schorr, G.S. and Collier, T.K.

2007. Persistent organic pollutants and stable isotopes in biopsy samples

(2004/2006) from Southern Resident killer whales. Marine Pollution Bulletin

54:1903-1911.

Krahn, M.M., Pitman, R.L. and Burrows, D.G. 2008. Use of chemical tracers to assess

diet and persistent organic pollutants in Antarctic Type C killer whales. Marine

Mammal Science 24(3):643-663.

Kurle, C.M. and Worthy, G.A.J. 2001. Stable isotope assessment of temporal and

geographic differences in feeding ecology of northern fur seals (*Callorhinus*

ursinus) and their prey. Oecologia 126:254-265.

Lawson, J.W. 2000. Diet of Harp Seals (*Pagophilus groenlandicus*) in nearshore northeast Newfoundland, influences from stable-carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) isotope analyses. *Marine Mammal Science* 16(3):578-591.

Lepoint, G., Nyssen, F., Gobert, S., Dauby, P. and Bouquegneau, J-M. 2000. Relative impact of a seagrass bed and its adjacent epilithic algal community in consumer diets. *Marine Biology* 136:513-518.

Lesage, V., Hammill, M.O. and Kovacs, K.M. 2001. Marine mammals and the community structure of the Estuary and Gulf of St Lawrence, Canada, evidence from stable isotope analysis. *Marine Ecology Progress Series* 210:203-221.

Loseto, L.L., Stern, G.A., Deibel, D., Connelly, T.L., Prokopowicz, A, Lean, D.R.S., Fortier, L. and Ferguson, S.H. 2008. Linking mercury exposure to habitat and feeding behaviour in Beaufort Sea beluga whales. *Journal of Marine Systems* 74:1012-1024.

Marcoux, M., Whitehead, H. and Rendell, L. 2007. Sperm whale feeding variation by location, year, social group and clan, evidence from stable isotopes. *Marine Ecology Progress Series* 333:309-314.

- Mendes, S., Newton, J., Reid, R.J., Zuur, A.F. and Pierce, G.J. 2007. Stable carbon and nitrogen isotope ratio profiling of sperm whale teeth reveals ontogenetic movements and trophic ecology. *Oecologia* 151:605-615.
- Mincks, S.L., Smith, C.R., Jeffreys, R.M. and Sumida, Y.G. 2008. Trophic structure on the West Antarctic Peninsula shelf, Detritivory and benthic inertia revealed by $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ analysis. *Deep-Sea Research II* 55:2502-2514.
- Moncreiff, C.A. and Sullivan, M.J. 2001. Trophic importance of epiphytic algae in subtropical seagrass beds, evidence from multiple stable isotope analyses. *Marine Ecology Progress Series* 215:93-106.
- Nadon, M-O. and Himmelman, J.H. 2010. The structure of subtidal food webs in the northern Gulf of St. Lawrence, Canada, as revealed by the analysis of stable isotopes. *Aquatic Living Resources* 23:167-176.
- Pinnegar, J.K. and Polunin, N.V.C. 2000. Contributions of stable-isotope data to elucidating food webs of Mediterranean rocky littoral fishes. *Oecologia* 122:399-409.
- Pinnegar, J.K., Polunin, N.V.C. and Badalamenti, F. 2003. Long-term changes in the trophic level of western Mediterranean fishery and aquaculture landings. *Canadian Journal of Fisheries and Aquatic Sciences* 60:222-235.

Polischuk, S.C., Hobson, K.A. and Ramsay, M.A. 2001. Use of stable-carbon and – nitrogen isotopes to assess weaning and fasting in female polar bears and their cubs. *Canadian Journal of Zoology* 79:499-511.

Polito, M.J., Fisher, S., Tobias, C.R. and Emslie, S.D. 2009. Tissue-specific isotope discrimination factors in gentoo penguin (*Pygoscelis papua*) egg components, Implications for dietary reconstruction using stable isotopes. *Journal of Experimental Marine Biology and Ecology* 372:106-112.

Polunin, N.V.C., Morales-Nin, B., Pawsey, W.E., Cartes, J.E., Pinnegar, J.K. and Moranta, J. 2001. Feedings relationships in Mediterranean bathyal assemblages elucidated by stable nitrogen and carbon isotope data. *Marine Ecology Progress Series* 220:13-23.

Power, M., Power, G., Caron, F., Doucett, R.R. and Guiguer, K.R.A. 2002. Growth and dietary niche in *Salvelinus alpinus* and *Salvelinus fontinalis* as revealed by stable isotope analysis. *Environmental Biology of Fishes* 64:75-85.

Quillfeldt, P., McGill, R.A.R. and Furness, R.W. 2005. Diet and foraging areas of southern ocean seabirds and their prey inferred from stable isotopes, review and case study of Wilson's storm-petrels. *Marine Ecology Progress Series* 295:295-304.

- Riera, P., Stall, L.J. and Nieuwenhuize, J. 2000. Heavy $\delta^{15}\text{N}$ in intertidal benthic algae and invertebrates in the Scheldt Estuary (The Netherlands), Effect of River Nitrogen Inputs. *Estuarine, Coastal and Shelf science* 51:365-372.
- Romanek, C.S., Gaines, K.F., Bryan Jr., A.L. and Brisbin Jr., I.L. 2000. Foraging ecology of the endangered wood stork recorded in the stable isotope signature of feathers. *Oecologia* 125:584-594.
- Ruiz-Cooley, R.I., Gendron, D., Aguiniga, S., Mesnick, S. and Carriquiry, J.D. 2004. Trophic relationships between sperm whales and jumbo squid using stable isotopes of C and N. *Marine Ecology Progress Series* 277:275-283.
- Sagerup, K., Henriksen, E.O., Skaare, J.U. and Gabrielsen, G.W. 2002. Intraspecific variation in trophic feeding levels and organochlorine concentrations in Glaucous Gulls (*Larus hyperboreus*) from Bjornoya, the Barents Sea. *Ecotoxicology* 11:119-125.
- Samelius, G., Alisauskas, R.T., Hobson, K.A. and Lariviere, S. 2007. Prolonging the arctic pulse, long-term exploitation of cached eggs by arctic foxes when lemmings are scarce. *Journal of Animal Ecology* 76:873-880.
- Sara, G., De Pirro, M., Sprovieri, M., Rumolo, P., Halldorsson, H.P. and Svavarsson, J. 2009. Carbon and nitrogen stable isotopic inventory of the most abundant demersal

fish captured by benthic gears in southwestern Iceland (North Atlantic). *Helgoland Marine Research* 63:309-315.

Schmidt, K., Atkinson, A., Stubing, D., McClelland, J.W., Montoya, J.P. and Voss, M. 2003. Trophic relationship among Southern Ocean copepods and krill, Some uses and limitations of a stable isotope approach. *Limnology and Oceanography* 48(1):277-289.

Schoeninger, M.J. and DeNiro, M.J. 1984. Nitrogen and carbon isotopic composition of bone collagen from marine and terrestrial animals. *Geochimica et Cosmochimica Acta* 48:625-639.

Sherwood, G.D. and Rose, G.A. 2005. Stable isotope analysis of some representative fish and invertebrates of the Newfoundland and Labrador continental shelf food web. *Estuarine, Coastal and Shelf Science* 63:537-549.

Sholto-Douglas, A.D., Field, J.G., James, A.G. and van der Merwe, N.J. 1991. $^{13}\text{C}/^{12}\text{C}$ and $^{15}\text{N}/^{14}\text{N}$ isotope ratios in the Southern Benguela Ecosystem, indicators of food web relationships among different size classes of plankton and pelagic fish; differences between fish muscle and bone collagen tissues. *Marine Ecology Progress Series* 78:23-31.

Soreide, J.E., Hop, H., Carroll, M.L., Falk-Petersen, S. and Hegseth, E.N. 2006. Seasonal food web structures and sympagic-pelagic coupling in the European Arctic revealed by stable isotopes and a two-source food web model. *Progress in Oceanography* 71:59-87.

Steele W.K. 2005. Stable isotope ratios of Antarctic petrel (*Thalassoica Antarctica*) and snow petrels (*Pagodroma nivea*) bone collagen. *Polar Biology* 28:672-679.

Strickland, M.E., Polito, M. and Emslie, S.D. 2008. Spatial and seasonal variation in Adelie penguin diet as inferred from stable isotope analysis of eggshell. *Journal of the North Carolina Academy of Science* 124(4):65-71.

Struck, U., Heyn, T., Altenbach, A., Alheit, J. and Emeis, K C. 2004. Distribution and nitrogen isotope ratios of fish scales in surface sediments from the upwelling area off Namibia. *Zitteliana* 44:125-132.

Sullivan, M.J. and Moncreiff, C.A. 1990. Edaphic algae are an important component of salt marsh food-webs, evidence from multiple stable isotope analyses. *Marine Ecology Progress Series* 62:149-159.

Tameler, T., Renaud, P.E., Hop, H., Carroll, M.L., Ambrose, W.G. and Hobson, K.A. 2006. Trophic relationships and pelagic-benthic coupling during summer in the

Barents Sea Marginal Ice zone, revealed by stable carbon and nitrogen isotope measurements. *Marine Ecology Progress Series* 310:33-46.

Thompson, D.R. and Furness, R.W. 1995. Stable-isotope ratios of carbon and nitrogen in feathers indicate seasonal dietary shifts in Northern Fulmars. *The American Ornithologists Union* 112(2):493-498.

Todd S., Ostrom P., Lien J. and Abrajano J. 1997. Use of biopsy samples of humpback whales (*Megaptera novaeangliae*) skin for stable isotope ($\delta^{13}\text{C}$) determination. *Journal of Northwest Atlantic Fisheries Science* 22:71-76.

Van der Lingen, C.D. and Miller, T.W. 2011. Trophic dynamics of pelagic nekton in the southern Benguela current ecosystem, Calibrating trophic models with stable isotope analysis. Pages 85-94 In *Interdisciplinary Studies on Environmental Chemistry—Marine Environmental Modeling and Analysis*, Eds., K. Omori, X. Guo, N. Yoshie, N. Fujii, I. C. Handoh, A. Isobe and S. Tanabe.

Wada, E., Terazaki, M., Kabaya, Y. and Nemoto, T. 1987. ^{15}N and ^{13}C abundances in the Antarctic Ocean with emphasis on the biogeochemical structure of the food web. *Deep Sea Research* 34:829-841.

Winemiller, K.O., Akin, S. and Zeug, S.C. 2007. Production sources and food web structure of a temperate tidal estuary, integration of dietary and stable isotope data. *Marine Ecology Progress Series* 343:63-76.

Witteveen B.H., Worthy G.A., Wynne K.M. and Roth J.D. 2009. Population structure of North Pacific humpback whales on their feeding grounds revealed by stable carbon and nitrogen isotope ratios. *Marine Ecology Progress Series* 379:299-310.

Zhao L., Castellinin M.A., Mau T.L. and Trumble S.J. 2004. Trophic interactions of Antarctic seals as determined by stable isotope signatures. *Polar Biology* 27:368-373.