

Tags on seabirds: how seriously are instrument-induced behaviours considered?

SP Vandenabeele, RP Wilson and A Grogan

Animal Welfare 20: 559-571

Appendix 1 Literature reviewed and analysed.

NB (Letters in square bracket at the end of the reference refer to the categories in which the paper examined the device effects according to the abbreviations given in Table 1)

DIRECT PAPERS

- Ackerman JT, Adams J, Takekawa JY, Carter HR, Whitworth DL, Newman SH, Golightly RT and Orthmeyer DL** 2004 Effects of radiotransmitters on the reproductive performance of Cassin's auklets. *Wildlife Society Bulletin* 32: 1229-1241 [BS]
- Ballard G, Ainley DG, Ribic CA and Barton KR** 2001 Effect of instrument attachment and other factors on foraging trip duration and nesting success of Adélie penguins. *Condor* 103: 481-490 [FB, BS]
- Barham PJ, Underhill LG, Crawford RJM, Leshoro TM and Bolton DA** 2008 Impact of flipper-banding on breeding success of African penguins *Spheniscus demersus* at Robben Island: comparisons among silicone rubber bands, stainless-steel bands and no bands. *African Journal of Marine Science* 30: 595-602 [BS]
- Croll DA, Boveng PL and Bengtson JL** 1996 Foraging behavior and reproductive success in chinstrap penguins: the effects of transmitter attachment. *Journal of Field Ornithology* 67: 1-9 [FB, BS]
- Culik B and Wilson RP** 1991 Swimming energetics and performance of instrumented Adélie penguins (*Pygoscelis adeliae*). *Journal of Experimental Biology* 158: 355-368 [DB, E]
- Culik BM, Bannasch R and Wilson RP** 1994 External devices on penguins - how important is shape. *Marine Biology* 118: 353-357 [DB, E]
- Culik BM and Wilson RP** 1992 Field metabolic rates of instrumented Adélie penguins using double-labeled water. *Journal of Comparative Physiology B: Biochemical Systemic and Environmental Physiology* 162: 567-573 [TB, E]
- Culik BM, Wilson RP and Bannasch R** 1993 Flipper-bands on penguins: what is the cost of a life-long commitment? *Marine ecology progress series* 98: 209-214 [E]
- Dugger KM, Ballard G, Ainley DG and Barton KJ** 2006 Effects of flipper bands on foraging behavior and survival of Adélie Penguins (*Pygoscelis adeliae*). *Auk* 123: 858-869 [FB, MR]
- Froget G, Gautier-Clerc M, Le Maho Y and Handrich Y** 1998 Is Penguin banding harmless? *Polar Biology* 20: 409-413 [BS]
- Gauthier-Clerc M, Gendner JP, Ribic CA, Fraser WR, Woehler EJ, Descamps S, Gilly C, Le Bohec C and Le Maho Y** 2004 Long-term effects of flipper bands on penguins. *Proceedings of the Royal Society B: Biological Sciences* 271: 423-426 [BS, MR]
- Green JA, Tanton JL, Woakes AJ, Boyd IL and Butler PJ** 2004 Effects of long-term implanted data loggers on macaroni penguins *Eudyptes chrysolophus*. *Journal of Avian Biology* 35: 370-376 [FC, PC, BS, MR]
- Hatch SA, Meyers PM, Mulcahy DM and Douglas DC** 2000 Performance of implantable satellite transmitters in diving seabirds. *Waterbirds* 23: 84-94 [MR]

- Hamel NJ, Parrish JK and Conquest LL** 2004 Effects of tagging on behavior, provisioning, and reproduction in the common murre (*Uria aalge*), a diving seabird. *Auk* 121: 1161-1171 [FC, TB, BS]
- Hull CL** 1997 The effect of carrying devices on breeding royal penguins. *Condor* 99: 530-534 [FB, PC, BS]
- Igual JM, Forero MG, Tavecchia G, Gonzalez-Solis J, Martinez-Abraín A, Hobson KA, Ruiz X and Oro D** 2005 Short-term effects of data-loggers on Cory's shearwater (*Calonectris diomedea*). *Marine Biology* 146: 619-624 [FB, PC, BS]
- Mallory ML and Gilbert CD** 2008 Leg-loop harness design for attaching external transmitters to seabirds. *Marine Ornithology* 36: 183-188 [BS]
- Meyers PM, Hatch SA and Mulcahy DM** 1998 Effect of implanted satellite transmitters on the nesting behavior of murrelets. *Condor* 100: 172-174 [BS]
- Miller GD and Davis LS** 1993 Foraging flexibility of Adélie penguins *Pygoscelis adeliae* - consequences for an indicator species. *Biological Conservation* 63: 223-230 [FB]
- Morris RD and Burness GP** 1992 A new procedure for transmitter attachment - effects on brood attendance and chick feeding rates by male common terns. *Condor* 94: 239-243 [BS]
- Navarro J, Gonzalez-Solis J, Viscor G and Chastel O** 2008 Ecophysiological response to an experimental increase of wing loading in a pelagic seabird. *Journal of Experimental Marine Biology And Ecology* 358: 14-19 [FB, PC]
- Paredes R, Jones IL and Boness DJ** 2005 Reduced parental care, compensatory behaviour and reproductive costs of thick-billed murrelets equipped with data loggers. *Animal Behaviour* 69: 197-208 [FB, PC, BS]
- Peery MZ, Beissinger SR, Burkett E and Newman SH** 2006 Local survival of marbled murrelets in central California: roles of oceanographic processes, sex, and radiotagging. *Journal of Wildlife Management* 70: 78-88 [MR]
- Phillips RA, Xavier JC and Croxall JP** 2003 Effects of satellite transmitters on albatrosses and petrels. *Auk* 120: 1082-1090 [FB, BS]
- Rayner MJ** 2007 Effects of dummy global location sensors on foraging behavior of Cook's petrel (*Pterodroma cookii*). *Wilson Journal of Ornithology* 119: 107-109 [FB]
- Ropert-Coudert Y, Bost CA, Handrich Y, Bevan RM, Butler PJ, Woakes AT and Le Maho Y** 2000 Impact of externally attached loggers on the diving behaviour of the king penguin. *Physiological and Biochemical Zoology* 73: 438-445 [DB]
- Ropert-Coudert Y, Knott N, Chiaradia A and Kato A** 2007 How do different data logger sizes and attachment positions affect the diving behaviour of little penguins? *Deep-Sea Research Part II* 54: 415-423 [FB, DB]
- Ropert-Coudert Y, Wilson RP, Yoda K and Kato A** 2007 Assessing performance constraints in penguins with externally-attached devices. *Marine Ecology Progress Series* 333: 281-289 [DB]
- Simeone A, Wilson RP, Knauf G, Knauf W and Schutzendube J** 2002 Effects of attached data-loggers on the activity budgets of captive Humboldt penguins. *Zoo Biology* 21: 365-373 [TB]
- Söhle IS** 2003 Effects of satellite telemetry on sooty shearwater, *Puffinus griseus*, adults and chicks. *Emu* 103: 373-379 [TB, BS]
- Söhle IS, Moller H, Fletcher D and Robertson CJR** 2000 Telemetry reduces colony attendance by sooty shearwaters (*Puffinus griseus*). *New Zealand Journal of Zoology* 27: 357-365 [TB, BS]
- Taylor SS, Leonard ML and Boness DJ** 2001 Foraging trip duration increases for Humboldt penguins tagged with recording devices. *Journal of Avian Biology* 32: 369-372 [FB]

- Tremblay Y, Cherel Y, Oremus M, Tveraa T and Chastel O** 2003 Unconventional ventral attachment of time–depth recorders as a new method for investigating time budget and diving behaviour of seabirds. *Journal of Experimental Biology* 206: 1929-1940 [FB]
- Wanless S** 1992 Effects of tail-mounted devices on the attendance behavior of kittiwakes during chick rearing. *Journal of Field Ornithology* 63: 169-176 [TB]
- Watanuki Y, Mori Y and Naito Y** 1992 Adélie penguin parental activities and reproduction - effects of device size and timing of its attachment during chick rearing period. *Polar Biology* 12: 539-544 [FB, PC, BS]
- Whidden SE, Williams CT, Breton AR and Buck CL** 2007 Effects of transmitters on the reproductive success of tufted puffins. *Journal of Field Ornithology* 78: 206-212 [BS]
- Wilson RP, Coria NR, Spairani HJ, Adelung D and Culik B** 1989 Human-induced behaviour in Adélie penguins *Pygoscelis adeliae*. *Polar Biology* 10: 77-80 [FB, BS]
- Wilson RP, Kreye JM, Lucke K and Urquhart H** 2004 Antennae on transmitters on penguins: balancing energy budgets on the high wire. *Journal of Experimental Biology* 207: 2649-2662 [E]

INDIRECT PAPERS

- Ackerman JT, Bluso-Demers JD and Takekawa JY** 2009 Postfledging Forster's tern movements, habitat selection, and colony attendance in San Francisco Bay. *Condor* 111: 100-110
- Ackerman JT, Eagles-Smith CA, Takekawa JY and Iverson SA** 2008 Survival of postfledging Forster's terns in relation to mercury exposure in San Francisco Bay. *Ecotoxicology* 17: 789-801
- Adams NJ and Navarro RA** 2005 Foraging of a coastal seabird: flight patterns and movements of breeding Cape gannets *Morus capensis*. *African Journal of Marine Science* 27: 239-248
- Aguiar JS, Benvenuti S, Dall'Antonia L, MacMinn-Grivé M and Mayol-Serra J** 2003 Preliminary results on the foraging ecology of Balearic shearwaters (*Puffinus mauretanicus*) from bird-borne data loggers. *Scientia Marina* 67: 129-134
- Ainley DG, Ford RG, Brown ED, Suryan RM and Irons DB** 2003 Prey resources, competition, and geographic structure of kittiwake colonies in Prince William Sound. *Ecology* 84: 709-723
- Ainley DG, Ribic CA, Ballard G, Heath S, Gaffney I, Karl BJ, Barton KJ, Wilson PR and Webb S** 2004 Geographic structure of Adélie penguin populations: overlap in colony-specific foraging areas. *Ecological monographs* 74: 159-178
- Ainley DG, Wilson PR, Barton KJ, Ballard G, Nur N and Karl B** 1998 Diet and foraging effort of Adélie penguins in relation to pack-ice conditions in the southern Ross Sea. *Polar Biology* 20: 311-319
- Akesson S and Welmerskirch H** 2005 Albatross long-distance navigation: comparing adults and juveniles. *Journal of Navigation* 58: 365-373
- Ancel A** 1997 Prey ingestion revealed by oesophagus and stomach temperature recordings in cormorants. *Journal of Experimental Biology* 200: 149-154
- Ancel A, Fetter L and Groscolas R** 1998 Changes in egg and body temperature indicate triggering of egg desertion at a body mass threshold in fasting incubating blue petrels (*Halobaena caerulea*). *Journal of Comparative Physiology B: Biochemical Systemic and Environmental Physiology* 168: 533-539
- Anderson CD, Roby DD and Collis K** 2004 Foraging patterns of male and female double-crested cormorants nesting in the Columbia River estuary. *Canadian Journal of Zoology* 82: 541-554
- Anderson DJ, Sievert PR, Andrewslabenski J and Ricklefs RE** 1991 A miniature activity recorder for plunge-diving seabirds. *Auk* 108: 257-263
- Anderson SK, Roby DD, Lyons DE and Collis K** 2007 Relationship of Caspian tern foraging ecology to nesting success in the Columbia River estuary, Oregon, USA. *Estuarine Coastal and Shelf Science* 73: 447-456
- Angelier F, Bost CA, Giraudeau M, Bouteloup G, Dano S and Chastel O** 2008 Corticosterone and foraging behavior in a diving seabird: The Adélie penguin, *Pygoscelis adeliae*. *General and Comparative Endocrinology* 156: 134-144
- Angelier F, Clement-Chastel C, Gabrielsen GW and Chastel O** 2007 Corticosterone and time-activity black-legged budget: an experiment with kittiwakes. *Hormones and Behavior* 52: 482-491
- Angelier F, Shaffer SA, Weimerskirch H, Trouve C and Chastel O** 2007 Corticosterone and foraging behavior in a pelagic seabird. *Physiological and Biochemical Zoology* 80: 283-292

- Awkerman JA, Fukuda A, Higuchi H and Anderson DJ** 2005 Foraging activity and submesoscale habitat use of waved albatrosses *Phoebastria irrorata* during chick-brooding period. *Marine Ecology Progress Series* 291: 289-300
- Barlow KE and Croxall JP** 2002 Provisioning behaviour of macaroni penguins *Eudyptes chrysolophus*. *Ibis* 144: 248-258
- Barlow KE and Croxall JP** 2002 Seasonal and interannual variation in foraging range and habitat of macaroni penguins *Eudyptes chrysolophus* at South Georgia. *Marine Ecology-Progress Series* 232: 291-304
- Becker PH, Dittmann T, Ludwigs JD, Limmer B, Ludwig SC, Bauch C, Braasch A and Wendeln H** 2008 Timing of initial arrival at the breeding site predicts age at first reproduction in a long-lived migratory bird. *Proceedings of the National Academy of Sciences of the United States of America* 105: 12349-12352
- Benvenuti S, Dall'Antonia L and Lyngs P** 2001 Foraging behaviour and time allocation of chick-rearing razorbills *Alca torda* at Graesholmen, central Baltic Sea. *Ibis* 143: 402-412
- Berrow SD, Wood AR and Prince PA** 2000 Foraging location and range of white-chinned petrels *Procellaria aequinoctialis* breeding in the South Atlantic. *Journal of Avian Biology* 31: 303-311
- Bethge P, Nicol S, Culik BM and Wilson RP** 1997 Diving behaviour and energetics in breeding little penguins (*Eudyptula minor*). *Journal of Zoology* 242: 483-502
- Bevan RM, Butler PJ, Woakes AJ and Boyd IL** 2002 The energetics of gentoo penguins, *Pygoscelis papua*, during the breeding season. *Ecology* 16: 175-190
- Bocher P, Labidoire B and Cherel Y** 2000 Maximum dive depths of common diving petrels (*Pelecanoides urinatrix*) during the annual cycle at Mayes Island, Kerguelen. *Journal of Zoology* 251: 517-524
- Boersma PD, Stokes DL and Strange IJ** 2002 Applying ecology to conservation: tracking breeding penguins at New Island South Reserve, Falkland Islands. *Aquatic Conservation: Marine And Freshwater Ecosystems* 12: 63-74
- Bost CA, Charrassin JB, Clerquin Y, Ropert-Coudert Y and Le Maho Y** 2004 Exploitation of distant marginal ice zones by king penguins during winter. *Marine Ecology Progress Series* 283: 293-297
- Bost CA, Georges JY, Guinet C, Cherel Y, Pütz K, Charrassin JB, Handrich Y, Zorn T, Lage J and Le Maho Y** 1997 Foraging habitat and food intake of satellite-tracked king penguins during the austral summer at Crozet Archipelago. *Marine Ecology Progress Series* 150: 21-33
- Bost CA, Handrich Y, Butler PJ, Fahlman A, Halsey LG, Woakes AJ and Ropert-Coudert Y** 2007 Changes in dive profiles as an indicator of feeding success in king and Adélie penguins. *Deep-Sea Research Part II-Topical Studies in Oceanography* 54: 248-255
- Boyd WS, Tranquilla LMF, Ryder JL, Shisko SG and Bertram DF** 2008 Variation in marine distributions of Cassin's auklets (*Ptychoramphus aleuticus*) breeding at Triangle Island, British Columbia. *Auk* 125: 158-166
- Breton AR, Diamond AW and Kress SW** 2006 Encounter, survival, and movement probabilities from an Atlantic puffin (*Fratercula arctica*) metapopulation. *Ecological Monographs* 76: 133-149
- Breton AR, Kildaw SD, Murra K and Buck CL** 2008 Multilevel models reveal no cohort-level variation in time spent foraging to account for a collapse in kittiwake (*Rissa tridactyla*) breeding success. *Ecological Modelling* 212: 233-243
- Bugoni L, D'Alba L and Furness RW** 2009 Marine habitat use of wintering spectacled petrels *Procellaria conspicillata*, and overlap with longline fishery. *Marine Ecology Progress Series* 374: 273-285

- Catard A, Weimerskirch H and Cherel Y** 2000 Exploitation of distant Antarctic waters and close shelf-break waters by white-chinned petrels rearing chicks. *Marine Ecology Progress Series* 194: 249-261
- Catry P, Phillips RA, Phalan B, Silk JRD and Croxall JP** 2004 Foraging strategies of grey-headed albatrosses *Thalassarche chrysostoma*: integration of movements, activity and feeding events. *Marine Ecology Progress Series* 280: 261-273
- Chappell MA, Shoemaker VH, Janes DN, Bucher TL and Maloney SK** 1993 Diving behavior during foraging in breeding Adélie penguins. *Ecology* 74: 1204-1215
- Chappell MA, Shoemaker VH, Janes DN, Maloney SK and Bucher TL** 1993 Energetics of foraging in breeding Adélie penguins. *Ecology* 74: 2450-2461
- Charrassin JB and Bost CA** 2001 Utilisation of the oceanic habitat by king penguins over the annual cycle. *Marine Ecology Progress Series* 221: 285-298
- Charrassin JB, Bost CA, Pütz K, Lage J, Dahier T, Zorn T and Le Maho Y** 1998 Foraging strategies of incubating and brooding king penguins *Aptenodytes patagonicus*. *Oecologia* 114: 194-201
- Charrassin JB, Park YH, Le Maho Y and Bost CA** 2004 Fine resolution 3D temperature fields off Kerguelen from instrumented penguins. *Deep-Sea Research Part I-Oceanographic Research Papers* 51: 2091-2103
- Cherel Y, Tremblay Y, Guinard E and Georges JY** 1999 Diving behaviour of female northern rockhopper penguins, *Eudyptes chrysocome moseleyi*, during the brooding period at Amsterdam Island (Southern Indian Ocean). *Marine Biology* 134: 375-385
- Cherel Y and Weimerskirch H** 1995 Seabirds as indicators of marine resources: black-browed albatrosses feeding on ommastrephid squids in Kerguelen waters. *Marine Ecology Progress Series* 129: 295-300
- Cherel Y, Weimerskirch H and Trouve C** 2000 Food and feeding ecology of the neritic-slope forager black-browed albatross and its relationships with commercial fisheries in Kerguelen waters. *Marine Ecology Progress Series* 207: 183-199
- Clarke J, Emmerson LM and Otahal P** 2006 Environmental conditions and life history constraints determine foraging range in breeding Adélie penguins. *Marine Ecology Progress Series* 310: 247-261
- Clarke J, Kerry K, Fowler C, Lawless R, Eberhard S and Murphy R** 2003 Post-fledging and winter migration of Adélie penguins *Pygoscelis adeliae* in the Mawson region of East Antarctica. *Marine Ecology Progress Series* 248: 267-278
- Clarke J, Manly B, Kerry K, Gardner H, Franchi E, Corsolini S and Focardi S** 1998 Sex differences in Adélie penguin foraging strategies. *Polar Biology* 20: 248-258
- Clausen A and Pütz K** 2003 Winter diet and foraging range of gentoo penguins (*Pygoscelis papua*) from Kidney Cove, Falkland Islands. *Polar Biology* 26: 32-40
- Cook TR, Cherel Y and Tremblay Y** 2006 Foraging tactics of chick-rearing Crozet shags: individuals display repetitive activity and diving patterns over time. *Polar Biology* 29: 562-569
- Croll DA, Demer DA, Hewitt RP, Jansen JK, Goebel ME and Tershy BR** 2006 Effects of variability in prey abundance on reproduction and foraging in chinstrap penguins (*Pygoscelis antarctica*). *Journal of Zoology* 269: 506-513
- Croll DA, Gaston AJ, Burger AE and Konnoff D** 1992 Foraging behavior and physiological adaptation for diving in thick-billed murre. *Ecology* 73: 344-356
- Culik B, Hennicke J and Martin T** 2000 Humboldt penguins outmanoeuvring El Niño. *Journal of Experimental Biology* 203: 2311-2322
- Culik BM** 1996 Diving energetics in king penguins (*Aptenodytes patagonicus*). *Journal of Experimental Biology* 199: 973-983

- Culik BM and Luna-Jorquera G** 1997 Satellite tracking of Humboldt penguins (*Spheniscus humboldti*) in northern Chile. *Marine Biology* 128: 547-556
- Cuthbert R, Hilton G, Ryan P and Tuck GN** 2005 At-sea distribution of breeding Tristan albatrosses *Diomedea dabbenena* and potential interactions with pelagic longline fishing in the South Atlantic Ocean. *Biological Conservation* 121: 345-355
- Daunt F, Benvenuti S, Harris MP, Dall'Antonia L, Elston DA and Wanless S** 2002 Foraging strategies of the black-legged kittiwake *Rissa tridactyla* at a North Sea colony: evidence for a maximum foraging range. *Marine Ecology Progress Series* 245: 239-247
- Daunt F, Peters G, Scott B, Grémillet D and Wanless S** 2003 Rapid-response recorders reveal interplay between marine physics and seabird behaviour. *Marine Ecology Progress Series* 255: 283-288
- Davis LS and Miller GD** 1992 Satellite tracking of Adélie penguins. *Polar Biology* 12: 503-506
- Deagle BE, Gales NJ and Hindell MA** 2008 Variability in foraging behaviour of chick-rearing macaroni penguins *Eudyptes chrysolophus* and its relation to diet. *Marine Ecology Progress Series* 359: 295-309
- Dittmann T and Becker PH** 2003 Sex, age, experience and condition as factors affecting arrival date in prospecting common terns, *Sterna hirundo*. *Animal Behaviour* 65: 981-986
- Dittmann T, Ezard THG and Becker PH** 2007 Prospectors' colony attendance is sex-specific and increases future recruitment chances in a seabird. *Behavioural Processes* 76: 198-205
- Einoder LD and Goldsworthy SD** 2005 Foraging flights of short-tailed shearwaters (*Puffinus tenuirostris*) from Althorpe Island: assessing their use of neritic waters. *Transactions of the Royal Society of South Australia* 129: 209-216
- Elliott KH, Davoren GK and Gaston AJ** 2007 The influence of buoyancy and drag on the dive behaviour of an Arctic seabird, the thick-billed murre. *Canadian Journal of Zoology* 85: 352-361
- Elliott KH, Davoren GK and Gaston AJ** 2008 Increasing energy expenditure for a deep-diving bird alters time allocation during the dive cycle. *Animal Behaviour* 75: 1311-1317
- Elliott KH, Davoren GK and Gaston AJ** 2008 Time allocation by a deep-diving bird reflects prey type and energy gain. *Animal Behaviour* 75: 1301-1310
- Elliott KH, Woo K, Gaston AJ, Benvenuti S, Dall'Antonia L and Davoren GK** 2008 Seabird foraging behaviour indicates prey type. *Marine Ecology Progress Series* 354: 289-303
- Enstipp MR, Grémillet D and Jones DR** 2007 Investigating the functional link between prey abundance and seabird predatory performance. *Marine Ecology Progress Series* 331: 267-279
- Falk K, Benvenuti S, Dall'Antonia L, Gilchrist G and Kampp K** 2002 Foraging behaviour of thick-billed murre breeding in different sectors of the North Water polynya: an inter-colony comparison. *Marine Ecology Progress Series* 231: 293-302
- Falk K, Benvenuti S, Dall'Antonia L, Kampp KAJ and Ribolini A** 2000 Time allocation and foraging behaviour of chick-rearing Brunnich's guillemots *Uria lomvia* in high-arctic Greenland. *Ibis* 142: 82-92
- Falk K and Møller S** 1995 Satellite tracking of high-arctic northern fulmars. *Polar Biology* 15: 495-502
- Fauchald P and Tveraa T** 2003 Using first-passage time in the analysis of area-restricted search and habitat selection. *Ecology* 84: 282-288
- Fauchald P and Tveraa T** 2006 Hierarchical patch dynamics and animal movement pattern. *Oecologia* 149: 383-395

- Felicísimo AM, Munoz J and Gonzalez-Solis J** 2008 Ocean surface winds drive dynamics of transoceanic aerial movements. *PLoS ONE* 3: e2928
- Fernández P and Anderson DJ** 2000 Nocturnal and diurnal foraging activity of Hawaiian albatrosses detected with a new immersion monitor. *Condor* 102: 577-584
- Fernandez P, Anderson DJ, Sievert PR and Huyvaert K** 2001 Foraging destinations of three low-latitude albatross (Phoebastria) species. *Journal Of Zoology* 254: 391-404
- Fischer KN, Suryan RM, Roby DD and Balogh GR** 2009 Post-breeding season distribution of black-footed and Laysan albatrosses satellite-tagged in Alaska: inter-specific differences in spatial overlap with North Pacific fisheries. *Biological Conservation* 142: 751-760
- Fraser GS, Jones IL and Hunter FM** 2002 Male-female differences in parental care in monogamous crested auklets. *Condor* 104: 413-423
- Froget G, Butler PJ, Woakes AJ, Fahlman A, Kuntz G, Le Maho Y and Handrich Y** 2004 Heart rate and energetics of free-ranging king penguins (*Aptenodytes patagonicus*). *Journal of Experimental Biology* 207: 3917-3926
- Furness RW, Crane JE, Bearhop S, Garthe S, Käckelä A, Käckelä R, Kelly A, Kubetzki U, Votier SC and Waldron S** 2006 Techniques to link individual migration patterns of seabirds with diet specialization, condition and breeding performance. *Ardea* 94: 631-638
- Garthe S, Benvenuti S and Montevecchi WA** 2000 Pursuit plunging by northern gannets (*Sula bassana*) feeding on capelin (*Mallotus villosus*). *Proceedings of the Royal Society of London Series B: Biological Sciences* 267: 1717-1722
- Garthe S, Benvenuti S and Montevecchi WA** 2003 Temporal patterns of foraging activities of northern gannets, *Morus bassanus*, in the northwest Atlantic Ocean. *Canadian Journal of Zoology/Revue Canadienne de Zoologie* 81: 453-461
- Garthe S, Grémillet D and Furness RW** 1999 At-sea-activity and foraging efficiency in chick-rearing northern gannets *Sula bassana*: a case study in Shetland. *Marine Ecology Progress Series* 185: 93-99
- Garthe S, Montevecchi WA, Chapdelaine G, Rail JF and Hedd A** 2007 Contrasting foraging tactics by northern gannets (*Sula bassana*) breeding in different oceanographic domains with different prey fields. *Marine Biology* 151: 687-694
- Garthe S, Montevecchi WA and Davoren GK** 2007 Flight destinations and foraging behaviour of northern gannets (*Sula bassana*) preying on a small forage fish in a low-Arctic ecosystem. *Deep-Sea Research Part II-Topical Studies in Oceanography* 54: 311-320
- Georges JY, Guinet C, Jouventin P and Weimerskirch H** 1997 Satellite tracking of seabirds: interpretation of activity pattern from the frequency of satellite locations. *Ibis* 139: 403-405
- González-Solís J, Becker PH and Wendeln H** 1999 Divorce and asynchronous arrival in common terns, *Sterna hirundo*. *Animal behaviour* 58: 1123-1129
- González-Solís J, Croxall J and Briggs D** 2002 Activity patterns of giant petrels, *Macronectes spp.*, using different foraging strategies. *Marine Biology* 140: 197-204
- González-Solís J, Croxall JP and Afanasyev V** 2007 Offshore spatial segregation in giant petrels *Macronectes spp.*: differences between species, sexes and seasons. *Aquatic Conservation: Marine and Freshwater Ecosystems* 17: S22-S36
- González-Solís J, Croxall JP, Oro D and Ruiz X** 2007 Trans-equatorial migration and mixing in the wintering areas of a pelagic seabird. *Frontiers in Ecology and the Environment* 5: 297-301
- González-Solís J, Croxall JP and Wood AG** 2000 Foraging partitioning between giant petrels *Macronectes spp.* and its relationship with breeding population changes at Bird Island, South Georgia. *Marine Ecology Progress Series* 204: 279-288

- González-Solís J, Croxall JP and Wood AG** 2000 Sexual dimorphism and sexual segregation in foraging strategies of northern giant petrels, *Macronectes halli*, during incubation. *Oikos* 90: 390-398
- Granadeiro JP, Nunes M, Silva MC and Furness RW** 1998 Flexible foraging strategy of Cory's shearwater, *Calonectris diomedea*, during the chick-rearing period. *Animal Behaviour* 56: 1169-1176
- Green JA, Boyd IL, Woakes AJ, Green CJ and Butler PJ** 2007 Feeding, fasting and foraging success during chick rearing in macaroni penguins. *Marine Ecology Progress Series* 346: 299-312
- Green JA, Butler PJ, Woakes AJ and Boyd IL** 2002 Energy requirements of female macaroni penguins breeding at South Georgia. *Ecology* 16: 671-681
- Green JA, Butler PJ, Woakes AJ and Boyd IL** 2003 Energetics of diving in macaroni penguins. *Journal of Experimental Biology* 206: 43-57
- Green K, Williams R and Green MG** 1998 Foraging ecology and diving behaviour of macaroni penguins *Eudyptes chrysolophus* at Heard Island. *Marine Ornithology* 26: 27-34
- Grémillet D, Enstipp MR, Boudiffa M and Liu H** 2006 Do cormorants injure fish without eating them? An underwater video study. *Marine Biology* 148: 1081-1087
- Grémillet D, Kuntz G, Delbart F, Mellet M, Kato A, Robin JP, Chaillon PE, Gendner JP, Lorentsen SH and Le Maho Y** 2004 Linking the foraging performance of a marine predator to local prey abundance. *Functional Ecology* 18: 793-801
- Grémillet D, Kuntz G, Gilbert C, Woakes AJ, Butler PJ and le Maho Y** 2005 Cormorants dive through the Polar night. *Biology Letters* 1: 469-471
- Grémillet D, Kuntz G, Woakes AJ, Gilbert C, Robin JP, Le Maho Y and Butler PJ** 2005 Year-round recordings of behavioural and physiological parameters reveal the survival strategy of a poorly insulated diving endotherm during the Arctic winter. *Journal of Experimental Biology* 208: 4231-4241
- Grémillet D, Pichegru L, Siorat F and Georges JY** 2006 Conservation implications of the apparent mismatch between population dynamics and foraging effort in French northern gannets from the English Channel. *Marine Ecology Progress Series* 319: 15-25
- Grémillet D, Wilson RP, Storch S and Gary Y** 1999 Three-dimensional space utilization by a marine predator. *Marine Ecology Progress Series* 183: 263-273
- Grémillet D, Wilson RP, Wanless S and Chater T** 2000 Black-browed albatrosses, international fisheries and the Patagonian Shelf. *Marine Ecology Progress Series* 195: 269-280
- Grémillet DJH and Plos AL** 1994 The use of stomach temperature records for the calculation of daily food-intake in cormorants. *Journal of Experimental Biology* 189: 105-115
- Guilford TC, Meade J, Freeman R, Biro D, Evans T, Bonadonna F, Boyle D, Roberts S and Perrins CM** 2008 GPS tracking of the foraging movements of Manx shearwaters *Puffinus puffinus* breeding on Skomer Island, Wales. *Ibis* 150: 462-473
- Guinet C, Koudil M, Bost CA, Durbec JP, Georges JY, Mouchot MC and Jouventin P** 1997 Foraging behaviour of satellite-tracked king penguins in relation to sea-surface temperatures obtained by satellite telemetry at Crozet Archipelago, a study during three austral summers. *Marine Ecology Progress Series* 150: 11-20
- Hamel NJ, Parrish JK and Laake J** 2008 Linking colonies to fisheries: Spatio-temporal overlap between common murrets (*Uria aalge*) from Tatoosh Island and coastal gillnet fisheries in the Pacific Northwest, USA. *Biological Conservation* 141: 3101-3115
- Hamer KC, Humphreys EM, Garthe S, Hennicke J, Peters G, Grémillet D, Phillips RA, Harris MP and Wanless S** 2007 Annual variation in diets, feeding locations and foraging behaviour of gannets in the North Sea: flexibility, consistency and constraint. *Marine Ecology Progress Series* 338: 5-305

- Hamer KC, Phillips RA, Hill JK, Wanless S and Wood AG** 2001 Contrasting foraging strategies of gannets *Morus bassanus* at two north Atlantic colonies: foraging trip duration and foraging area fidelity. *Marine Ecology Progress Series* 224: 283-290
- Hamer KC, Phillips RA, Wanless S, Harris MP and Wood AG** 2000 Foraging ranges, diets and feeding locations of gannets *Morus bassanus* in the North Sea: evidence from satellite telemetry. *Marine Ecology Progress Series* 200: 257-264
- Hamilton CD, Golightly RT and Takekawa JY** 2005 Characteristics of diving in radio-marked Xantus's murrelets. *Marine Ornithology* 33: 155-159
- Harding AMA, Egevang C, Walkusz W, Merkel F, Blanc S and Grémillet D** 2009 Estimating prey capture rates of a planktivorous seabird, the little auk (*Alle alle*), using diet, diving behaviour, and energy consumption. *Polar Biology* 32: 785-796
- Hatch SA, Meyers PM, Mulcahy DM and Douglas DC** 2000 Seasonal movements and pelagic habitat use of murrelets and puffins determined by satellite telemetry. *Condor* 102: 145-154
- Hawkins PAJ, Butler PJ, Woakes AJ and Gabrielsen GW** 1997 Heat increment of feeding in Brunnich's guillemot *Uria lomvia*. *Journal of Experimental Biology* 200: 1757-1763
- Hedd A, Gales R and Brothers N** 2001 Foraging strategies of shy albatross *Thalassarche cauta* breeding at Albatross Island, Tasmania, Australia. *Marine Ecology Progress Series* 224: 267-282
- Hedd A, Regular PM, Montevecchi WA, Buren AD, Burke CM and Fifield DA** 2009 Going deep: common murrelets dive into frigid water for aggregated, persistent and slow-moving capelin. *Marine Biology* 156: 741-751
- Hennicke JC and Culik BM** 2005 Foraging performance and reproductive success of Humboldt penguins in relation to prey availability. *Marine Ecology Progress Series* 296: 173-181
- Hoskins AJ, Dann P, Ropert-Coudert Y, Kato A, Chiaradia A, Costa DP and Arnould JPY** 2008 Foraging behaviour and habitat selection of the little penguin *Eudyptula minor* during early chick rearing in Bass Strait, Australia. *Marine Ecology Progress Series* 366: 293-303
- Hull CL, Hindell MA and Michael K** 1997 Foraging zones of royal penguins during the breeding season, and their association with oceanographic features. *Marine Ecology Progress Series* 153: 217-228
- Hyrenbach KD and Dotson RC** 2003 Assessing the susceptibility of female black-footed albatross (*Phoebastria nigripes*) to longline fisheries during their post-breeding dispersal: an integrated approach. *Biological Conservation* 112: 391-404
- Hyrenbach KD, Fernández P and Anderson DJ** 2002 Oceanographic habitats of two sympatric North Pacific albatrosses during the breeding season. *Marine Ecology Progress Series* 233: 283-301
- Hyrenbach KD, Keiper C, Allen SG, Ainley DG and Anderson DJ** 2006 Use of marine sanctuaries by far-ranging predators: commuting flights to the California Current System by breeding Hawaiian albatrosses. *Fisheries Oceanography* 15: 95-103
- Irons DB** 1998 Foraging area fidelity of individual seabirds in relation to tidal cycles and flock feeding. *Ecology* 79: 647-655
- Ishikawa K and Watanuki Y** 2002 Sex and individual differences in foraging behavior of Japanese cormorants in years of different prey availability. *Journal of Ethology* 20: 49-54
- Jansen JK, Boveng PL and Bengtson JL** 1998 Foraging modes of chinstrap penguins: contrasts between day and night. *Marine Ecology Progress Series* 165: 161-172
- Jansen JK, Russell RW and Meyer WR** 2002 Seasonal shifts in the provisioning behavior of chinstrap penguins, *pygoscelis antarctica*. *Oecologia* 131: 306-318

- Jodice PGR, Roby DD, Suryan RM, Irons DB, Kaufman AM, Turco KR and Visser GH** 2003 Variation in energy expenditure among black-legged kittiwakes: effects of activity-specific metabolic rates and activity budgets. *Physiological and Biochemical Zoology* 76: 375-388
- Jones IL, Rowe S, Carr SM, Fraser G and Taylor P** 2002 Different patterns of parental effort during chick-rearing by female and male thick-billed murre (*Uria lomvia*) at a low-arctic colony. *Auk* 119: 1064-1074
- Jouventin P, Capdeville D, Cuenot-Chaillet F and Boiteau C** 1994 Exploitation of pelagic resources by a non-flying seabird: satellite tracking of the king penguin throughout the breeding cycle. *Marine Ecology Progress Series* 106: 11-11
- Kato A, Ropert-Coudert Y and Chiaradia A** 2008 Regulation of trip duration by an inshore forager, the little penguin (*Eudyptula minor*), during incubation. *Auk* 125: 588-593
- Kato A, Watanuki Y and Naito Y** 2003 Foraging behaviour of chick-rearing rhinoceros auklets *Cerorhinca monocerata* at Teuri Island, Japan, determined by acceleration-depth recording micro data loggers. *Journal of Avian Biology* 34: 282-287
- Kato A, Watanuki Y, Shaughnessy P, Le Maho Y and Naito Y** 1999 Intersexual differences in the diving behaviour of foraging subantarctic cormorant (*Phalacrocorax albiventer*) and Japanese cormorant (*P. filamentosus*). *Comptes Rendus de l'Académie des Sciences Series III: Sciences de la Vie* 322: 557-562
- Kato A, Yoshioka A and Sato K** 2009 Foraging behavior of Adélie penguins during incubation period in Lützow-Holm Bay. *Polar Biology* 32: 181-186
- Klomp NI and Schultz MA** 2000 Short-tailed shearwaters breeding in Australia forage in Antarctic waters. *Marine Ecology Progress Series* 194: 307-310
- Kooyman GL** 1992 Heart rates and swim speeds of emperor penguins diving under sea ice. *Journal of Experimental Biology* 165: 161-180
- Kooyman GL, Cherel Y, Le Maho Y, Croxall JP, Thorson PH, Ridoux V and Kooyman CA** 1992 Diving behavior and energetics during foraging cycles in king penguins. *Ecological Monographs* 62: 143-163
- Koudil M, Charrassin JB, Le Maho Y and Bost CA** 2000 Seabirds as monitors of upper-ocean thermal structure. King penguins at the Antarctic polar front, east of Kerguelen sector. *Comptes Rendus de l'Académie des Sciences Series III: Sciences de la Vie* 323: 377-384
- Kuroki M, Kato A, Hayama SI and Naito Y** 1999 Preliminary report of new method for ECG measurement of exercising birds. *Polar bioscience* 12: 40-46
- Lawton K, Kirkwood R, Robertson G and Raymond B** 2008 Preferred foraging areas of Heard Island albatrosses during chick raising and implications for the management of incidental mortality in fisheries. *Aquatic Conservation-Marine And Freshwater Ecosystems* 18: 309-320
- Le Bohec C, Durant JM, Gauthier-Clerc M, Stenseth NC, Park YH, Pradel R, Grémillet D, Gendner JP and Le Maho Y** 2008 King penguin population threatened by Southern Ocean warming. *Proceedings of the National Academy of Sciences* 105: 2493-2497
- Le Bohec C, Gauthier-Clerc M, Grémillet D, Pradel R, Bechet A, Gendner JP and Le Maho Y** 2007 Population dynamics in a long-lived seabird: I. Impact of breeding activity on survival and breeding probability in unbanded king penguins. *Journal of Animal Ecology* 76: 1149-1160
- Lescroël A and Bost CA** 2005 Foraging under contrasting oceanographic conditions: the gentoo penguin at Kerguelen Archipelago. *Marine Ecology Progress Series* 302: 245-261
- Lewis S, Benvenuti S, Dall'Antonia L, Griffiths R, Money L, Sherratt TN, Wanless S and Hamer KC** 2002 Sex-specific foraging behaviour in a monomorphic seabird. *Proceedings of the Royal Society B: Biological Sciences* 269: 1687-1693

- Lewis S, Benvenuti S, Daunt F, Wanless S, Dall'Antonia L, Luschi P, Elston DA, Hamer KC and Sherratt TN** 2004 Partitioning of diving effort in foraging trips of northern gannets. *Canadian Journal of Zoology/Revue Canadienne de Zoologie* 82: 1910-1916
- Lewis S, Grémillet D, Daunt F, Ryan PG, Crawford RJM and Wanless S** 2006 Using behavioural and state variables to identify proximate causes of population change in a seabird. *Oecologia* 147: 606-614
- Lewis S, Schreiber EA, Daunt F, Schenk GA, Orr K, Adams A, Wanless S and Hamer KC** 2005 Sex-specific foraging behaviour in tropical boobies: does size matter? *Ibis* 147: 408-414
- Lewis S, Schreiber EA, Daunt F, Schenk GA, Wanless S and Hamer KC** 2004 Flexible foraging patterns under different time constraints in tropical boobies. *Animal Behaviour* 68: 1331-1337
- Limmer B and Becker PH** 2007 The relative role of age and experience in determining variation in body mass during the early breeding career of the common tern (*Sterna hirundo*). *Behavioral Ecology and Sociobiology* 61: 1885-1896
- Limmer B and Becker PH** 2009 Improvement in chick provisioning with parental experience in a seabird. *Animal Behaviour* 77: 1095-1101
- Litzow MA and Piatt JF** 2003 Variance in prey abundance influences time budgets of breeding seabirds: evidence from pigeon guillemots *Cephus columba*. *Journal of Avian Biology* 34: 54-64
- Luna-Jorquera G and Culik BM** 1999 Diving behaviour of Humboldt penguins *Spheniscus humboldti* in northern Chile. *Marine Ornithology* 27: 67-76
- Magalhaes MC, Santos RS and Hamer KC** 2008 Dual-foraging of Cory's shearwaters in the Azores: feeding locations, behaviour at sea and implications for food provisioning of chicks. *Marine Ecology Progress Series* 359: 283-293
- Mallory ML, Akearok JA, Edwards DB, O'Donovan K and Gilbert CD** 2008 Autumn migration and wintering of northern fulmars (*Fulmarus glacialis*) from the Canadian high Arctic. *Polar Biology* 31: 745-750
- Mallory ML, Forbes MR, Ankney CD and Alisauskas RT** 2008 Nutrient dynamics and constraints on the pre-laying exodus of high Arctic northern fulmars. *Aquatic Biology* 4: 211-223
- Mangin S, Gauthier-Clerc M, Frenot Y, Gendner JP and Le Maho Y** 2003 Ticks *Ixodes uriae* and the breeding performance of a colonial seabird, king penguin *Aptenodytes patagonicus*. *Journal of Avian Biology* 34: 30-34
- Mañosa S, Oro D and Ruiz X** 2004 Activity patterns and foraging behaviour of Audouin's gulls in the Ebro Delta, NW Mediterranean. *Scientia Marina* 68: 605-614
- Mattern T, Ellenberg U, Houston DM and Davis LS** 2007 Consistent foraging routes and benthic foraging behaviour in yellow-eyed penguins. *Marine Ecology Progress Series* 343: 295-306
- Miller AK and Trivelpiece WZ** 2008 Chinstrap penguins alter foraging and diving behavior in response to the size of their principle prey, Antarctic krill. *Marine Biology* 154: 201-208
- Moore GJ, Wienecke B and Robertson G** 1999 Seasonal change in foraging areas and dive depths of breeding king penguins at Heard Island. *Polar Biology* 21: 376-384
- Mori Y** 1997 Dive bout organization in the chinstrap penguin at Seal Island, Antarctica. *Journal of Ethology* 15: 9-15
- Mori Y, Takahashi A, Mehlum F and Watanuki Y** 2002 An application of optimal diving models to diving behaviour of Brünnich's guillemots. *Animal Behaviour* 64: 739-745
- Navarro J and Gonzalez-Solis J** 2007 Experimental increase of flying costs in a pelagic seabird: effects on foraging strategies, nutritional state and chick condition. *Oecologia* 151: 150-160

- Navarro J and González-Solís J** 2009 Environmental determinants of foraging strategies in Cory's shearwaters *Calonectris diomedea*. *Marine Ecology Progress Series* 378: 259-267
- Navarro J, Kaliontzopoulou A and Gonzalez-Solis J** 2009 Sexual dimorphism in bill morphology and feeding ecology in Cory's shearwater (*Calonectris diomedea*). *Zoology* 112: 128-138
- Nel DC, Lutjeharms JRE, Pakhomov EA, Ansorge IJ, Ryan PG and Klages NTW** 2001 Exploitation of mesoscale oceanographic features by grey-headed albatross *Thalassarche chrysostoma* in the southern Indian Ocean. *Marine Ecology Progress Series* 217: 15-26
- Nel DC, Nel JL, Ryan PG, Klages NTW, Wilson RP and Robertson G** 2000 Foraging ecology of grey-headed mollymawks at Marion Island, southern Indian Ocean, in relation to longline fishing activity. *Biological Conservation* 96: 219-231
- Nevitt GA, Losekoot M and Weimerskirch H** 2008 Evidence for olfactory search in wandering albatross, *Diomedea exulans*. *Proceedings of the National Academy of Sciences* 105: 4576-4581
- Nicholls DG, Robertson CJR, Prince PA, Murray MD, Walker KJ and Elliott GP** 2002 Foraging niches of three Diomedea albatrosses. *Marine Ecology Progress Series* 231: 269-277
- Niizuma Y, Gabrielsen GW, Sato K, Watanuki Y and Naito Y** 2007 Brunnich's guillemots (*Uria lomvia*) maintain high temperature in the body core during dives. *Comparative Biochemistry And Physiology A: Molecular & Integrative Physiology* 147: 438-444
- Ostrand WD, Drew GS, Suryan RM and McDonald LL** 1998 Evaluation of radio-tracking and strip transect methods for determining foraging ranges of black-legged kittiwakes. *Condor* 100: 709-718
- Peery MZ, Beissinger SR, Newman SH, Becker BH, Burkett E and Williams TD** 2004 Individual and temporal variation in inland flight behavior of marbled murrelets: implications for population monitoring. *Condor* 106: 344-353
- Perrow MR, Skeate ER, Lines P, Brown D and Tomlinson ML** 2006 Radio telemetry as a tool for impact assessment of wind farms: the case of little terns *Sterna albifrons* at Scroby Sands, Norfolk, UK. *Ibis* 148: 57-75
- Petersen SL, Ryan PG and Grémillet D** 2006 Is food availability limiting African penguins *Spheniscus demersus* at Boulders? A comparison of foraging effort at mainland and island colonies. *Ibis* 148: 14-26
- Phalan B, Phillips RA, Silk JRD, Afanasyev V, Fukuda A, Fox J, Catry P, Higuchi H and Croxall JP** 2007 Foraging behaviour of four albatross species by night and day. *Marine Ecology Progress Series* 340: 271-286
- Phillips RA, Catry P, Silk JRD, Bearhop S, McGill R, Afanasyev V and Strange IJ** 2007 Movements, winter distribution and activity patterns of Falkland and brown skuas: insights from loggers and isotopes. *Marine Ecology Progress Series* 345: 281-291
- Phillips RA, Silk JRD, Croxall JP and Afanasyev V** 2006 Year-round distribution of white-chinned petrels from South Georgia: relationships with oceanography and fisheries. *Biological Conservation* 129: 336-347
- Phillips RA, Silk JRD, Croxall JP, Afanasyev V and Briggs DR** 2004 Accuracy of geolocation estimates for flying seabirds. *Marine Ecology Progress Series* 266: 265-272
- Phillips RA, Silk JRD, Phalan B, Catry P and Croxall JP** 2004 Seasonal sexual segregation in two *Thalassarche* albatross species: competitive exclusion, reproductive role specialization or foraging niche divergence? *Proceedings of the Royal Society B: Biological Sciences* 271: 1283-1291
- Pichegru L, Ryan PG, van der Lingen CD, Coetzee J, Ropert-Coudert Y and Grémillet D** 2007 Foraging behaviour and energetics of Cape gannets *Morus capensis* feeding on live

prey and fishery discards in the Benguela upwelling system. *Marine Ecology Progress Series* 350: 127-136

Pinaud D, Cherel Y and Weimerskirch H 2005 Effect of environmental variability on habitat selection, diet, provisioning behaviour and chick growth in yellow-nosed albatrosses. *Marine Ecology Progress Series* 298: 295-304

Pinaud D and Weimerskirch H 2002 Ultimate and proximate factors affecting the breeding performance of a marine top-predator. *Oikos* 99: 141-150

Pinaud D and Weimerskirch H 2005 Scale-dependent habitat use in a long-ranging central place predator. *Journal of Animal Ecology* 74: 852-863

Ponganis PJ 2000 Sub-ice foraging behavior of emperor penguins. *Journal of Experimental Biology* 203: 3275-3278

Prince PA, Wood AG, Barton T and Croxall JP 1992 Satellite tracking of wandering albatrosses (*Diomedea exulans*) in the South Atlantic. *Antarctic science* 4: 31-36

Pütz K and Bost CA 1994 Feeding behavior of free-ranging king penguins (*Aptenodytes patagonicus*). *Ecology* 489-497

Pütz K and Cherel Y 2005 The diving behaviour of brooding king penguins (*Aptenodytes patagonicus*) from the Falkland Islands: variation in dive profiles and synchronous underwater swimming provide new insights into their foraging strategies. *Marine Biology* 147: 281-290

Putz K, Ingham RJ and Smith JG 2002 Foraging movements of magellanic penguins *Spheniscus magellanicus* during the breeding season in the Falkland Islands. *Aquatic Conservation: Marine and Freshwater Ecosystems* 12: 75-87

Pütz K, Ingham RJ, Smith JG and Lüthi BH 2002 Winter dispersal of rockhopper penguins *Eudyptes chrysocome* from the Falkland Islands and its implications for conservation. *Marine ecology progress series* 240: 273-284

Pütz K, Rey AR, Huin N, Schiavini A, Pütz A and Lüthi BH 2006 Diving characteristics of southern rockhopper penguins (*Eudyptes c. chrysocome*) in the southwest Atlantic. *Marine Biology* 149: 125-137

Pütz K, Rey AR, Schiavini A, Clausen AP and Lüthi BH 2006 Winter migration of rockhopper penguins (*Eudyptes c. chrysocome*) breeding in the Southwest Atlantic: is utilisation of different foraging areas reflected in opposing population trends? *Polar Biology* 29: 735-744

Putz K, Smith JG, Ingham RJ and Luthi BH 2003 Satellite tracking of male rockhopper penguins *Eudyptes chrysocome* during the incubation period at the Falkland Islands. *Journal of Avian Biology* 34: 139-144

Pütz K, Wilson RP, Raclot T, Lage J, Le Maho Y, Kierspel MAM, Culik BM and Adelung D 1998 Foraging strategy of king penguins (*Aptenodytes patagonicus*) during summer at the Crozet Islands. *Ecology* 79: 1905-1921

Quillfeldt P, Strange IJ, Segelbacher G and Masello JF 2007 Male and female contributions to provisioning rates of thin-billed prions, *Pachyptila belcheri*, in the South Atlantic. *Journal of Ornithology* 148: 367-372

Quintana F and Dell'Arciprete PO 2002 Foraging grounds of southern giant petrels (*Macronectes giganteus*) on the Patagonian shelf. *Polar Biology* 25: 159-161

Radl A and Culik BM 1999 Foraging behaviour and reproductive success in magellanic penguins (*Spheniscus magellanicus*): a comparative study of two colonies in southern Chile. *Marine Biology* 133: 381-393

Rayner MJ, Hauber ME, Clout MN, Seldon DS, Van Dijken S, Bury S and Phillips RA 2008 Foraging ecology of the Cook's petrel *Pterodroma cookii* during the austral breeding season: a comparison of its two populations. *Marine Ecology Progress Series* 370: 271-284

- Regel J and Putz K** 1997 Effect of human disturbance on body temperature and energy expenditure in penguins. *Polar Biology* 18: 246-253
- Rey AR, Trathan P, Puetz K and Schiavini A** 2007 Effect of oceanographic conditions on the winter movements of rockhopper penguins *Eudyptes chrysocome chrysocome* from Staten Island, Argentina. *Marine Ecology Progress Series* 330: 285-295
- Rock JC, Leonard ML and Boyne AW** 2007 Foraging habitat and chick diets of roseate tern, *Sterna dougallii*, breeding on Country Island, Nova Scotia. *Avian Conservation and Ecology/Écologie et conservation des oiseaux* 2: 1-10
- Rodary D, Bonneau W, Le Maho Y and Bost CA** 2000 Benthic diving in male emperor penguins *Aptenodytes forsteri* foraging in winter. *Marine Ecology Progress Series* 207: 171-181
- Rodary D, Wienecke BC and Bost CA** 2000 Diving behaviour of Adélie penguins (*Pygoscelis adeliae*) at Dumont d'Urville, Antarctica: nocturnal patterns of diving and rapid adaptations to changes in sea-ice condition. *Polar Biology* 23: 113-120
- Ropert-Coudert Y, Baudat J, Kurita M, Bost CA, Kato A, Le Maho Y and Naito Y** 2000 Validation of oesophagus temperature recording for detection of prey ingestion on captive Adélie penguins (*Pygoscelis adeliae*). *Marine Biology* 137: 1105-1110
- Ropert-Coudert Y, Grémillet D and Kato A** 2006 Swim speeds of free-ranging great cormorants. *Marine Biology* 149: 415-422
- Ropert-Coudert Y, Grémillet D, Ryan P, Kato A, Naito Y and Le Maho Y** 2004 Between air and water: the plunge dive of the Cape gannet *Morus capensis*. *Ibis* 146: 281-290
- Ropert-Coudert Y, Kato A, Baudat J, Bost CA, Le Maho Y and Naito Y** 2001 Feeding strategies of free-ranging Adélie penguins *Pygoscelis adeliae* analysed by multiple data recording. *Polar Biology* 24: 460-466
- Ropert-Coudert Y, Kato A, Bost CA, Rodary D, Sato K, Le Maho Y and Naito Y** 2002 Do Adélie penguins modify their foraging behaviour in pursuit of different prey? *Marine Biology* 140: 647-652
- Ropert-Coudert Y, Kato A, Naito Y and Cannell BL** 2003 Individual diving strategies in the little penguin. *Waterbirds* 26: 403-408
- Ropert-Coudert Y, Kato A, Wilson RP and Cannell B** 2006 Foraging strategies and prey encounter rate of free-ranging little penguins. *Marine Biology* 149: 139-148
- Ropert-Coudert Y, Wilson RP, Daunt F and Kato A** 2004 Patterns of energy acquisition by a central place forager: benefits of alternating short and long foraging trips. *Behavioral Ecology* 15: 824-830
- Ropert-Coudert YAN, Grémillet D and Kato A** 2004 A fine-scale time budget of Cape gannets provides insights into the foraging strategies of coastal seabirds. *Animal Behaviour* 67: 985-992
- Ryan PG, Petersen SL, Peters G and Grémillet D** 2004 GPS tracking a marine predator: the effects of precision, resolution and sampling rate on foraging tracks of African penguins. *Marine Biology* 145: 215-223
- Sagar PM, Murdoch R, Sagar MW and Thompson DR** 2005 Rockhopper penguin (*Eudyptes chrysocome filholi*) foraging at Antipodes Islands. *Notornis* 52: 75-80
- Sagar PM and Weimerskirch H** 1996 Satellite tracking of southern Buller's albatrosses from The Snares, New Zealand. *Condor* 98: 649-652
- Sato K, Charrassin JB, Bost CA and Naito Y** 2004 Why do macaroni penguins choose shallow body angles that result in longer descent and ascent durations? *Journal of Experimental Biology* 207: 4057-4065
- Sato K, Daunt F, Watanuki Y, Takahashi A and Wanless S** 2008 A new method to quantify prey acquisition in diving seabirds using wing stroke frequency. *Journal of Experimental Biology* 211: 58-65

- Sato K, Naito Y, Kato A, Niizuma Y, Watanuki Y, Charrassin JB, Bost CA, Handrich Y and Le Maho Y** 2002 Buoyancy and maximal diving depth in penguins: do they control inhaling air volume? *Journal Of Experimental Biology* 205: 1189-1197
- Schmid D, Grémillet DJH and Culik BM** 1995 Energetics of underwater swimming in the great cormorant (*Phalacrocorax Carbo Sinensis*). *Marine Biology* 123: 875-881
- Seefelt NE and Gillingham JC** 2006 Foraging locations of double-crested cormorants in the Beaver Archipelago of northern Lake Michigan: potential for impacts on Smallmouth bass. *Waterbirds* 29: 473-480
- Shaffer SA, Costa DP and Weimerskirch H** 2001 Behavioural factors affecting foraging effort of breeding wandering albatrosses. *Journal of Animal Ecology* 70: 864-874
- Shaffer SA, Costa DP and Weimerskirch H** 2003 Foraging effort in relation to the constraints of reproduction in free-ranging albatrosses. *Functional Ecology* 17: 66-74
- Shaffer SA, Costa DP and Weimerskirch H** 2004 Field metabolic rates of black-browed albatrosses *Thalassarche melanophrys* during the incubation stage. *Journal of Avian Biology* 35: 551-558
- Shaffer SA, Tremblay Y, Awkerman JA, Henry RW, Teo SLH, Anderson DJ, Croll DA, Block BA and Costa DP** 2005 Comparison of light- and SST-based geolocation with satellite telemetry in free-ranging albatrosses. *Marine Biology* 147: 833-843
- Shaffer SA, Tremblay Y, Weimerskirch H, Scott D, Thompson DR, Sagar PM, Moller H, Taylor GA, Foley DG, Block BA and Costa DP** 2006 Migratory shearwaters integrate oceanic resources across the Pacific Ocean in an endless summer. *Proceedings of the National Academy of Sciences of the United States of America* 103: 12799-12802
- Shepard ELC, Wilson RP, Halsey LG, Quintana F, Laich AG, Gleiss AC, Liebsch N, Myers AE and Norman B** 2008 Derivation of body motion via appropriate smoothing of acceleration data. *Aquatic Biology* 4: 235-241
- Simeone A and Wilson RP** 2003 In-depth studies of magellanic penguin (*Spheniscus magellanicus*) foraging: can we estimate prey consumption by perturbations in the dive profile? *Marine Biology* 143: 825-831
- Skov H, Humphreys E, Garthe S, Geitner K, Grémillet D, Hamer KC, Hennicke J, Parner H and Wanless S** 2008 Application of habitat suitability modelling to tracking data of marine animals as a means of analyzing their feeding habitats. *Ecological Modelling* 212: 504-512
- Steinfurth A, Vargas FH, Wilson RP, Spindler M and Macdonald DW** 2008 Space use by foraging Galápagos penguins during chick rearing. *Endangered Species Research* 4: 105-112
- Stokes DL and Boersma PD** 1999 Where breeding magellanic penguins *Spheniscus magellanicus* forage: satellite telemetry results and their implications for penguin conservation. *Marine Ornithology* 27: 59-65
- Suryan RM, Dietrich KS, Melvin EF, Balogh GR, Sato F and Ozaki K** 2007 Migratory routes of short-tailed albatrosses: use of exclusive economic zones of North Pacific Rim countries and spatial overlap with commercial fisheries in Alaska. *Biological Conservation* 137: 450-460
- Suryan RM, Irons DB and Benson J** 2000 Prey switching and variable foraging strategies of black-legged kittiwakes and the effect on reproductive success. *Condor* 102: 374-384
- Suryan RM, Sato F, Balogh GR, Hyrenbach KD, Sievert PR and Ozaki K** 2006 Foraging destinations and marine habitat use of short-tailed albatrosses: a multi-scale approach using first-passage time analysis. *Deep-Sea Research Part II-Topical Studies in Oceanography* 53: 370-386
- Takahashi A, Kokubun N, Mori Y and Shin HC** 2008 Krill-feeding behaviour of gentoo penguins as shown by animal-borne camera loggers. *Polar Biology* 31: 1291-1294

- Takahashi A, Matsumoto K, Hunt GL, Shultz MT, Kitaysky AS, Sato K, Iida K and Watanuki Y** 2008 Thick-billed murre use different diving behaviors in mixed and stratified waters. *Deep-Sea Research Part II-Topical Studies in Oceanography* 55: 1837-1845
- Takahashi A, Sato K, Naito Y, Dunn MJ, Trathan PN and Croxall JP** 2004 Penguin-mounted cameras glimpse underwater group behaviour. *Proceedings of the Royal Society B: Biological Sciences* 271: 281-282
- Takahashi A, Watanuki Y, Sato K, Kato A, Arai N, Nishikawa J and Naito Y** 2003 Parental foraging effort and offspring growth in Adélie penguins: does working hard improve reproductive success? *Functional Ecology* 590-597
- Terauds A and Gales R** 2006 Provisioning strategies and growth patterns of light-mantled sooty albatrosses *Phoebastria palpebrata* on Macquarie Island. *Polar Biology* 29: 917-926
- Trathan PN, Green C, Tanton J, Peat H, Poncet J and Morton A** 2006 Foraging dynamics of macaroni penguins *Eudyptes chrysolophus* at South Georgia during brood-guard. *Marine Ecology Progress Series* 323: 239-251
- Trebilco R, Gales R, Baker GB, Terauds A and Sumner MD** 2008 At sea movement of Macquarie Island giant petrels: relationships with marine protected areas and Regional Fisheries Management Organisations. *Biological Conservation* 141: 2942-2958
- Tremblay Y and Cherel Y** 2000 Benthic and pelagic dives: a new foraging behaviour in rockhopper penguins. *Marine Ecology Progress Series* 204: 257-267
- Tremblay Y and Cherel Y** 2003 Geographic variation in the foraging behaviour, diet and chick growth of rockhopper penguins. *Marine ecology progress series* 251: 279-297
- Tremblay Y and Cherel Y** 2005 Spatial and temporal variation in the provisioning behaviour of female rockhopper penguins *Eudyptes chrysocome filholi*. *Journal of Avian Biology* 36: 135-145
- Tremblay Y, Cook TR and Cherel Y** 2005 Time budget and diving behaviour of chick-rearing Crozet shags. *Canadian Journal of Zoology* 83: 971-982
- Tuck GN, Polacheck T, Croxall JP, Weimerskirch H, Prince PA and Wotherspoon S** 1999 The potential of archival tags to provide long-term movement and behaviour data for seabirds: first results from wandering albatross *Diomedea exulans* of South Georgia and the Crozet Islands. *Emu* 99: 60-68
- Van Dam RP, Ponganis PJ, Ponganis KV, Levenson DH and Marshall G** 2002 Stroke frequencies of emperor penguins diving under sea ice. *Journal of Experimental Biology* 205: 3769-3774
- Veit RR and Prince PA** 1997 Individual and population level dispersal of black-browed albatrosses *Diomedea melanophris* and grey-headed albatrosses *D. chrysostoma* in response to antarctic krill. *Ardea* 85: 129-134
- Votier SC, Bearhop S, Ratcliffe N and Furness RW** 2004 Reproductive consequences for great skuas specializing as seabird predators. *Condor* 106: 275-287
- Votier SC, Crane JE, Bearhop S, de Leon A, McSorley CA, Minguez E, Mitchell IP, Parsons M, Phillips RA and Furness RW** 2006 Nocturnal foraging by great skuas *Stercorarius skua*: implications for conservation of storm-petrel populations. *Journal of Ornithology* 147: 405-413
- Walker BG and Boersma PD** 2003 Diving behavior of magellanic penguins (*Spheniscus magellanicus*) at Punta Tombo, Argentina. *Canadian Journal of Zoology/Revue Canadienne de Zoologie* 81: 1471-1483
- Wanless S, Finney SK, Harris MP and McCafferty DJ** 1999 Effect of the diel light cycle on the diving behaviour of two bottom feeding marine birds: the blue-eyed shag *Phalacrocorax atriceps* and the European shag *P. aristotelis*. *Marine ecology Progress series* 188: 219-224

- Watanuki Y, Daunt F, Takahashi A, Newei M, Wanless S, Sat K and Miyazaki N** 2008 Microhabitat use and prey capture of a bottom-feeding top predator, the European shag, shown by camera loggers. *Marine Ecology-Progress Series* 356: 283-293
- Watanuki Y, Ishikawa K, Takahashi A and Kato A** 2004 Foraging behavior of a generalist marine top predator, Japanese cormorants (*Phalacrocorax filamentosus*), in years of demersal versus epipelagic prey. *Marine Biology* 145: 427-434
- Watanuki Y, Kato A, Mori Y and Naito Y** 1993 Diving performance of Adélie penguins in relation to food availability in fast sea-ice areas: comparison between years. *Journal of Animal Ecology* 62: 634-646
- Watanuki Y, Kato A, Naito Y, Robertson G and Robinson S** 1997 Diving and foraging behaviour of Adélie penguins in areas with and without fast sea-ice. *Polar Biology* 17: 296-304
- Watanuki Y, Kato A, Sato K, Niizuma Y, Bost CA, Le Maho Y and Naito Y** 2002 Parental mass change and food provisioning in Adélie penguins rearing chicks in colonies with contrasting sea-ice conditions. *Polar Biology* 25: 672-681
- Watanuki Y, Mehlum F and Takahashi A** 2001 Water temperature sampling by foraging Brunnich's Guillemots with bird-borne data loggers. *Journal of Avian Biology* 32: 189-193
- Watanuki Y, Niizuma Y, Gabrielsen GW, Sato K and Naito Y** 2003 Stroke and glide of wing-propelled divers: deep diving seabirds adjust surge frequency to buoyancy change with depth. *Proceedings of the Royal Society of London Series B: Biological Sciences* 270: 483-488
- Watanuki Y, Takahashi A, Daunt F, Wanless S, Harris M, Sato K and Naito Y** 2005 Regulation of stroke and glide in a foot-propelled avian diver. *Journal of Experimental Biology* 208: 2207-2216
- Watanuki Y, Takahashi A and Sato K** 2003 Feeding area specialization of chick-rearing Adélie Penguins *Pygoscelis adeliae* in a fast sea-ice area. *Ibis* 145: 558-564
- Watanuki Y, Takahashi A, Sato K, Kato A and Bost CA** 2004 Inter-colony and sex differences in the effects of parental body condition and foraging effort on the brood growth of Adélie penguins. *Journal of Ethology* 22: 91-98
- Watanuki Y, Wanless S, Harris M, Lovvorn JR, Miyazaki M, Tanaka H and Sato K** 2006 Swim speeds and stroke patterns in wing-propelled divers: a comparison among alcids and a penguin. *Journal of Experimental Biology* 209: 1217-1230
- Waugh S, Troup C, Filippi D and Weimerskirch H** 2002 Foraging zones of southern royal albatrosses. *Condor* 104: 662-667
- Waugh SM and Weimerskirch H** 2003 Environmental heterogeneity and the evolution of foraging behaviour in long ranging greater albatrosses. *Oikos* 103: 374-384
- Waugh SM, Weimerskirch H, Cherel Y and Prince PA** 2000 Contrasting strategies of provisioning and chick growth in two sympatrically breeding albatrosses at Campbell Island, New Zealand. *Condor* 102: 804-813
- Waugh SM, Weimerskirch H, Cherel Y, Shankar U, Prince PA and Sagar PM** 1999 Exploitation of the marine environment by two sympatric albatrosses in the Pacific Southern Ocean. *Marine Ecology Progress Series* 177: 243-254
- Weimerskirch H, Akesson S and Pinaud D** 2006 Postnatal dispersal of wandering albatrosses *Diomedea exulans*: implications for the conservation of the species. *Journal of Avian Biology* 37: 23-28
- Weimerskirch H, Catard A, Prince PA, Cherel Y and Croxall JP** 1999 Foraging white-chinned petrels *Procellaria aequinoctialis* at risk: from the tropics to Antarctica. *Biological Conservation* 87: 273-275

- Weimerskirch H, Chastel O, Cherel Y, Henden JA and Tveraa T** 2001 Nest attendance and foraging movements of northern fulmars rearing chicks at Bjørnøya Barents Sea. *Polar Biology* 24: 83-88
- Weimerskirch H, Cherel Y, CuenotChaillet F and Ridoux V** 1997 Alternative foraging strategies and resource allocation by male and female wandering albatrosses. *Ecology* 78: 2051-2063
- Weimerskirch H, Corre ML, Ropert-Coudert Y, Kato A and Marsac F** 2006 Sex-specific foraging behaviour in a seabird with reversed sexual dimorphism: the red-footed booby. *Oecologia* 146: 681-691
- Weimerskirch H, Doncaster CP and Cuenotchaillet F** 1994 Pelagic seabirds and the marine environment: foraging patterns of wandering albatrosses in relation to prey availability and distribution. *Proceedings of the Royal Society of London Series B: Biological Sciences* 255: 91-97
- Weimerskirch H, Gault A and Cherel Y** 2005 Prey distribution and patchiness: factors in foraging success and efficiency of wandering albatrosses. *Ecology* 86: 2611-2622
- Weimerskirch H and Guionnet T** 2002 Comparative activity pattern during foraging of four albatross species. *Ibis* 144: 40-50
- Weimerskirch H, Guionnet T, Martin J, Shaffer SA and Costa DP** 2000 Fast and fuel efficient? Optimal use of wind by flying albatrosses. *Proceedings of the Royal Society of London Series B: Biological Sciences* 267: 1869-1874
- Weimerskirch H, Le Corre M and Bost CA** 2008 Foraging strategy of masked boobies from the largest colony in the world: relationship to environmental conditions and fisheries. *Marine Ecology Progress Series* 362: 291-302
- Weimerskirch H, Le Corre M, Jaquemet S and Marsac F** 2005 Foraging strategy of a tropical seabird, the red-footed booby, in a dynamic marine environment. *Marine Ecology Progress Series* 288: 251-261
- Weimerskirch H, Le Corre M, Jaquemet S, Potier M and Marsac F** 2004 Foraging strategy of a top predator in tropical waters: great frigatebirds in the Mozambique Channel. *Marine Ecology Progress Series* 275: 297-308
- Weimerskirch H, Le Corre M, Ropert-Coudert Y, Kato A and Marsac F** 2005 The three-dimensional flight of red-footed boobies: adaptations to foraging in a tropical environment? *Proceedings of the Royal Society of London Series B: Biological Sciences* 272: 53-61
- Weimerskirch H, Mougey T and Hindermeyer X** 1997 Foraging and provisioning strategies of black-browed albatrosses in relation to the requirements of the chick: natural variation and experimental study. *Behavioral ecology* 8: 635-643
- Weimerskirch H, Pinaud D, Pawlowski F and Bost CA** 2007 Does prey capture induce area-restricted search? A fine-scale study using GPS in a marine predator, the wandering albatross. *American Naturalist* 170: 734-743
- Weimerskirch H, Wilson RP, Guinet C and Koudil M** 1995 Use of seabirds to monitor sea-surface temperatures and to validate satellite remote-sensing measurements in the southern ocean. *Marine Ecology-Progress Series* 126: 299-303
- Weimerskirch H, Wilson RP and Lys P** 1997 Activity pattern of foraging in the wandering albatross: a marine predator with two modes of prey searching. *Marine Ecology Progress Series* 151: 245-254
- Weimerskirch H, Zimmermann L and Prince PA** 2001 Influence of environmental variability on breeding effort in a long-lived seabird, the yellow-nosed albatross. *Behavioral Ecology* 12: 22-30
- Wendeln H and Becker PH** 1999 Effects of parental quality and effort on the reproduction of common terns. *Journal of Animal Ecology* 68: 205-214

- Werner SJ, King DT and Wooten DE** 2000 Double-crested cormorant satellite telemetry: preliminary insight. *Wildlife Damage Management Conferences Proceedings* 31
- Wienecke B, Kirkwood R and Robertson G** 2004 Pre-moult foraging trips and moult locations of Emperor penguins at the Mawson Coast. *Polar Biology* 27: 83-91
- Wienecke B, Robertson G, Kirkwood R and Lawton K** 2007 Extreme dives by free-ranging emperor penguins. *Polar Biology* 30: 133-142
- Wienecke BC and Robertson G** 1997 Foraging space of emperor penguins *Aptenodytes forsteri* in Antarctic shelf waters in winter. *Marine Ecology Progress Series* 159: 249-263
- Wilson R and Liebsch N** 2003 Up-beat motion in swinging limbs: new insights into assessing movement in free-living aquatic vertebrates. *Marine Biology* 142: 537-548
- Wilson R, Peters G, Regel J, Grémillet D, Putz K, Kierspel M, Weimerskirch H and Cooper J** 1998 Short retention times of stomach temperature loggers in free-living seabirds: is there hope in the spring? *Marine Biology* 130: 559-566
- Wilson R, Steinfurth A, Ropert-Coudert Y, Kato A and Kurita M** 2002 Lip-reading in remote subjects: an attempt to quantify and separate ingestion, breathing and vocalisation in free-living animals using penguins as a model. *Marine Biology* 140: 17-27
- Wilson RP** 1996 Body temperatures of free-living African penguins (*Spheniscus demersus*) and bank cormorants (*Phalacrocorax neglectus*). *Journal of Experimental Biology* 199: 2215-2223
- Wilson RP** 2003 Penguins predict their performance. *Marine Ecology Progress Series* 249: 305-310
- Wilson RP, Alvarez B, Latorre L, Adelung D, Culik B and Bannasch R** 1998 The movements of gentoo penguins *Pygoscelis papua* from Ardley Island, Antarctica. *Polar Biology* 19: 407-413
- Wilson RP, Bost CA, Putz K, Charrassin JB, Culik BM and Adelung D** 1997 Southern rockhopper penguin *Eudyptes chrysocome chrysocome* foraging at Possession Island. *Polar Biology* 17: 323-329
- Wilson RP, Cooper J and Plotz J** 1992 Can we determine when marine endotherms feed? A case study with seabirds. *Journal of Experimental Biology* 167: 267-275
- Wilson RP, Culik BM, Bannasch R and Lage J** 1994 Monitoring Antarctic Environmental Variables Using Penguins. *Marine Ecology Progress Series* 106: 199-202
- Wilson RP and Peters G** 1999 Foraging behaviour of the chinstrap penguin *Pygoscelis antarctica* at Ardley Island, Antarctica. *Marine Ornithology* 27: 85-95
- Wilson RP, Ropert-Coudert Y and Kato A** 2002 Rush and grab strategies in foraging marine endotherms: the case for haste in penguins. *Animal Behaviour* 63: 85-95
- Wilson RP, Sclaro A, Quintana F, Siebert U, Straten M, Mills K, Zimmer I, Liebsch N, Steinfurth A and Spindler G** 2004 To the bottom of the heart: cloacal movement as an index of cardiac frequency, respiration and digestive evacuation in penguins. *Marine Biology* 144: 813-827
- Wilson RP, Sclaro JA, Grémillet D, Kierspel MAM, Laurenti S, Upton J, Gallelli H, Quintana F, Frere E and Muller G** 2005 How do magellanic penguins cope with variability in their access to prey? *Ecological monographs* 75: 379-401
- Wilson RP, Sclaro JA, Peters G, Laurenti S, Kierspel M, Gallelli H and Upton J** 1995 Foraging areas of Magellanic penguins *Spheniscus magellanicus* breeding at San Lorenzo, Argentina, during the incubation period. *Marine Ecology Progress Series* 129: 1-6
- Woo KJ, Elliott KH, Davidson M, Gaston AJ and Davoren GK** 2008 Individual specialization in diet by a generalist marine predator reflects specialization in foraging behaviour. *Journal of Animal Ecology* 77: 1082-1091

- Wood AG, Naef-Daenzer B, Prince PA and Croxall JP** 2000 Quantifying habitat use in satellite-tracked pelagic seabirds: application of kernel estimation to albatross locations. *Journal of Avian Biology* 31: 278-286
- Xavier JC, Trathan PN, Croxall JP, Wood AG, Podesta G and Rodhouse PG** 2004 Foraging ecology and interactions with fisheries of wandering albatrosses (*Diomedea exulans*) breeding at South Georgia. *Fisheries Oceanography* 13: 324-344
- Yamamoto T, Takahashi A, Yoda K, Katsumata N, Watanabe S, Sato K and Trathan PN** 2008 The lunar cycle affects at-sea behaviour in a pelagic seabird, the streaked shearwater, *Calonectris leucomelas*. *Animal Behaviour* 76: 1647-1652
- Yoda K** 1999 Precise monitoring of porpoising behaviour of Adélie penguins determined using acceleration data loggers. *Journal of Experimental Biology* 202: 3121-3126
- Yoda K, Kohno H and Naito Y** 2007 Ontogeny of plunge diving behaviour in brown boobies: application of a data logging technique to hand-raised seabirds. *Deep-Sea Research Part II-Topical Studies in Oceanography* 54: 321-329
- Yoda K, Naito Y, Sato K, Takahashi A, Nishikawa J, Ropert-Coudert Y, Kurita M and Le Maho Y** 2001 A new technique for monitoring the behaviour of free-ranging Adélie penguins. *Journal of Experimental Biology* 204: 685-690
- Yoda K and Ropert-Coudert Y** 2007 Temporal changes in activity budgets of chick-rearing Adélie penguins. *Marine Biology* 151: 1951-1957
- Yorio P, Quintana F, Gatto A, Lisnizer N and Suárez N** 2004 Foraging patterns of breeding Olrog's gull at Golfo San Jorge, Argentina. *Waterbirds* 27: 193-199
- Zavalaga CB, Benvenuti S, Dall'Antonia L and Emslie SD** 2008 Foraging areas of breeding blue-footed boobies *Sula nebouxii* in northern Peru, as determined by direction recorders. *Journal of Avian Biology* 39: 405-412
- Zharikov Y, Lank DB, Huettmann F, Bradley RW, Parker N, Yen PPW, McFarlane-Tranquilla LA and Cooke F** 2006 Habitat selection and breeding success in a forest-nesting Alcid, the marbled murrelet, in two landscapes with different degrees of forest fragmentation. *Landscape Ecology* 21: 107-120