

References Cited

- Aars, J., N.J. Lunn, and A.E. Derocher. *eds.* 2006. Polar bears: proceedings of the 14th working meeting of the IUCN/SSC Polar Bear Specialist Group, 20-24 June, Seattle, Washington, USA. IUCN, Gland, Switzerland. 189 pp.
- Achuta Rao, K., C. Covey, C. Doutriaux, M. Fiorino, P. Glckler, T. Phillips, K. Sperber, and K. Taylor. 2004. Appraisal of coupled climate model simulations. Lawrence Livermore National Laboratory, California Report UCRL-TR-202550.
- Amstrup, S.C. 2003. Polar Bear (*Ursus maritimus*). Pages 587-610 in Feldhamer, B.C. Thompson, and J.A. Chapman, *eds.* Wild Mammals of North America- Biology, Management, and Conservation. John Hopkins University Press. Baltimore, Maryland. Pages 587-610.
- Amstrup, S.C. 2000. Polar bear. Pages 133-157 in Truett, J.J. and S.R. Johnson, *eds.* The natural history of an Arctic oilfield: development and the biota. Academic Press, Inc. New York.
- Amstrup, S.C. 1993. Human disturbances of denning polar bears in Alaska. *Arctic* 46:246–50.
- Amstrup, S.C. Unpublished data. U.S.Geological Survey, Alaska Science Center, Anchorage, Alaska.
- Amstrup, S.C. and D.P. DeMaster. 1988. Polar bear—*Ursus maritimus*. Pages 39–56 in Lentfer, J.W., *ed.* Selected marine mammals of Alaska: species accounts with research and management recommendations. Marine Mammal Commission, Washington, DC.
- Amstrup, S.C., and G.M. Durner. 1995. Survival rates of radio-collared female polar bears and their dependent young. *Canadian Journal of Zoology* 73:1312–22.
- Amstrup, S.C., and C. Gardner. 1994. Polar bear maternity denning in the Beaufort Sea. *Journal of Wildlife Management* 58:1–10.
- Amstrup, S.C., B.G. Marcot, and D.C. Douglas. 2007. Forecasting the range-wide status of polar bears at selected times in the 21st century. U.S. Geological Survey Administrative Report, Reston, Virginia. 126pp.
- Amstrup, S.C., G.M. Durner, T.L. McDonald, and W.R. Johnson. 2006a. Estimating potential effects of hypothetical oil spills on polar bears. Unpublished report. U.S.Geological Survey, Alaska Science Center, Anchorage, Alaska. 56 pp.

- Amstrup, S.C., I. Stirling, T.S. Smith, C. Perham, and G.W. Thieman. 2006b. Recent observations of intraspecific predation and cannibalism among polar bears in the Southern Beaufort Sea. *Polar Biology* doi 10.1007/S00300-006-0142-5.
- Amstrup, S.C., G.M. Durner, I. Stirling, and T.L. McDonald. 2005. Allocating harvests among polar bear stocks in the Beaufort Sea. *Arctic* 58(3): 247-259.
- Amstrup, S.C., T.L. McDonald, and G.M. Durner. 2004. Using satellite radio-telemetry data to delineate and manage wildlife populations. *Wildlife Society Bulletin* 32: 661-679.
- Amstrup, S.C. T.L. McDonald, and I. Stirling. 2001. Polar bears in the Beaufort Sea: a 30-year mark-recapture case history. *Journal of Agricultural, Biological, and Environmental Statistics* 6(2):221-234.
- Amstrup, S.C., G.M. Durner, and T.L. McDonald. 2000a. Estimating potential effects of hypothetical oil spills from the Liberty oil production island on polar bears. Liberty Development and Production Plan Draft Environmental Impact Statement. DOI, Minerals Management Service, Alaska OCS Region, OCS EIS/EA, MMS 2001-001. Volume III (J-1):1-42.
- Amstrup, S.C., G.M. Durner, I. Stirling, N.J. Lunn, and F. Messier. 2000b. Movements and distribution of polar bears in the Beaufort Sea. *Canadian Journal of Zoology* 78:948-66.
- Amstrup, S.C., C. Gardner, K.C. Meyers, and F.W. Oehme. 1989. Ethylene glycol (antifreeze) poisoning in a free-ranging polar bear. *Veterinary and Human Toxicology*, Vol. 31, No. 4, pp. 317-319.
- Amstrup, S. C., I. Stirling, and J.W. Lentfer. 1986. Past and present status of polar bears in Alaska. *Wildlife Society Bulletin* 14: 241-254.
- Andersen, M., E. Lie, A.E. Derocher, S.E. Belikov, A.N. Boltunov, G.W. Garner, and J.U. Skaare, and Ø. Wiig. 2001. Geographic variation in selected PCB congeners in polar bears (*Ursus maritimus*) from Svalbard east to the Chukchi Sea. *Polar Biology*. 24:231-238.
- Arctic Climate Impact Assessment (ACIA). 2005. Arctic Climate Impact Assessment. Cambridge University Press. 1042 pp.
- Arctic Arctic Climate Impact Assessment (ACIA). 2004. Impacts of a warming Arctic. Cambridge University Press, Cambridge, UK.

- Arctic Monitoring and Assessment Programme (AMAP). 2005. AMAP Assessment 2002: Persistent Organic Pollutants in the Arctic. Oslo, Norway. xvi + 310 pp.
- Arctic Monitoring and Assessment Programme (AMAP). 2004a. AMAP Assessment 2002: Heavy Metals in the Arctic. Oslo, Norway. xvi + 265 pp.
- Arctic Monitoring and Assessment Programme (AMAP). 2004b. AMAP Assessment 2002: Radioactivity in the Arctic. Oslo, Norway. xi + 100pp.
- Arctic Monitoring and Assessment Programme (AMAP). 2003. AMAP Assessment 2002: the influence of global change on contaminant pathways to, within, and from the Arctic. Oslo, Norway. xii + 65 pp.
- Arctic Monitoring and Assessment Programme (AMAP). 1998. AMAP Assessment Report: Arctic Pollution Issues. Oslo, Norway, xii + 859 pp.
- Arthur, S.M., B.F.J. Manly, L.L. McDonald, and G.W. Garner. 1996. Assessing habitat selection when availability changes. *Ecology* 77:215–227.
- Arzel, O., T. Fichefet, and H. Goosse. 2006. Sea ice evolution over the 20th and 21st centuries as simulated by current AOGCMs. *Ocean Modeling* 12:401-415.
- Atkinson, S.N., and M.A. Ramsay. 1995. Effects of prolonged fasting of the body composition and reproductive success of female polar bears (*Ursus maritimus*). *Functional Ecology* 9:559-567.
- Barrie, L.A., D. Gregor, B. Hargrave, R. Lake, D. Muir, R. Shearer, B. Tracey and T. Bidleman. 1992. Arctic contaminants: sources, occurrence, and pathways. *The Science of the Total Environment* 122:1-74.
- Beissinger, S. R. 2000. Ecological mechanisms of extinction. *Proceedings of the National Academy of Science, U.S.A.* 97: 11688-11689.
- Belchansky, G.I., D.C. Douglas, I.V. Alpatsky, and N.G. Platonov. 2004. Spatial and temporal multiyear sea ice distributions in the Arctic: A neural network analysis of SSM/I data, 1988-2001. *Journal of Geophysical Research* 109(C10017):1-17.
- Belchansky, G.I., D.C. Douglas and N.G. Platonov. 2005. Spatial and temporal variation in the age structure of Arctic sea ice. *Geophysical Research Letters* 32:L1`8504. doi:10.1029/2005GL023976.

- Belikov, S.E. and A.N. Boltunov. 1998. Research and management of polar bear populations in the Russian Arctic 1993-1995. Pages 113-114 *in* Derocher, A.E., G.W. Garner, N.J. Lunn, and Ø. Wiig. Polar bears: proceedings of the twelfth working meeting of the IUCN/SSC Polar Bear Specialist Group, 3-7 February 1997, Oslo Norway. IUCN, Gland, Switzerland, and Cambridge, U.K. v + 159 pp.
- Belikov, S.E., A.N. Boltunov, N.G. Ovsyanikov, G.I. Belchansky, and A.A. Kochnev. 2005. Polar bear management and research in Russia, 2001-2004. p. 153 *in* Aars, J, N.J. Lunn, and A.E. Derocher. 2006. Polar bears: proceedings of the 14th working meeting of the IUCN/SSC Polar Bear Specialist Group, Seattle, Washington, USA. IUCN, Gland, Switzerland and Cambridge, U.K. xx pp.
- Belikov, S.E., A.N. Boltunov, N.G. Ovsyanikov, and G.I. Belchansky. 2002. Polar Bear research and management in Russia 1997-2000. Pages 85-88 *in* Lunn, N.J., S. Schliebe, and E.W. Born. Polar bears: proceeding of the 13th working meeting of the IUCN/SSC Polar Bear Specialist Group, Nuuk, Greenland. IUCN, Gland, Switzerland and Cambridge, U.K. vii + 153 pp.
- Bentzen, T.W. 2006. Winter feeding ecology and biomagnification of organochlorine contaminants in Alaskan polar bears. M.S. thesis. Department of Biology and Wildlife, University of Alaska, Fairbanks.
- Bergen, S., G.M. Durner, D.C. Douglas, and S.C. Amstrup. 2007. Predicting movements of female polar bears between summer sea ice foraging habitats and terrestrial denning habitats of Alaska in the 21st Century: proposed methodology and pilot assessment. U.S. Dept. of the Interior, U.S. Geological Survey Administrative Report. 20 pp.
- Bernhoft, A., Ø. Wiig, and J.U. Skaare. 1997. Organochlorines in polar bears (*Ursus maritimus*) at Svalbard. *Environmental Pollution* 95:159–75.
- Bertrand, C., J-P Van Ypersele, and A. Berger. 2002. Are natural climate forcings able to counteract projected anthropogenic global warming? *Climate Change* 55:413-427.
- Best, R.C. 1985. Digestibility of ringed seals by the polar bear. *Canadian Journal of Zoology* 63: 1033-1036.
- Best, R.C. 1982. Thermoregulation in resting and active polar bears. *Journal of Comparative Physiology B* 146:63–73.
- Birks, H.H. and B. Ammann. 2000. Two terrestrial records of rapid climatic change during the glacial-Holocene transition (14,000-9,000 calendar

- years B.P.) from Europe. Proceedings of the National Academy of Sciences 97:1390-1394.
- Bitz, C.M. and G.H. Roe. 2004. A mechanism for the high rate of sea-ice thinning in the Arctic Ocean. Journal of Climate 17:3622--31
- Blix, A.S. and J.W. Lentfer. 1979. Modes of thermal protection in polar bear cubs: at birth and on emergence from the den. American Journal of Physiology 236:R67-74.
- Bodmer, R.E., J.F. Eisenberg, and K.H. Redford. 1997. Hunting and likelihood of extinction of Amazonian mammals. Conservation Biology 11:460-466.
- Born, E.W. 2005a. Robben and Eisbären in der Arktis: Auswirkung von Erderwärmung und Jagd (Arctic pinnipeds and polar bears: effects of warming and exploitation). Pages 152-159 in J.L. Lozán, H. Grassl, H.W. Hubberten, P. Hupfer, L. Karbe, and D. Piepenburg. Warnsignale aus den Polarregionen (Warning signals from the polar regions). Wissenschaftliche Auswertungen, Hamburg, Germany.
- Born, E.W. 1995. Status of polar bears in Greenland. Pages 81-103 in Wiig, Ø., E.W. Born, and G.W. Garner. Polar bears: proceedings of the eleventh working meeting of the IUCN/SSC Polar Bear Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK. V + 192 pp.
- Born, E.W. and C. Sonne. 2005. Research on polar bears in Greenland. Pages 135-143 in, Polar bears: proceedings of the 14th working meeting of the IUCN/SSC Polar Bear Specialist Group, 20-24 June, 2005, Seattle, Washington, USA.
- Born, E.W., A. Heilmann, L. Kielsen-Holm, and K. Laidre. In prep. Polar bears and polar bear hunting in Northwest Greenland: An interview survey. Technical Report, Greenland Institute of Natural Resources, in prep; in Greenlandic and Danish.
- Bowes, G.W. and C.J. Jonkel. 1975. Presence and distribution of polychlorinated biphenyls (PCB) in arctic and subarctic marine food chains. Journal Fisheries research Board Canada. 32(11):2111-2123.
- Boyd, T.J., M. Steele, R.D. Muench and J.T. Gunn. 2002. Partial recovery of the Arctic Ocean halocline. Geophysical Research Letters 29, 10.1029/2001GLO14047.
- Bradstreet, M.S.W. and W.E. Cross. 1982. Trophic relationships at high Arctic ice edges. Arctic 35:1-12.

- Braune, B.M., P.M. Outridge, A.T. Fisk, D.C.G. Muir, P.A. Helm, K. Hobbs, P.F. Hoekstra, Z.A. Kuzyk, M. Kwan, R.J. Letcher, W.L. Lockhart, R.J. Norstrom, G.A. Stern, and I. Stirling. 2005. Persistent organic pollutants and mercury in marine biota of the Canadian Arctic: an overview of spatial and temporal trends. *The Science of the Total Environment* 351-352:4-56.
- Braune, B.M., R.J. Norstrom, M.P. Wong, B.T. Collins, and J. Lee. 1991. Geographical distribution of metals in livers of polar bears from the Northwest Territories, Canada. *The Science of the Total Environment* 100:283-299.
- Broecker, W.S. 2001. Was the medieval warm period global? *Science* 291:1497-1499.
- Brooks, J.W., J.C. Bartonek, D.R. Klein, D.L. Spencer, A.S. Thayer. 1971. Environmental influences of oil and gas development in the Arctic Slope and Beaufort Sea. Pg. 15, Department of the Interior-U.S. Fish and Wildlife Service Resource Publication 96.
- Brower, C.D., A. Carpenter, M.L. Branigan, W. Calvert, T. Evans, A.S. Fischbach, J.A. Nagy, J.A. S. Schliebe, and I. Stirling. 2002. The polar bear management agreement for the Southern Beaufort Sea: an evaluation of the first ten years of a unique conservation agreement. *Arctic* 55:362-372.
- Budyko, M. I. 1966. Polar ice and climate. Proceedings of the Symposium Arctic Arctic Heat Budget and Atmospheric Circulation. Rand Corporation, Santa Monica, California. RM-5233-NSF: 3-21.
- Burger, R., and M. Lynch. 1995. Evolution and extinction in a changing environment: a quantitative genetic analysis. *Evolution* 49:151-163.
- Burns, J.J. 2002. Arctic Marine Mammals *in* Perrin, W.F., B. Wursig, J.G.M. Thewissen, *eds.* Encyclopedia of Marine Mammals, pages 39-45.
- Burns, J.J. 1970. Remarks on the distribution and natural history of pagophilic pinnipeds in the Bering and Chukchi Seas. *J. Mammal.* 51:445-454.
- Calvert, W. and I. Stirling. 1990. Interactions between polar bears and overwintering walrus in the central Canadian High Arctic. *International Conference on Bear Research and Management* 8:351-56.
- Calvert, W., M. Taylor, I. Stirling, G.B. Kolenosky, S. Kearney, M. Crete, and S. Luttich. 1995. Polar bear management in Canada 1988-92. Pages 61-79 *in* Wiig, Ø., E.W. Born, and G.W. Garner, *eds.* Polar bears: Proceedings of

the eleventh working meeting of the IUCN/SSC Polar Bear Specialist Group, 25-27 January 1993, Copenhagen, Denmark.

- Canadell, J.G., C. Le Quéré, M.R. Raupach, C.B. Field, E.T. Buitenhuis, P. Ciais, T.J. Conway, N.P. Gillett, R.A. Houghton, and G. Marland. 2007. Contributions to accelerating atmospheric CO₂ growth from economic activity, carbon intensity, and efficiency of natural sinks. Proceedings of the National Academy of Science, U.S.A [no vol. pp info]
- CAPE (Cape Last Interglacial Project Members). 2006. Last interglacial arctic warmth confirms polar amplification of climate change. *Quaternary Science Reviews* 25:1383-1400.
- Chapman, W.L. and J.E. Walsh. 2007. A Synthesis of Antarctic temperatures. *Journal of Climate* 20: 4096-4117.
- Chapskii, K.K. 1940. Distribution of the walrus in the Laptev and East Siberian seas. *Problemy Severa*, 1940(6):80-94.
- Chelintsev, N.G. 1977. Determination of the absolute number of dens based on the selective counts. Pages 66-85 in Uspenski, S.M., *ed.* The polar bear and its conservation in the Soviet Arctic. Central Laboratory on Nature Conservation, Moscow, Russia (in Russian with English summary).
- Chylek, P., S. Robinson, M.K. Dubey, M.D. King, Q. Fu, and W.B. Clodius. 2006. Comparison of near-infrared and thermal infrared cloud phase detections. *Journal of Geophysical Research* 111:D20203.
- Clarkson, P.L. and D. Irish. 1991. Den collapse kills female polar bear and two newborn cubs. *Arctic* 44(1): 83-84.
- Comiso, J.C. 2006. Arctic warming signals from satellite observations, *Weather* 61(3):70-76.
- Comiso, J.C. 2005. Impact studies of a 2° global warming on the Arctic sea ice cover. Pages 43-56 in: 2° is too much! Evidence and implications of dangerous climate change in the Arctic. Rosentrater, L, *ed.* World Wildlife Fund International Arctic Programme, Oslo, Norway. 68 pp.
- Comiso, J.C. 2003. Warming trends in the Arctic from clear sky satellite observations. *Journal of Climate* 16:3498-3510.
- Comiso, J.C. 2002. A rapidly declining perennial sea ice cover in the Arctic. *Geophysical Research Letters* 29:1956. DOI 10.1029/2002GL015650.

- Comiso, J.C. 2001. Satellite-observed variability and trend in sea-ice extent, surface temperature, albedo and clouds in the Arctic. *Annals of Glaciology* 33: 457-473.
- Comiso, J. C. and F. Nishio. 2008. Trends in the sea ice cover using enhanced and compatible AMSR-E, SSM/I, and SMMR data. *Journal of Geophysical Research* 113, C02S07, doi: 10.1029/2007JC004257
- Comiso, J.C. and C.L. Parkinson. 2004. Satellite observed changes in the Arctic, *Physics Today* 57(8):38-44.
- Comiso, J. C., C.L. Parkinson, R. Gersten, and L. Stock. 2008. Accelerated decline in the Arctic sea ice cover. *Geophysical Research Letters* 35, L01703, doi:10.1029/2007 GL031972.
- Craig, P.C., W.B. Griffiths, L. Haroldson, and H. McElderry. 1982. Ecological studies of arctic cod in Beaufort Sea coastal waters, Alaska. *Canadian Journal of Fisheries and Agricultural Sciences*: 395-406.
- Cronin, M.A., S.C. Amstrup, and K.T. Scribner. 2006. Microsatellite DNA and mitochondrial DNA variation in polar bears (*Ursus maritimus*) from the Beaufort and Chukchi seas, Alaska. *Canadian Journal of Zoology* 84:655-660.
- Dahl-Jensen, D., K. Mosegaard, N. Gundestrup, G.D. Clow, S.J. Johnsen, A.W. Hansen, N. Belling. 1998. Past temperatures directly from the Greenland Ice Sheet. *Science*, 282:268-271.
- Dansgaard, W., S.J. Johnsen, H.B. Clausen, D. Dahl-Jensen, N.S. Gundestrup, C.U. Hammer, C.S. Hvideberg, J.P. Steffensen, A.E. Sveinbjörnsdottir, J. Jouzel, and G. Bond. 1993. Evidence for general instability of past climate from a 250-kyr ice-core record. *Nature* 364:218-220.
- Davis, J.L., P. Elosegui, J.X. Mitrovica, M.E. Tamisiea. 2004. Climate-driven deformation of the solid Earth from GRACE and GPS. *Geophysical Research Letters* 31:L24605.
- Dehn, L. A., G.G. Sheffield, E. H. Follmann, L.K. Duffy, D.L. Thomas, G. R. Bratten, R.J. Taylor, and T.M. O'Hara. 2005. Trace elements in tissues of phocid seals harvested in the Alaskan and Canadian Arctic: influence of age and feeding ecology. *Canadian Journal of Zoology* 83:726-746.
- de March, B.G.E., C.A. De Wit, and D.C.G. Muir. 1998. Persistent organic pollutants. Pages 183-335 *in* Wilson, S.J., J.L. Murray, and H.P. Huntington, *eds*. AMAP 1998. Assessment report: arctic pollution issues. Oslo, Norway.

- DeMaster, D.P. and I. Stirling. 1981. *Ursus maritimus*. Polar bear. Mammalian Species 145:1-7.
- Derocher, A.E. and I. Stirling. 1998. Maternal investment and factors affecting offspring size in polar bears (*Ursus maritimus*). Journal of Zoology, London 245:253-260.
- Derocher, A. E. and I. Stirling. 1996. Aspects of survival in juvenile polar bears. Canadian Journal of Zoology 74:1246-1252.
- Derocher, A. E., and I. Stirling. 1995. Age-specific reproductive performance of female polar bears (*Ursus maritimus*). Journal of Zoology 234:527-536.
- Derocher, A.E. and I. Stirling. 1991. Oil contamination of two polar bears. Polar Record 27(160):56-57.
- Derocher, A.E. and I. Stirling. 1990. Distribution of polar bears (*Ursus maritimus*) during the ice-free period in Western Hudson Bay. Canadian Journal of Zoology 68:1395-1403.
- Derocher, A.E. and Ø. Wiig. 2002. Postnatal growth in body length and mass of polar bears (*Ursus maritimus*) at Svalbard. Journal of Zoology (London) 256:343-349.
- Derocher, A.E. and Ø. Wiig. 1999. Infanticide and cannibalism of juvenile polar bears (*Ursus maritimus*) in Svalbard. Arctic 52:307-10.
- Derocher, A.E., M. Andersen, and Ø. Wiig. 2005. Sexual dimorphism of polar bears. Journal of Mammalogy 86(5):895-901.
- Derocher, A.E., N.J. Lunn, and I. Stirling. 2004. Polar bears in a warming climate. Integrative and Comparative Biology 44:163-176.
- Derocher, A.E., H. Wolkers, T. Colborn, M. Schlabach, T.S. Larsen and Ø.Wiig. 2003. Contaminants in Svalbard polar bear samples archived since 1967 and possible population level effects. The Science of the Total Environment 301:163-174.
- Derocher, A. E., O. Wiig, and M. Andersen. 2002. Diet composition of polar bears in Svalbard and the western Barents Sea. Polar Biology 25:448-452.
- Derocher, A.E., Ø. Wiig, M. Andersen, D. Vongraven, and M. Ekker. 2002b. Polar bear research and management in Norway 1997-2000. Pages 75-84 in Lunn N.J., S. Schliebe, and E.W. Born, eds. Polar bears: proceedings of

the 13th working meeting of the IUCN/SSC Polar Bear Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.

- Derocher, A.E., G.W. Garner, N.J. Lunn, and Ø. Wiig, *eds.* 1998. Polar bears: proceedings of the twelfth working meeting of the IUCN/SSC Polar Bear Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK. v + 159pp.
- Derocher, A.E., D. Andriashek, and I. Stirling. 1993. Terrestrial foraging by polar bears during the ice-free period in Western Hudson Bay. *Arctic* 46:251–54.
- Derocher, A.E., I. Stirling, and D. Andriashek. 1992. Pregnancy rates and serum progesterone levels of polar bears in Western Hudson Bay. *Canadian Journal of Zoology* 70:561–66.
- Derocher, A. E., R. A. Nelson, I. Stirling, and M. A. Ramsay. 1990. Effects of fasting and feeding on serum urea and serum creatinine levels in polar bears. *Marine Mammal Science* 6:196-203.
- DeWeaver, E. 2007. Uncertainty in climate model projections of Arctic sea ice decline: an evaluation relevant to polar bears. U.S. Dept. of the Interior, U.S. Geological Survey Administrative Report. 41 pp.
- de Wit, C. 2002. An overview of brominated flame retardants in the environment. *Chemosphere* 46(5):583-624.
- Dick, T.A. and M. Belosevic. 1978. Observations on a *Trichinella spiralis* isolate from a polar bear. *Journal of Parasitology* 64:1143–45.
- Dickson, R.R., T.J. Osborn, J.W. Hurrell, J. Meincke, J. Blindheim, B. Adlandsvik, T. Vinje, G. Alekseev, and W. Maslowski. 2000. The Arctic Ocean response to the North Atlantic oscillation. *Journal of Climate* 13: 2671.
- Dietz, R. F.F. Riget, C. Sonne-Hansen, R.J. Letcher, E.W. Born and D.C.G. Muir. 2004. Seasonal and temporal trends in polychlorinated biphenyls and organochlorine pesticides in East Greenland polar bears (*Ursus maritimus*). *The Science of the Total Environment* 331:107-124.
- Dietz, R., J. Pacyna, D.J. Thomas et al. 1998. Heavy metals. Pages 373-524 in AMAP Assessment Report: Arctic Pollution Issues. Arctic Monitoring and Assessment Programme (AMAP), Oslo, Norway.

- Dietz, R., C.O. Nielsen, M.M. Hansen and C.T. Hansen. 1990. Organic mercury in Greenland birds and mammals. *The Science of the Total Environment* 95:41-51.
- Dowsley, M. 2005. Inuit knowledge regarding climate change and the Baffin Bay polar bear population. Unpublished report. McGill University, Montreal, Quebec. 43 pp.
- Dowsley, M. and M. Taylor 2005. Community consultations with Qikiqtarjuaq, Clyde River, and Pond Inlet on management concerns for the Baffin Bay (BB) polar bear population: a summary of Inuit knowledge and community consultations. Unpublished report. McGill University. Montreal, Quebec. 83pp.
- Driscoll, C.A., M. Menotti-Raymond, G. Nelson, D. Goldstein, and S. J. O'Brien. 2002. Genomic microsatellites as evolutionary chronometers: a test of wild cats. *Genome Research* 12:414-423.
- Dubey, J.P., R. Zarnke, N.J. Thomas, S.K. Wong, W. Van Bonn, M. Briggs, J.W. Davis, R. Ewing, M. Mense, O.C.H. Kwok, S. Romand, and P. Thulliez. 2003. *Toxoplasma gondii*, *Neospora canium*, *Sarcocystis neurona*, and *Sarcocystis canis*-like infections in marine mammals. *Veterinary Parasitology* 116:275-296.
- Duignan, P.J., O. Nielson, C. House, K.M. Kovacs, N. Duffy, G. Early, D.J. St. Aubin, B.K. Rima, and J.R. Geraci. 1997. Epizootiology of morbillivirus in harp, hooded, and ringed seals from the Canadian Arctic and western Atlantic. *Journal of Wildlife Diseases* 33(1):7-19.
- Dunton, K.H., J.L. Goodall, S.V. Schonberg, J.M. Grebmeier, and D.R. Maidment. 2005. Multi-decadal synthesis of benthic–pelagic coupling in the western arctic: Role of cross-shelf advective processes. *Deep-Sea Research II* 52:3462–3477.
- Durner, G.M. and S.C. Amstrup. 1996. Mass and body-dimension relationships of polar bears in northern Alaska. *Wildlife Society Bulletin* 24(3):480-484.
- Durner, G.M. and S.C. Amstrup. 1995. Movement of a polar bear from northern Alaska to northern Greenland. *Arctic* 48:338-41.
- Durner, G.M., D.C. Douglas, R.M. Nielson, S.C. Amstrup, and T.L. McDonald. 2007. Predicting the future distribution of polar bear habitat in the polar basin from resource selection functions applied to 21st Century General Circulation Model projections of sea ice. U.S. Dept. of the Interior, U.S. Geological Survey Administrative Report. 55 pp.

- Durner, G.M., D.C. Douglas, R.M. Nielson, and S.C. Amstrup. 2006. Model for Autumn Pelagic Distribution of Adult Female Polar Bears in the Chukchi Seas, 1987–1994. USGS Alaska Science Center, Anchorage, Final Report to USFWS.
- Durner, G.M., S.C. Amstrup, R. Nielson, T. McDonald. 2004. Using discrete choice modeling to generate resource selection functions for female polar bears in the Beaufort Sea. Pages 107–120 in S. Huzurbazar (Editor). Resource Selection Methods and Applications: Proceedings of the 1st International Conference on Resource Selection, 13–15 January 2003, Laramie, Wyoming.
- Durner, G.M., S.C. Amstrup, and A.S. Fischbach. 2003. Habitat characteristics of polar bear terrestrial maternal den sites in northern Alaska. *Arctic* 56(1):55–62.
- Durner, G.M., S.C. Amstrup, and K.J. Ambrosius. 2001. Remote identification of polar bear maternal den habitat in northern Alaska. *Arctic* 54:115–21.
- Dyck, M.G. and R.K. Baydack. 2004. Vigilance behaviour of polar bears (*Ursus maritimus*) in the context of wildlife-viewing activities at Churchill, Manitoba, Canada. *Biological Conservation* 116:343-350.
- Eberhardt, L.L. 1985. Assessing the dynamics of wild populations. *Journal of Wildlife Management* 49(4):997-1012.
- Environment Canada. 2005.
<http://www.speciesatrisk.gc.ca/search/speciesDetailse.cfm?SpeciesID=167>
- Ferguson, S.H. and P.D. McLoughlin. 2000. Effects of energy availability, seasonality, and geographic range on brown bear life history. *Ecography* 23:193-200.
- Ferguson, S.H., I. Stirling, and P. McLoughlin. 2005. Climate change and ringed seal (*Phoca hispida*) recruitment in Western Hudson Bay. *Marine Mammal Science* 21(1): 121-135.
- Ferguson, S.H., M.K. Taylor, E.W. Born, A. Rosing-Asvid, and F. Messier. 2001. Activity and movement patterns of polar bears inhabiting consolidated versus active pack ice. *Arctic* 54:49-54.
- Ferguson, S.H., M.K. Taylor, A. Rosing-Asvid, E.W. Born, and F. Messier. 2000a. Relationships between denning of polar bears and conditions of sea ice. *Journal of Mammalogy* 81:1118–27.

- Ferguson, S.H., M.K. Taylor, and F. Messier. 2000b. Influence of sea ice dynamics on habitat selection by polar bears. *Ecology* 81:761–772.
- Ferguson, S.H., M.K. Taylor, E.W. Born, and F. Messier. 1998. Fractals, sea-ice landscape and spatial patterns of polar bears. *Journal of Biogeography* 25:1081-1092.
- Ferguson, S.H., M.K. Taylor, and F. Messier. 1997. Space use by polar bears in and around Auyuittuq National Park, Northwest Territories, during the ice-free period. *Canadian Journal of Zoology* 75:1585–94.
- Finley, K. J., G. M. Miller, G. W., R. A. Davis, and W. R. Koski. 1983. A distinctive large breeding population of ringed seals (*Phoca hispida*) inhabiting the Baffin Bay pack ice. *Arctic* 36:162-173.
- Fischbach, A.S., S.C. Amstrup and D.C. Douglas. 2007. Landward and eastward shift of Alaskan polar bear denning associated with recent ice changes. *Polar Biology* doi 10.1007/s00300-007-0300-4.
- Fisk, A.T., K.E. Hobbs, and D.C.G. Muir, *eds.* 2003. Contaminant levels and trends in the biological environment. Canadian Arctic contaminants assessment report II, Indian and Northern Affairs, Canada. 202pp.
- Fisk, A.T., K.A. Hobson, and R.J. Norstrom. 2001. Influence of chemical and biological factors on trophic transfer of persistent pollutants in the Northwater Polynya marine food web. *Environmental Science and Technology* 35:732-738.
- Flato, G.M., and participating CMIP Modeling Groups. 2004. Sea ice and its response to CO₂ forcing as simulated by global climate models. *Climate Dynamics* 23:229-241.
- Forbes, L.B. 2000. The occurrence and ecology of *Trichinella* in marine mammals. *Veterinarian Parasitology* 93:321-334.
- Førland, E.J., I. Hanssen-Bauer and P. Nordli. 1997. Climate statistics and long-term time series of temperature and precipitation at Svalbard and Jan Mayen. Norwegian Meteorological Institute Report 21/97. 72pp.
- Fowler, C., W.J. Emery and J. Maslanik. 2004. Satellite-derived evolution of Arctic sea ice age: October 1978 to March 2003. *Geoscience and Remote Sensing Letters, IEEE*, Volume 1, Issue 2, April 2004 pp.71–74.
- Francis, J.A. and E. Hunter. 2006. New insight into the disappearing Arctic sea ice. *EOS Trans. Am. Geophys. Union* 87, 509-524.

- Frantzen, B. and A. Bambulyak. 2003. Oil transport from the Russian part of the Barents region. Report to the Barents Secretariat. Svanhovd Environmental Centre, Norway. Pp. 1-27.
- Frost, K.J., L.F. Lowry, E.H. Sinclair, J. Ver Hoef, and D.C. McAllister. 1994a. Impacts on distribution, abundance, and productivity of harbor seals. Pages 97-118 in Loughlin, T.R., *ed.* Marine Mammals and the Exxon Valdez, Academic Press, San Diego, California.
- Frost, K.J., C.A. Manen, and T.L. Wade. 1994b. Petroleum hydrocarbons in tissues of harbor seal from Prince William Sound and the Gulf of Alaska. Pages 331-358 in Loughlin, T.R., *ed.* Marine Mammals and the Exxon Valdez, Academic Press, San Diego, California.
- Furnell, D. J. and D. Oolooyuk. 1980. Polar bear predation on ringed seals in ice-free water. Canadian Field-Naturalist 94: 88-89.
- Gagnon, A.S. and W.A. Gough. 2005. Trends in the dates of ice freeze-up and breakup over Hudson Bay, Canada. Arctic 58:370-382.
- Garner, G.W., J.F. Evermann, J.T. Saliki, E.H. Follmann, and A.J. McKeirnan. 2000. Morbillivirus ecology in polar bears (*Ursus maritimus*). Polar Biology 23:474-478.
- Garner, G.W., S.C. Amstrup, I. Stirling, and S.E. Belikov. 1994. Habitat considerations for polar bears in the North Pacific Rim. Transactions of the North American Wildlife and Natural Resources Conference 59:111-20.
- Garner, G.W., S.T. Knick, and D.C. Douglas. 1990. Seasonal movements of adult female polar bears in the Bering and Chukchi Seas. International Conference on Bear Research and Management 8:219-26.
- Gaston, A.J., K. Woo, and J.M. Hipfner. 2003. Trends in forage fish populations in northern Hudson Bay since 1981 as determined from the diet of nestling thick-billed murre, *Uria lomvia*. Arctic 56:227-233.
- Gjertz, I. and J.O. Scheie. 1998. Human casualties and polar bears killed in Svalbard, 1993-1997. Polar Record 34:337-340.
- Gleason, J., C. Monnett, and C.J. Cowles. 2006. Long-term changes in habitats associated with polar bear sightings during fall in the Alaskan Beaufort Sea: 1979-2005. Poster presented at the 16th Biennial Conference on the Biology of Marine Mammals, December 12-16, 2005. San Diego, California.

- Gloersen, P. 1995. Modulation of hemispheric sea-ice cover by ENSO events. *Nature* 373:503-506.
- Gough, W.A., A.R. Cornwell, and L.J.S Tsuji. 2004. Trends in seasonal ice duration in southwestern Hudson Bay. *Arctic* 57:298-304.
- Gray, A.P. 1972. *Mammalian hybrids: a check-list with bibliography*. 2nd edition, Slough, Commonwealth Agricultural Bureaux.
- Gregory, J.M., P.A. Scott, D.J. Cresswell, N.A. Rayner, C. Gordon, and D.M.H. Sexton. 2002. Recent and future changes in Arctic sea ice simulated by the HadCM3 AOGCM. *Geophysical Research Letters* 29: doi: 10.1029/2001GL014575.
- Groisman, P.Ya. and E.Ya. Rankova. 2001. Precipitation trends over the Russian permafrost-free zone: removing the artifacts of pre-processing. *International Journal of Climatology* 21:657–678.
- Haave, M., M. Ropstad, A.E. Derocher, E. Lie, E. Dahl, Ø. Wiig, and J.U. Skaare. 2003. Polychlorinated biphenyls and reproductive hormones in female polar bears at Svalbard. *Environmental Health Perspectives* 111(4): 431-436.
- Häkkinen, S. and G.L. Mellor. 1990. One hundred years of Arctic ice cover variations as simulated by a one-dimensional ice ocean model. *Journal of Geophysical Research* 15 (C9):15,959-15,969.
- Hall, C.F. 1866. *Arctic researches and life among the Esquimaux: being the narrative of an expedition in search of Sir John Franklin, in the years 1860, 1861, and 1862*. Harper Brothers Publishers, New York.
- Hall, A. and X. Qu. 2006. Using the current seasonal cycle to constrain snow albedo feedback in future climate change. *Geophysical Research Letters* 33:L03502.
- Hammill, M.O. and T.G. Smith. 1991. The role of predation in the ecology of the ringed seal in the Barrow Strait, Northwest Territories, Canada. *Marine Mammal Science* 7(2):123-135.
- Hansen, J., M. Sato, R. Ruedy, L. Nazarenko, A. Lacis, G.A. Schmidt, G. Russell, I. Aleinov, M. Bauer, S. Bauer, N. Bell, B. Cairns, V. Canuto, M. Chandler, Y. Cheng, A. Del Genio, G. Faluvegi, E. Fleming, A. Friend, T. Hall, C. Jackman, M. Kelly, N. Kiang, D. Koch, J. Lean, J. Lerner, K. Lo, S. Menon, R. Miller, P. Minnis, T. Novakov, V. Oinas, Ja. Perlwitz, Ju. Perlwitz, D. Rind, A. Romanou, D. Shindell, P. Stone, S. Sun, N. Tausnev, D. Thresher, B. Weilicki, T. Wong, M. Yao, and S. Zhang. 2006.

Efficacy of climate forcings. *Journal of Geophysical Research* 101:D18104, doi: 10.1029/2005JD005776, 2005.

- Hanssen-Bauer, I. and E.J. Førland. 1998. Long-term trends in precipitation and temperature in the Norwegian Arctic: can they be explained by changes in atmospheric circulation patterns? *Climate Research* 19:143–153.
- Hanssen-Bauer, I., E.J. Førland, O.E. Tveito and P.O. Nordli. 1997. Estimating regional trends – comparisons of two methods. *Nordic Hydrology* 28:21–36.
- Hansson, R. and J. Thomassen. 1983. Behaviour of polar bears with cubs of the year in the denning area. *International Conference on Bear Research and Management* 5:246-254.
- Harington, C.R. 1968. Denning habits of the polar bear (*Ursus maritimus* Phipps). Report Series 5, Canadian Wildlife Service, Ottawa, Canada.
- Harington, C.R. 1966. A polar bear's life. Pages 3–7 in Report on polar bears. Lectures presented at the 8th Annual Meeting of the Washington Area Associates. Arctic Institute of North America Research Paper No. 34.
- Harvell, C.D., C.E. Mitchell, J.R. Ward, S. Altizer, A.P. Dobson, R.S. Ostfield, and M.D. Sammuel. 2002. Climatic warming and disease risks for terrestrial and marine biota. *Science* 296:2158-2162.
- Harwood, L.A. and I. Stirling. 1992. Distribution of ringed seals in the southeastern Beaufort Sea during late summer. *Canadian Journal of Zoology* 70:891-900.
- Harwood, L.A., T.G. Smith, and H. Melling. 2000. Variation in reproduction and body condition of the ringed seal (*Phoca hispida*) in Western Prince Albert Sound, NT, Canada, as assessed through a harvest-based sampling program. *Arctic* 53: 422-431.
- Hedrick, P.W. 1996. Bottleneck(s) or metapopulation in cheetahs. *Conservation Biology* 10:897-899.
- Hegerl, G. C., F.W. Zwiers, P. Braconnot, N.P. Gillett, Y. Luo, J. A. Marengo Orsini, N. Nicholls, J.E. Penner, and P.A. Stott. 2007. Understanding and attributing climate change. *In: Climate change 2007: the physical science basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* {Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Avery, M. Tignor, and H.L. Millers eds). Cambridge University Press, Cambridge, United Kingdom, and New York, NY, USA.

- Heide-Jørgensen, M.P., T. Härkönen, and P. Aberg. 1992. Long-term effects of the seal epizootic. *Ambio* 21:511-516.
- Herrero, J. and S. Herrero. 1997. Visitor safety in polar bear viewing activities in the Churchill region of Manitoba, Canada, BIOS Environmental Research and Planning Associates, Calgary, Alberta, Canada. 88pp.
- Hilderbrand, G.V., C.C. Schwartz, C.T. Robbins, M.E. Jacoby, T.A. Hanley, S.M. Arthur, and C. Servheen. 1999. Importance of meat, particularly salmon, to body size, population productivity, and conservation of North American brown bears. *Canadian Journal of Zoology* 77:132-138.
- Holland, M.M. and C.M. Bitz. 2003. Polar amplification in climate models. *Climate Dynamics* 21:221-232.
- Holland, M.M., C.M. Bitz, and E.C. Hunke. 2006a. W.H. Lipscomb, and J.L. Schramm, 2006: Influence of the sea ice thickness distribution on polar climate in CCSM3, *Journal of Climate* 19: 2398-2414.
- Holland, M., C.M. Bitz, and B. Tremblay. 2006b. Future abrupt reductions in summer Arctic sea ice. *Geophysical Research Letters* 33 L25503: doi 10.1029/200661028024: 1-5.
- Hughes-Hanks, J.M., L.G. Richard, C. Panuska, J.R. Saucier, T.M. O'Hara, R.M. Rolland, and L. Dehn. 2005. Prevalence of *Cryptosporidium* spp. and *Giardia* spp. in five marine mammal species. *Journal of Parasitology* 95:1225-1228.
- Humphries, M.M., D.W. Thomas, and D.L. Kramer. 2003. The role of energy availability in mammalian hibernation: a cost-benefit approach. *Physiological and Biochemical Zoology* 76:165-179.
- Hunter, C.M., H. Caswell, M.C. Runge, E.V. Regehr, S.C. Amstrup, and I. Stirling. 2007. Polar bears in the southern Beaufort Sea II: demographic and population growth in relation to sea ice conditions. U.S. Dept. of the Interior, U.S. Geological Survey Administrative Report. 46 pp.
- Hurrell, J.W. 1995. Decadal trends in the North Atlantic Oscillation. *Science* 269:676-679.
- Hurst, R.J. 1982. Metabolic and temperature responses of polar bears to crude oil. Pages 263-280 *in* Rand, P.J., *ed.* Land and water issues related to energy development. Ann Arbor Science, Michigan.

- Ikonomou, M.G., S. Rayne, and R.F. Addison. 2002. Exponential increases of brominated flame retardants, polybrominated diphenyl ethers, in the Canadian Arctic from 1980-2000. *Environmental Science and Technology* 36:1886-1892.
- Ingolfsson, O. and Ø. Wiig. 2007. Fossil find on Svalbard highlights the natural history of the polar bear (*Ursus maritimus*). American Geophysical Union fall meeting abstracts: AGUFMGC11B.01I.
- Intergovernmental Panel on Climate Change (IPCC). 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. 996 pp.
- Intergovernmental Panel on Climate Change (IPCC). 2007. *Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom, and New York, NY, USA.
- Intergovernmental Panel on Climate Change (IPCC). 2001a. *Climate Change 2001: impacts, adaptation, and vulnerability. Third Assessment Report*, Cambridge University Press, Cambridge, UK. 1032pp.
- Intergovernmental Panel on Climate Change (IPCC). 2001b. *Climate Change 2001: scientific basis. Third Assessment Report*, Cambridge University Press, Cambridge, UK. 881pp.
- Intergovernmental Panel on Climate Change (IPCC). 2000. *IPCC Special Report on Emission Scenarios*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. 570 pp.
- International Union for Conservation of Nature (IUCN). 2004. *Guidelines for using the IUCN Red List Categories and Criteria*. Prepared by the standards and petitions subcommittee of the IUCN SSC Red List Programme Committee. 50 pp.
- Iverson, S.J., I. Stirling, and S.L.C. Lang. 2006. Spatial and temporal variation in the diets of polar bears across the Canadian Arctic: indicators of changes in prey populations and environment Pages 98-117 *in* Boyd, I., S. Wanless, and C.J. Camphuysen. *Top predators in marine ecosystems*. Cambridge University Press.
- Jansen, E., J. Overpeck, K.R. Briffa, J.-C. Duplessy, F. Joos, V. Masson-Delmotte, D. Olago, B. Otto-Bliesner, W.R. Peltier, S. Rahmstorf, R. Ramesh, D. Raynaud, D. Rind, O. Solomina, R. Villalba and D. Zhang, 2007: Palaeoclimate. In: *Climate Change 2007: The Physical Science*

Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

- Jensen, J. 2002. A note on the management of polar bears in Greenland. Page 65 *in* Lunn N.J., S. Schliebe, and E.W. Born, *eds.* Polar bears: proceedings of the 13th working meeting of the IUCN/SSC Polar Bear Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.
- Jevrejeva, S. 2001. Severity of winter seasons in the northern Baltic Sea between 1529 and 1990: reconstruction and analysis. *Climate Research*, Vol.17, p.55-62.
- Jiang, D. et al. 2005. Modeling the middle Pliocene climate with a global atmospheric general circulation model. *Journal of Geophysical Research* 110, D14107, doi:10.1029/2004JD005639.
- Johannessen, O.M., L. Bengtson, M.W. Miles, S.I. Kuzmina, V.A. Semenov, G.V. Alexseev, A.P. Nagurnyi, V.F. Zakharov, L. Bobylev, L.H. Pettersson, K. Hasselmann and H.P. Cattle. 2004. Arctic climate change: observed and modeled temperature and sea-ice variability. *Tellus* 56A: 328-341.
- Johnston, D.W., A.S. Friedlaender, L.G. Torres, and D.M. Lavingne. 2005. Variation in sea ice cover on the east coast of Canada from 1969 to 2002: climate variability and implications for harp and hooded seals. *Climate Research* 29:209-222.
- Jonkel, C., P. Smith, I. Stirling, and G.B. Kolenosky. 1976. The present status of the polar bear in the James Bay and Belcher Islands area. Occasional Paper No. 26. Canadian Wildlife Service, Ottawa, Canada.
- Jonkel, C.J., G.B. Kolenosky, R. Robertson, and R.H. Russell. 1972. Further notes on polar bear denning habits. *International Conference on Bear Biology and Management* 2: 142-158.
- Kannan, K., S.H. Yun, and T.J. Evans. 2005. Chlorinated, brominated, and perfluorinated contaminants in livers of polar bears from Alaska. *Environmental Science and Technology* 39:9057-9063.
- Karl, T.R., R.G. Quayle and P. Ya. Groisman. 1993. Detecting climate variations and change: new challenges for observing and data management systems. *Journal of Climate* 6:1481-1494.

- Kaufman, D.S., T.A. Ager, N.J. Anderson, P.M. Anderson, J.T. Andrews, P.J. Bartlein, L.B. Brubaker, L.L. Coats, L.C. Cwynar, M.L. Duvall, A.S. Dyke, M.E. Edwards, W.R. Eisner, K. Gajewski, A. Geirsdóttir, F.S. Hu, A.E. Jennings, M.R. Kaplan, M.W. Kerwin, A.V. Lozhkin, G.M. MacDonald, G.H. Miller, C.J. Mock, W.W. Oswald, B.L. Otto-Bliesner, D.F. Porinchu, K. Ruhlman, J.P. Smol, E.J. Steig, B.B. Wolfe. 2004. Holocene thermal maximum in the western Arctic 0-180° West. *Quaternary Science Reviews* 23:529-560.
- Kelly, B.P., O.H. Badajos, M. Kunnsranta, and J. Moran. 2006. Timing and re-interpretation of ringed seal surveys. Final report OCS Study MMS 2006-013, 60 pp.
- Kelly, B.P. 2001. Climate change and ice breeding pinnipeds. Pages 43-55 *in*: Walther, G.R., C.A. Burga and P.J. Edwards, *eds*. "Fingerprints" of climate change: adapted behaviour and shifting species ranges. Kluwer Academic/Plenum Publishers, New York and London.
- Kelly, B.P., O.H. Badajos, M. Kunnsranta, and J. Morgan. 2006. Timing and re-interpretation of ringed seal surveys. Final Report OCS Study MMS 2006-013, Minerals Management Service Alaska Region, Anchorage, Alaska. 60pp.
- Kiliaan, H.P. and I. Stirling. 1978. Observations on overwintering walruses in the eastern Canadian High Arctic. *Journal of Mammalogy*:59:197-200.
- Kingsley, M.C.S. 1990. Status of the ringed seal, *Phoca hispida*, in Canada. *Canadian Field Naturalist* 104: 138-145.
- Kingsley, M.C.S., I. Stirling, and W. Calvert. 1985. The distribution and abundance of seals in the Canadian high Arctic. *Canadian Journal of Fisheries and Aquatic Sciences* 42:1189-1210.
- Kirk, Cassandra. 2006. University of Alaska (Fairbanks) Doctorate Student; personal communication with Thomas Evans, U.S. Fish and Wildlife Service, Marine Mammals Management, Anchorage, Alaska.
- Klumov, S.K. 1937. Polar cod and its importance for certain life processes in the Arctic. *Izvestiya Akademii Nauk SSSR Seriya Biologicheskaya* 1937(1):175-188.
- Knutti, R., G.A. Meehl, M.R. Allen, and D.A. Staniforth. 2006. Constraining climate sensitivity from the seasonal cycle in surface temperature. *Journal of Climate* 19:4224-4233.

- Kochnev, A. 2006. Research on polar bear autumn aggregations on Chukotka, 1989-2004. Pages 157-165 in Aars, J., N.J. Lunn, and A.E. Derocher. 2006. Polar bears: proceedings of the 14th working meeting of the IUCN/SSC Polar Bear Specialist Group, 20-24 June 2005, Seattle, Washington, USA.
- Kochnev, A., V.M. Etylin, V.I. Kavry, E.B. Siv-Siv, and I.V. Tanko. 2003. Traditional knowledge of Chukotka Native Peoples regarding polar bear habitat use. Chukotka Association of Traditional Marine Mammal Hunters, Alaska Nanuuq Commission, and Pacific Fisheries Research Center, Anadyr, Russia. 165pp.
- Kolenosky, G.B., and J.P. Prevelt. 1983. Productivity and maternity denning of polar bears in Ontario. *International Conference on Bear Research and Management* 5:238-45.
- Kucklick, J.R., W.D.J. Struntz, P.R. Becker, G.W. York, T.M. O'Hara, and J.E. Bohonowych. 2002. Persistent organochlorine pollutants in ringed seals and polar bears collected from northern Alaska. *The Science of the Total Environment* 287(1-2):45-59.
- Kuiken, T., S. Kennedy, T. Barrett, M.W.G. Van de Bildt, F.H. Borgsteede, S.D. Brew, G.A. Codd, C. Duck, R. Deaville, T. Eybatov, M.A. Forsyth, G. Foster, P.D. Jepson, A. Kydyrmanov, I. Mitrofanov, C. J. Ward, S. Wilson, and A.D.M.E. Osterhaus. 2006. The 2000 canine distemper epidemic in Caspian seals (*Phoca caspica*): Pathology and analysis of contributory factors. *Veterinary Pathology*. 43:321-338.
- Kumlien, L. 1879. Contribution to the natural history of the Arctic America, made in connection with the Howgate Polar Expedition, 1877-1878. *U.S. national Museums Bulletin* 15. 179pp.
- Kurten, B. 1964. The evolution of the polar bear, *Ursus maritimus* Phipps. *Acta Zoologica Fennica* 108:1-30.
- Kutz, S. J., E.P. Hoberg, J. Nagy, L. Polley, and B. Elkin. 2004. 'Emerging' parasitic infections in arctic ungulates. *Integrative and Comparative Biology*. 44(2):109-118.
- Kutz, S. J., A. Veitch, E.P. Hoberg, B.T. Elkin, E.J. Jenkins, and L. Polley. 2001. New host and geographic records for two protostrongylids in Dall's sheep. *Journal of Wildlife Diseases* 37:751-774.
- Kwok, R. 2000. Recent changes in Arctic Ocean sea ice motion associated with the North Atlantic Oscillation. *Geophysical Research Letters* 27(6):775-778.

- Laidre, K.L. and M.P. Heide-Jorgensen. 2005. Arctic sea ice trends and narwhal vulnerability. *Biological Conservation* 121:509-517.
- Laidre, K.L., I. Stirling, L.F. Lowry, Ø. Wiig, , M-P. Heide-Jørgensen and S.H. Ferguson.2008. Quantifying the sensitivity of arctic marine mammals to climate-induced habitat change. *Ecological Applications* 18(2), pp. S97-S125.
- Larsen, T. 1985. Polar bear denning and cub production in Svalbard, Norway. *Journal of Wildlife Management* 49:320–26.
- Larsen, T. and B. Kjos-Hanssen. 1983. *Trichinella* sp. in polar bears from Svalbard, in relation to hide length and age. *Polar Research* 1:89–96.
- Laxon, S., N. Peacock, and D. Smith. 2003. High international variability of sea ice thickness in the Arctic region. *Nature* 425:947-950.
- Lee, D.C. and B.E. Rieman. 1997. Population viability assessment of salmonids by using probabilistic networks. *North American Journal of Fisheries Management* 17:1144-1157.
- Lemke, P., J. Ren, R.B. Alley, I. Allison, J. Carrasco, G. Flato, Y. Fujii, G. Kaser, P. Mote, R.H. Thomas and T. Zhang. 2007. Observations: Changes in Snow, Ice and Frozen Ground. *In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Avery, M. Tignor and H.L. Miller *eds*]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Lentfer, J.W. 1990. Workshop on measures to assess and mitigate the adverse effects of Arctic oil and gas activities on polar bears. Final report to the U.S. Marine Mammal Commission. U.S. Department of Commerce National Technical Information Service, Washington, D.C., USA. iv + 39pp.
- Lentfer, J. W. 1976. Polar Bear Management in Alaska.. Proceedings from the Third International Conference on Bears – Their Biology and Management. June 1974 in Binghamton, New York and Moscow, USSR. IUCN, Morges, Switzerland. 209-213.
- Lentfer, J.W. 1974. Agreement on Conservation of Polar Bears. *Polar Record*, Vol. 17, No. 108, p. 327-30.

- Lentfer, J.W. 1972. Polar bear-sea ice relationships. Pages 165-171 in *Bears: their biology and management*. Morges, Switzerland.
- Lentfer, J.W. and R.J. Hensel. 1980. Alaskan polar bear denning. *International Conference on Bear Research and Management* 4:101-8.
- Letcher, R.J., E. Klasson-Wehler and A. Bergman. 2000. In Passivirta, J., ed. *The handbook of environmental chemistry: new types of persistent halogenated compounds*. Volume 3 Part K. Springer Verlag, Ottawa, Canada. Pp. 315-360.
- Li, Y.F., T.F. Bidleman, L.A. Barrie, and L.L. McConnell. 1998. Global hexachlorocyclohexane use trends and their impact on the arctic atmospheric environment. *Geophysical Research Letters* 25:39-41.
- Lie E., H.J. Larsen, S. Larsen, G.M. Johansen, A.E. Derocher, N.J. Lunn, R.J. Norstrom, Ø. Wiig, and J.U. Skaare. 2004. Does high organochlorine (OC) exposure impair the resistance to infection in polar bears (*Ursus maritimus*)? Part I: Effect of OCs on the humoral immunity. *Journal of Toxicology and Environmental Health-A* 67:555-582.
- Lie, E., A. Bernhoft, F. Riget, S.E. Belikov, A.N. Boltunov, G.W. Garner, Ø Wiig, , and J.U. Skaare. 2003. Geographical distribution of organochlorine pesticides (OCPs) in polar bears (*Ursus maritimus*) in the Norwegian and Russian Arctic. *The Science of the Total Environment* 306:159-170.
- Limpasuvan, V. and D.L. Hartmann. 2000. Wave-maintained annular modes of climate variability. *Journal of Climate* 13:4414-4429.
- Lindsay, R.W. and J. Zhang. 2005. The thinning of the Arctic sea ice, 1988-2003: have we passed a tipping point? *J. Climate* 18: 4879-4894.
- Lønø, O. 1970. The polar bear (*Ursus maritimus* Phipps) in the Svalbard area. *Norsk Polarinstitutt Skrifter* 149, Oslo, Norway. 103 pp.
- Lønstrup, J. 2005. Polar bear management in Greenland. Pages 133-134 in, *Polar bears: proceedings of the 14th working meeting of the IUCN/SSC Polar Bear Specialist Group*, 20-24 June, 2005, Seattle, Washington, USA
- Lowry, L.F., K.J. Frost, and K.W. Pitcher. 1994. Observations of oiling of harbor seals in Prince William Sound. Pages 209-226 in Loughlin, T.R., ed. *Marine Mammals and the Exxon Valdez*, Academic Press, San Diego, California.

- Lowry, L.F., J.J. Burns, and R.R. Nelson. 1987. Polar bear, *Ursus maritimus*, predation on belugas, *Delphinapterus leucas*, in the Bering and Chukchi Seas. *Canadian Journal of Zoology* 101:141–46.
- Lowry, L.F., K.J. Frost, and J.J. Burns. 1980. Variability in the diet of ringed seals, *Phoca hispida*, in Alaska. *Canadian Journal of Fisheries and Aquatic Science* 37:2254-2261.
- Lunn, N.J. and G.B. Stenhouse. 1985. An observation of possible cannibalism by polar bears (*Ursus maritimus*). *Canadian Journal of Zoology* 63:1516-1517.
- Lunn, N.J. and I. Stirling. 1985. The significance of supplemental food to polar bears during the ice-free period of Hudson Bay. *Canadian Journal of Zoology* 63:2291–97.
- Lunn, N.J., M. Branigan, L. Carpenter, K. Chaulk, B. Doidge, J. Galipeau, D. Hedman, M. Huot, R. Maraj, M. Obbard, R. Otto, I. Stirling, M. Taylor, and S. Woodley. 2005. Polar bear management in Canada 2001-2004. Report to the 14th working meeting of the IUCN/SSC Polar Bear Specialist Group, June 2005, Seattle, Washington, U.S.A. 22pp.
- Lunn, N.J., S. Schliebe, and E.W. Born, eds. 2002a. Polar bears: Proceedings of the 13th working meeting of the IUCN/SSC Polar Bear Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK. vii +153pp.
- Lunn, N.J., S. Atkinson, M. Branigan, W. Calvert, D. Clark, B. Doidge, C. Elliott, J. Nagy, M. Obbard, R. Otto, I. Stirling, M. Taylor, D. Vandal, and M. Wheatley. 2002b. Polar bear management in Canada 1997-2000. Pages 41-63 in Polar Bear Specialist Group (PBSG). 2002. Polar bears: proceedings of the 13th working meeting of the IUCN/SSC Polar Bear Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.
- Lunn, N.J., I. Stirling, D. Andriashek, and G.B. Kolenosky. 1997. Re-estimating the size of the polar bear population in Western Hudson Bay. *Arctic* 50:234–40.
- Lunn, N.J., I. Stirling, and D. Andriashek. 1995. Movements and distribution of polar bears in the northeastern Beaufort Sea and M'Clure Strait: final report by the Canadian Wildlife Service to the Inuvialuit Wildlife Management Advisory Committee, Inuvik, NWT. Canadian Wildlife Service, Edmonton, Alberta. 65pp.
- Lydersen, C., O.A. Nøst, K.M. Kovaks, and M.A. Fedak. 2004. Temperature data from Norwegian and Russian waters of the northern Barents Sea collected by free-living ringed seals. *Journal of Marine Systematics* 46:99-108.

- Lydersen, C., and Smith T.G. 1989. Avian predation on ringed seal, *Phoca hispida* pups. *Polar Biology* 9: 489-490.
- Lydersen, C., O.A. Nøst, K.M. Kovaks, and M.A. Fedak. 2004. Temperature data from Norwegian and Russian waters of the northern Barents Sea collected by free-living ringed seals. *Journal of Marine Systematics* 46:99-108.
- Lydersen, C., P.M. Jensen, and E. Lydersen. 1987. Studies of the ringed seal population in the Van Mijen fjord, Svalbard, in the pbreeding period 1986. *Nortk Polarinst. Rapportser.* 34: 91-112.
- Macdonald, R.W., T. Harner, and J. Fyfe. 2005. Recent climate change in the Arctic and its impact on contaminant pathways and interpretation of temporal trend data. *Science of the Total Environment.* 342:5-86.
- Macdonald, R.W., T. Harner, J. Fyfe, H. Loeng, and T. Weingartner. 2003. AMAP assessment 2002: the influence of global change on contaminant pathways to, within, and from the Arctic. Oslo Norway: Arctic Monitoring and Assessment Programme. xii + 65pp.
- Manly, B.F.J., L.L. McDonald, D.L. Thomas, T.L. McDonald, and W.P. Erickson. 2002. Resource selection by animal statistical design and analysis for field studies. Kluwer Academic Publishers, Dordrecht, Netherlands, 2nd edition.
- Manley, F.J., L.L. McDonald, D.L. Thomas, T.L. McDonald, and W.P. Erickson. 2002. Resource selection by animal statistical design and analysis for field studies. Second edition, Kluwer Academic Publishers, Dordrecht, The Netherlands.
- Manning, T.H. 1971. Geographical variation in the polar bear *Ursus maritimus* Phipps. Report Series No. 13. Canadian Wildlife Service, Ottawa, Canada.
- Marcot, B.G., R.S. Holthausen, M.G. Raphael, M.M. Rowland, and M.J. Wisdom. 2001. Using Bayesian belief networks to evaluate fish and wildlife population viability under land management alternatives from an environmental impact statement. *Forest Ecology and Management* 153:29-42.
- Marcot, B.G., J.D. Steventon, G.D. Sutherland, and R.K. McCann. 2006. Guidelines for developing and updating Bayesian belief networks applied to ecological modeling and conservation. *Canadian Journal of Forest Research* 36:3063-3074.
- Martin, J., M. Smithwick, B.M. Braune, P.F. Hoekstra, D.C.G. Muir, and S.A. Mabury. 2004. Identification of long-chain perfluorinated acids in biota

from the Canadian Arctic. *Environmental Science and Technology* 38: 373-380.

- Maslanik, J.A., S. Drobot, C. Fowler, W. Emery, and R. Barry. 2007. On the Arctic climate paradox and the continuing role of atmospheric circulation in affecting sea ice conditions. *Geophysical Research Letters* 34(3).
- Mauritzen, M., A.E. Derocher, O. Pavlova., and Ø. Wiig. 2003a. Female polar bears, *Ursus maritimus*, on the Barents Sea drift ice: walking the treadmill. *Animal Behaviour* 66: 107-113.
- Mauritzen, M., S.E. Belikov, A.N. Boltunov, A.E. Derocher, E. Hansen, R.A. Ims, Ø. Wiig, and N. Yoccoz. 2003b. Functional responses in polar bear habitat selection. *Oikos* 100:112-124.
- Mauritzen, M., A.E. Derocher, and Ø Wiig. 2001. Space-use strategies of female polar bears in a dynamic sea ice habitat. *Canadian Journal of Zoology* 79:1704-1713.
- McLaren, A. J., et al. 2006. Evaluation of the sea ice simulation in a new coupled atmosphere-ocean climate model (HadGEM1). *Journal of Geophysical Resource Letters* 111, C12014, doi:10.1029/2005JC003033.
- McKinney, M. L. 1997. Extinction vulnerability and selectivity: combining ecological and paleontological views. *Annual Review of Ecology and Systematics* 28: 495-516.
- McLaren, I.A. 1958. The biology of the ringed seal, *Phoca hispida*, in the eastern Canadian Arctic. *Fisheries Research Board of Canada Bulletin* 118:1-97.
- McNab, B.K. 2002. *The physiological ecology of vertebrates: a view from energetics*. Comstock Publishing Associates. Ithaca, NY.
- McNay, R.S., B.G. Marcot, V. Brumovsky, and R. Ellis. 2006. A Bayesian approach to evaluating habitat suitability for woodland caribou in north-central British Columbia. *Canadian Journal of Forest Research* 36:3117-3133.
- Measures, L.N. and M.E. Olson. 1999. Giardiasis in pinnipeds from eastern Canada. *Journal of Wildlife Diseases* 35(4):779-782.
- Meehl, G., T.F. Stocker, W.D. Collins, P. Friedlingstein, A.T. Gaye, J.M. Gregory, A. Kitoh, R. Knutti, J.M. Murphy, A. Noda, S.C.B. Raper, I.G. Watterson, A.J. Weaver, and Z.C. Zhao. 2007. Global climate projections. *In* Solomon, S., D. Qin, M. Manning and H.L. Miller, eds. *Climate Change 2007: The Physical Science Basis*. Contribution of Working

Group I to the 4th Assessment Report of the IPCC. Cambridge University Press, United Kingdom. Available from: <http://www.ipcc.ch/>.

- Meier, W.N., J. Stroeve, and F. Fetterer. 2007. Whither Arctic sea ice? A clear signal of decline regionally, seasonally, and extending beyond the satellite record. *Annals of Glaciology* 46:428-434.
- Meehl, G. A., W. M. Washington, B. D. Santer, W. D. Collins, J. M. Arblaster, A. Hu, D. M. Lawrence, H. Teng, L. E. Buja, and W. G. Strand. 2006. Climate change projections for the Twenty-First century and climate change commitment in the CCSM3. *J. Clim.*19: 2597–2616.
- Meier, W.N., J. Stroeve, and F. Fetterer. 2007. Whither Arctic sea ice? A clear signal of decline regionally, seasonally, and extending beyond the satellite record. *Annals of Glaciology* 46: 428-434.
- Mekis, E. and W.D. Hogg. 1999. Rehabilitation and analysis of Canadian daily precipitation time series. *Atmosphere-Ocean* 37: 53–85.
- Messier, F., M.K. Taylor, and M.A. Ramsay. 1994. Denning ecology of polar bears in the Canadian Arctic Archipelago. *Journal of Mammalogy* 75:420–30.
- Miller, S., S. Schliebe and K. Proffitt. 2006. Demographics and behavior of polar bears feeding on bowhead whale carcasses at Barter and Cross Islands, Alaska, 2002-2004. OCS Study MMS 2006-14, Minerals Management Service, Anchorage, Alaska. 29pp.
- Miller, S.D., White, G.C., Sellers, R.A., Reynolds, H.V., Schoen, J.W., Titus, K., Barnes, V.G., Jr., Smith, R.B., Nelson, R.R., Ballard, W.B., and Schwartz, C.C. 1997. Brown and black bear density estimation in Alaska using radiotelemetry and replicated mark–resight techniques. *Wildlife Monograph* No. 133. pp. 1–55.
- Minerals Management Service (MMS). 2007 Chukchi Sea Planning Area oil and gas lease sale 193 and seismic surveying activities in the Chukchi Sea. Final Environmental Impact Statement, OCS/EA MMS 2007-026, U.S. Department of the Interior, Alaska OCS Region, Anchorage, Alaska. 1818pp.
- Monnett, C. and J.S. Gleason. 2006. Observations of mortality associated with extended open water swimming by polar bears in the Alaskan Beaufort Sea. *Polar Biology* DOI 10.1007/s00300-005-0105-2.
- Moore, S.E. and H.P. Huntington. In press. Arctic marine mammals and climate change: impacts and resilience. *Ecological Applications*: xx-xx

- Morrison, J., K. Aagaard, and M. Steele. 2000. Recent environmental changes in the Arctic: A review. *Arctic* 53(4): 359-371.
- Muir, D., S. Backus, A.E. Derocher, R. Dietz, T.J. Evans, G.W. Gabrielsen, J. Nagy, R.J. Norstrom, C. Sonne, I. Stirling, M.K. Taylor, and R.J. Letcher. 2006. Brominated flame retardants in polar bears (*Ursus maritimus*) from Alaska, the Canadian Arctic, East Greenland, and Svalbard. *Environmental Science Technology* 40(2):449-455.
- Mysak, L.A. and D.K. Manak. 1989. Arctic sea-ice extent and anomalies, 1953-1984. *Atmosphere-Ocean* 27(2):376-405.
- Nageak, B.P., C.D. Brower, and S.L. Schliebe. 1991. Polar bear management in the southern Beaufort Sea: An agreement between the Inuvialuit Game Council and North Slope Borough Fish and Game Committee. *Transactions of the North American Wildlife and Natural Resources Conference* 56:337-43.
- National Research Council (NRC). 2003. Cumulative environmental effects of oil and gas activities on Alaska's North Slope. National Academy Press. Washington, D.C.
- National Snow and Ice Data Center (NSIDC). 2005. Sea ice decline intensifies. Joint press release from the National Snow and Ice Data Center, NASA, and the University of Washington. Boulder, Colorado. September 28, 2005.
- Neff, J.M. 1990. Composition and fate of petroleum and spill-treating agents in the marine environment *in* Geraci, J.R. and D.J. St. Aubin, *eds.* *Sea mammals and oil: confronting the risks.* Academic Press. San Diego California. 33pp.
- Norstrom, R.J., S.E. Belikov, E.W. Born, G.W. Garner, B. Malone, S. Olpinski, M.A. Ramsay, S. Schliebe, I. Stirling, M.S. Stishov, M.K. Taylor, and Ø. Wiig. 1998. Chlorinated hydrocarbon contaminants in polar bears from eastern Russia, North America, Greenland, and Svalbard: Biomonitoring of Arctic pollution. *Archives of Environmental Contamination and Toxicology* 35:354-67.
- Norstrom, R.J., M. Simon, and D.C.G. Muir. 1990. Polychlorinated dibenzo-p-dioxins and dibenzofurans in marine mammals in the Canadian north. *Environmental Pollution* 66:1019.

- Norstrom, R.J., R.E. Schweinsburg and B.T. Collins. 1986. Heavy metals and essential elements in livers of the polar bear (*Ursus maritimus*) in the Canadian Arctic. *The Science of the Total Environment* 48:195-212.
- Nystrom, V., A. Angerbjorn, and L. Dalen. 2006. Genetic consequences of a demographic bottleneck in the Scandinavian arctic fox. *Oikos* 114: 84-94.
- Obbard, M.E., T.L. McDonald, E.J. Howe, E.V. Regehr, and E.S. Richardson. 2007. Polar bear population status in southern Hudson Bay, Canada. U.S. Dept. of the Interior, U.S. Geological Survey Administrative Report, Reston, Virginia. 32 pp.
- Obbard, M.E., M.R.L. Cattet, T. Moody, L. R. Walton, D. Potter, J. Inglis, and C. Chenier. 2006. Temporal trends in the body condition of Southern Hudson Bay polar bears. *Climate Change Research Information Note*. Note No. 3.
- Ogi, M. and J.M. Wallace. 2007. Summer minimum Arctic sea ice extent and associated summer atmospheric circulation. *Geophysical Research Letters* 34:L12705.
- Omstedt, A. and D. Chen. 2001. Influence of atmospheric circulation on the maximum ice extent in the Baltic Sea. *Journal of Geophysical Research* 106:4493-4500.
- Oskam, I.C., E. Ropstad, E. Dahl, E. Lie, A.E. Derocher, Ø. Wiig, S. Larsen, R. Wiger, and J.U. Skaare. 2003. Organochlorines affect the major androgenic hormone, testosterone, in male polar bears (*Ursus maritimus*) at Svalbard. *Journal of Toxicology and Environmental Health-A* 66:2119–2139.
- Overland, J.E. and M. Wang. 2007a. Future regional Arctic sea ice declines. *Geophysical Research Letters* 34: L17705.
- Overland, J.E. and M. Wang 2007b. Future climate of the North Pacific Ocean. *Eos Trans. AGU* 88(16), 178, 182.
- Ovsyanikov, N. 2005. Research and conservation of polar bears on Wrangel Island. Report to the 14th working meeting of the IUCN/SSC Polar Bear Specialist Group, June 2005, Seattle, Washington, U.S.A. 22pp.
- Ovsyanikov, N. 2005. Personal communication with Scott Schliebe, U.S. Fish and Wildlife Service, Marine Mammals Management, Anchorage, Alaska.
- Owens, I. P. F. and P.M. Bennett. 2000. Ecological basis of extinction risk in birds: habitat loss versus human persecution and introduced predators.

Proceedings of the National Academy of Science, U.S.A. 97: 12144-12148.

- Paetkau, D., S.C. Amstrup, E.W. Born, W. Calvert, A.E. Derocher, G.W. Garner, F. Messier, I. Stirling, M.K. Taylor, Ø. Wiig, and C. Strobeck. 1999. Genetic structure of the world's polar bear populations. *Molecular Ecology* 8:1571–84.
- Paetkau, D., W. Calvert, I. Stirling, and C. Strobeck. 1995. Microsatellite analysis of population structure in Canadian polar bears. *Molecular Ecology* 3:347-354.
- Parkinson, C.L. 2000a. Variability of Arctic sea ice: the view from the space, an 18-year record. *Arctic* 53:341-358.
- Parkinson, C.L. 2000b. Recent trend reversals in Arctic sea ice extents: possible connections to the North Atlantic Oscillation. *Polar Geography* 24(1):1-12.
- Parkinson, C.L. and D.J. Cavalieri. 2002. A 21 year record of Arctic sea-ice extents and their regional, seasonal, and monthly variability and trends. *Annals of Glaciology* 34:441-446.
- Parkinson, C.L., K.Y. Vinnikov, and D.J. Cavalieri. 2006. Evaluation of the simulation of the annual cycle of Arctic and Antarctic sea ice coverages by 11 major global climate models. *Journal of Geophysical Research* 111, C07012, doi:10.1029/2005JC003408.
- Parkinson, C.L., D.J. Cavalieri, P. Gloersen, H.J. Zwally and J.C. Comiso. 1999. Arctic sea ice extents, areas, and trends, 1978-1996. *Journal of Geophysical Research* 104(C9):20837-20856.
- Parks, E.K., A.E. Derocher, and N.J. Lunn. 2006. Seasonal and annual movement patterns of polar bears on the sea ice of Hudson Bay. *Canadian Journal of Zoology* 84(9): 1282-1294.
- Parmesan, C. 2006. Ecological and evolutionary responses to recent climate change. *Annual review of Ecology, Evolution, and Systematics* 37:637-669.
- Peacock, E., M. Dyck, and F. Piugattuk. 2007. Government of Nunavut submission to the Polar Bear Technical Committee, February 6-9, 2007. Edmonton, Alberta.
- Pedersen, A. 1945. The polar bear: its distribution and way of life. Aktieselskabet E. Bruun, Copenhagen, Denmark.

- Phipps, C.J. 1774. A voyage towards the North Pole. J. Nourse, London.
- Polar Bear Technical Committee (PBTC). 2007. Minutes from the Polar Bear Technical Committee meeting, Edmonton, Alberta, 6-9 February 2007. 88pp.
- Polyakov, I., L. Timokhov, I. Dmitrenko, V. Ivanov, H. Simmons, A. Beszczynska-Möller, R. Dickson, E. Fahrbach, L. Fortier, Jean-Claude Gascard, J. Hölemann, N. P. Holliday, E. Hansen, C. Mauritzen, J. Piechura, R. Pickart, U. Schauer, M. Steele, W. Walczowski. 2007. Observational Program Tracks Arctic Ocean Transition to a Warmer State. EOS, Transactions American Geophysical Union 88(40): 398.
- Polyakov, I.V., G.V. Alexseev, R.V. Bekryaev, U.S. Bhatt, R. Colony, M.A. Johnson, V.P. Karklin, D. Walsh, and A.V. Yulin. 2003. Long term ice variability in Arctic marginal seas. Journal of Climate 16(12):2078-2085.
- Pomeroy, L.R. 1997. Primary production in the Arctic Ocean estimated from dissolved oxygen. Journal of Marine Sciences 10:1-8.
- Powell, E., J. Klinck, and E. Hofmann. 1996. Modeling diseased oyster populations. II. triggering mechanisms for *Perkinsus marinus* epizootics. Journal of Shellfish Research. 15:141-165.
- Prestrud, P. and I. Stirling. 1994. The international polar bear agreement and the current status of polar bear conservation. Aquatic Mammals 20:113–24.
- Prevett, J.P. and G.B. Kolenosky. 1982. The status of polar bears in Ontario. Naturaliste Canadien 109:933–39.
- Pritchard, G. T., and C. T. Robbins. 1990. Digestive and metabolic efficiencies of grizzly and black bears. Canadian Journal of Zoology 68:1645-1651.
- Proshutinsky, A.Y. and M. Johnson. 2001. Two regimes of Arctic's circulation from ocean models with ice and contaminants. Marine Pollution Bulletin 43(1-6):61-70.
- Putkonen, J. and G. Roe. 2003. Rain-on-snow events impact soil temperatures and affect ungulate survival. Geophysical Research Letters 30(4), 1188.
- Quadfasel, D.A., A. Sy, D. Wells, and A. Tunik. 1991. Warming in the Arctic. Nature 350:385.

- Ramsay, M.A. and D.S. Andriashek. 1986. Long distance route orientation of female polar bears (*Ursus maritimus*) in spring. *Journal of Zoology A* (London) 208:63–72.
- Ramsay, M.A. and K.A. Hobson. 1991. Polar bears make little use of terrestrial food webs: evidence from stable-carbon isotope analysis. *Oecologia* 86: 598-600.
- Ramsay, M.A. and I. Stirling. 1990. Fidelity of female polar bears to winter-den sites. *Journal of Mammalogy* 71:233–36.
- Randall, D.A., R.A. Wood, S. Bony, R. Colman, T. Fichefet, J. Fyfe, V. Kattsov, A. Pitman, J. Shukla, J. Srinivasan, R.J. Stouffer, A. Sumi, and K.E. Taylor. 2007. Climate models and their evaluation. *In: Solomon, S., D. Qin, M. Manning, and H.L. Miller eds. In Climate Change 2007: the Physical Science Basis. Contribution of Working Group I to the 4th Assessment Report of the IPCC. Cambridge University Press, United Kingdom. Available from: <http://www.ipcc.ch/>.*
- Rausch, R.L. 1970. Trichinosis in the Arctic. Pages 348–73 *in* Gould, S.E., *ed.* Trichinosis in man and animals. C.C. Thomas, Springfield, Illinois, USA.
- Ray, C.E. 1971. Polar bear and mammoth on the Pribilof Islands. *Arctic* 24:9–19.
- Raynor, N.A., D.E. Parker, E.B. Horton, C.K. Folland, V.L.V. Alexander, and D.P. Rowell. 2003. Global analyses of sea surface temperature, sea ice, and night marine air temperature since the late nineteenth century. *Journal of Geophysical Research* 108(D14):4407.
- Reale, D., A. G. McAdam, S. Boutin, and D. Berteaux. 2003. Genetic and plastic response of a northern mammal to climate change. *Proceedings of the Royal Society of London – B* 270:591-596.
- Regehr, E.V., N.J. Lunn, S.C. Amstrup, and I. Stirling. 2007a. Effects of earlier sea ice breakup on survival of polar bears in Western Hudson Bay. *Journal of Wildlife Management* 71(8): 2673-2683.
- Regehr, E.V., C.M. Hunter, H. Caswell, S.C. Amstrup, and I. Stirling. 2007b. Polar bears in the southern Beaufort Sea: survival and breeding in relation to sea ice conditions, 2001-2006. U.S. Dept. of the Interior, U.S. Geological Survey Administrative Report, Reston, Virginia. 45 pp.
- Regehr, E.V., S.C. Amstrup and I. Stirling. 2006. Polar bear population status in the Southern Beaufort Sea. Report Series 2006-1337, U.S. Department of the Interior, U.S. Geological Survey, Anchorage, Alaska. 55pp.

- Rennert, K.J., G. Roe, J. Putkonen, C. M. Bitz. 2008. Soil Thermal and Ecological Impacts of Rain on Snow Events in the Circumpolar Arctic. *J. Climate* online. DOI: 10.1175/2008JCLI2117.1.
- Rhymer, J.M. and D. Simberloff. 1996. Extinction by hybridization and introgression. *Annual Review of Ecology and Systematics* 27:83-109.
- Richter-Menge, J., J. Overland, A. Proshutinsky, V. Romanovsky, L. Bengtsson, L. Brighma, M. Dyurgerov, J.C. Gascard, S. Gerland, R. Graversen, C. Haas, M. Karcher, P. Kuhry, J. Maslanik, H. Melling, W. Maslowski, J. Morison, D. Perovich, R. Przybylak, V. Rachold, I. Rigor, A. Shiklomanov, J. Stroeve, D. Walker, and J. Walsh. 2006. State of the Arctic Report. NOAA/OAR/PMEL, Seattle, Washington, Special Report.
- Riget, F.F., D.C.G. Muir, M. Kwan, T. Savinova, M. Nyman, V. Woshner, and T. O'Hara. 2005. Circumpolar pattern of mercury and cadmium in ringed seals. *The Science of the Total Environment* 351-352:312-322.
- Rigor, I.G. and J.M. Wallace. 2004. Variations in the age of Arctic sea-ice and summer sea-ice extent. *Geophysical Research Letters* 31:L09401.
- Rigor, I.G., J.M. Wallace and R.L. Colony. 2002. Response of sea ice to the Arctic Oscillation. *Journal of Climate* 15:2648-2663.
- Robbins, C.T. 1993. *Wildlife Feeding and Nutrition*. 2nd Edition. Academic Press, New York, NY.
- Rode, K.D., and C.T. Robbins. 2000. Why bears consume mixed diets during fruit abundance. *Canadian Journal of Zoology* 78:1640-1645.
- Rode, K.D., S.C. Amstrup, and E.V. Regehr. 2007. Polar Bears in the southern Beaufort Sea III: stature, mass, and cub recruitment in relationship to time and sea ice extent between 1982 and 2006. U.S. Dept. of the Interior, U.S. Geological Survey Administrative Report, Reston, Virginia. 28pp.
- Rode, K. D., C. T. Robbins, and L. A. Shipley. 2001. The constraints on herbivory by bears. *Oecologia* 128:62-71.
- Rothrock, D.A., J. Zhang, and Y. Yu. 2003. The arctic ice thickness anomaly of the 1990s: a consistent view from observations and models. *Journal of Geophysical Research* 108: C33038. doi 10.1029/2001JC001208.
- Rothrock, D.A., Y. Yu, and G.A. Maykut. 1999. Thinning of the Arctic sea-ice cover, *Geophysical Research Letters* 26: 3469-3472.

- Russell, R.H. 1975. The food habits of polar bears of James Bay and southwest Hudson Bay in summer and autumn. *Arctic* 28: 117-129.
- Schliebe, S., K.D. Rode, J.S. Gleason, J. Wilder, K. Proffitt, T.J. Evans, and S. Miller. 2008. Effects of sea ice extent and food availability on spatial and temporal distribution of polar bears during the fall open-water period in the Southern Beaufort Sea. *Polar Biology*. 12 pp.
- Schliebe, S., T.J. Evans, K. Johnson, M. Roy, S. Miller, C. Hamilton, R. Meehan, and S. Jahrsdoerfer. 2006a. Status assessment in response to a petition to list polar bears as a threatened species under the U.S. Endangered Species Act. U.S. Fish and Wildlife Service, Marine Mammals Management, Anchorage, Alaska. 262pp.
- Schliebe, S., T.J. Evans, S. Miller, and J. Wilder. 2006b. Fall distribution of polar bears along northern Alaska coastal areas and relationship to pack ice position. Paper presented at the Marine Mammals of the Holarctic meeting, September 2006, St. Petersburg, Russia. Pages 558-561.
- Schliebe, S.L., T.J. Evans, S. Miller, C. Perham, and L. Lierheimer. 2005. Summary of polar bear management in Alaska, 2000-2004. Pages 63 – 76 in, *Polar bears: proceedings of the 14th working meeting of the IUCN/SSC Polar Bear Specialist Group, 20-24 June, 2005, Seattle, Washington, USA.*
- Schwartz, C.C., S.D. Miller, and M.A. Haroldson. 2003. Polar bear, in Feldhammer, G.A., Thompson, B.C., and Chapman, J.A. (eds.), *Wild mammals of North America: Biology, Management, and Conservation*, 2nd edition: Baltimore, Maryland, Johns Hopkins University Press, p. 556-586.
- Schweinsburg, R.E. 1979. Summer snow dens used by polar bears in the Canadian High Arctic. *Arctic* 32:165–69.
- Schweinsburg, R.E. and L.J. Lee. 1982. Movement of four satellite-monitored polar bears in Lancaster Sound, Northwest Territories. *Arctic* 35:504–11.
- Schweinsburg, R.E., W. Spencer, and D. Williams. 1984. Polar bear denning area at Gateshead Island, Northwest Territories. *Arctic* 37(2):169-171.
- Sekerak, A.D. 1982. Young-of-the-year cod in Lancaster Sound and Western Baffin Bay. *Arctic* 35: 75-87.
- Serreze, M.C. 2006. Arctic ice disappearing quickly. BBC news article by Richard Black, available at <http://news.bbc.co.uk/2/hi/science/nature/4290340.stm>

- Serreze, M.C. and R.G. Barry. 2005. The Arctic Climate System. Cambridge University Press, Cambridge, UK 402 pp.
- Serreze, M. C., M. M .Holland, and J. Stroeve. 2007. Perspectives on the Arctic's shrinking sea-ice cover. *Science* 315: 1533-1536.
- Serreze, M.C., J.E. Walsh, F.S. Chapin III, T. Osterkamp, M. Dyurgerov, V. Romanovsky, W.C. Oechel, J. Morrison, T. Zhang, and R.G. Barry. 2000. Observational evidence of recent change in the northern high-latitude environment. *Climate Change* 46:159-207.
- Servheen, C., S. Herrero, and B. Peyton. 1999. Bears, Status, Survey, and Conservation Action Plan. IUCN/SSC Bear and Polar Bear Specialist Groups. IUCN, Gland, Switzerland and Cambridge, UK. X +309 pp.
- Skaare, J.U., A. Bernhoft, A. Derocher, G.W. Gabrielsen, A. Goksøyr, E. Henriksen, H.J. Larsen, E. Lie, and Ø. Wiig. 2000. Organochlorines in top predators at Svalbard – occurrence, levels and effects. *Toxicology Letters* 112-113:103-109.
- Skinner, W.R., R.L. Jeffries, T.J. Carleton, R.F. Rockwell, and K.F. Abraham. 1998. Prediction of reproductive success and failure in lesser snow geese based on early season climatic variables. *Global Change Biology* 4:3-16.
- Smith, T.G. 1987. The ringed seal, *Phoca hispida*, of the Canadian Western Arctic. *Canadian Bulletin of Fisheries and Aquatic Sciences* I-X:1-81.
- Smith, T.G. 1985. Polar bears, *Ursus maritimus*, as predators of belugas, *Delphinapterus leucas*. *Canadian Field-Naturalist* 99:71–75.
- Smith, T.G. 1980. Polar bear predation of ringed and bearded seals in the landfast sea ice habitat. *Canadian Journal of Zoology* 58:2201–9.
- Smith, T.G. 1976. Predation of ringed seal pups (*Phoca hispida*) by the Arctic fox (*Alopex lagopus*). *Canadian Journal of Zoology* 54:1610-1666.
- Smith, T. G., and M. O. Hammill. 1981. The ecology of the ringed seal, (*Phoca hispida*) in its fast ice breeding habitat. *Canadian Journal of Zoology* 59:966-981.
- Smith, T.G. and L.A. Harwood. 2001. Observations of neonate ringed seals, *Phoca hispida*, after early break-up of the sea ice in Prince Albert Sound, Northwest Territories, Canada, spring 1998. *Polar Biology* 24:215-219.

- Smith, T.G. and C. Lydersen. 1991. Availability of suitable land-fast ice and predation as factors limiting ringed seal populations, *Phoca hispida*, in Svalbard. *Polar Res.* 10: 585-594.
- Smith, T.G. and B. Sjare. 1990. Predation of belugas and narwhals by polar bears in nearshore areas of the Canadian High Arctic. *Arctic* 43: 99-102.
- Smith, T.G. and I. Stirling. 1975. The breeding habitat of the ringed seal (*Phoca hispida*): the birth lair and associated structures. *Canadian Journal of Zoology* 53:1297-1305.
- Smith, T.G., M.O. Hammill, and G. Taugbøl. 1991. A review of the developmental, behavioural and physiological adaptations of the ringed seal, *Phoca hispida*, to life in the arctic winter. *Arctic* 44:124-131.
- Smithwick, M., J.W. Martin, S.A. Mabury, K. Solomon, C. Sonne, E.W. Born, R. Dietz, A.E. Derocher, R.J. Letcher, T.J. Evans, G.W. Gabrielsen, J. Nagy, I. Stirling, and D.C.G. Muir. 2006. Temporal trends of perfluoroalkyl contaminants in polar bears (*Ursus maritimus*) from two locations in the North American Arctic 1972-2002. *Environmental Science and Technology* 40(4):1139-1143.
- Soon, W.H. 2005. Variable solar irradiance as a plausible agent for multidecadal variations in the Arctic-wide surface air temperature record of the past 130 years. *Geophysical Research Letters* 32, L16712, doi:10.1029/2005GL023429.
- Species at Risk Act (SARA) Public Registry. 2005. Species at Risk Act: A guide. Government of Canada. Available at <http://www.sararegistry.gc.ca>.
- Spraker, T.R., L.F. Lowry, and K.J. Frost. 1994. Gross necropsy and histopathological lesions found in harbor seals. Pages 281-311 in Loughlin, T.R., ed. *Marine Mammals and the Exxon Valdez*, Academic Press, San Diego, California.
- St. Aubin, D.J. 1990. Physiologic and toxic effects on polar bears. Pages 235-239 in Geraci, J.R. and D.J. St. Aubin, eds. *Sea Mammals and Oil: Confronting the Risks*. Academic Press, Inc. New York, New York.
- Steele, M. and T. Boyd. 1998. Retreat of the cold halocline layer in the Arctic Ocean. *Journal of Geophysical Research Letters* 103, 10,419-10,435.
- Stenhouse, G.B., L.J. Lee, K.G. Poole. 1988. Some characteristics of polar bears killed during conflicts with humans in the Northwest Territories, 1976-1986. *Arctic* 41(4).

- Stirling, I. 2005. Reproductive rates of ringed seals and survival of pups in Northwestern Hudson Bay, Canada, 1991-2000. *Polar Biology* 28:381-387.
- Stirling, I. 2002. Polar bears and seals in the eastern Beaufort Sea and Amundsen Gulf: a synthesis of population trends and ecological relationships over three decades. *Arctic* 55:59-76.
- Stirling, I. 1997. Importance of polynyas, ice edges, and leads to marine mammals and birds. *Journal of Marine Systems* 10:9-21.
- Stirling, I. 1990. Polar bears and oil: ecological perspectives. Pages 223-34 in Geraci, J.R. and D.J. St. Aubin, *eds.* *Sea mammals and oil: confronting the risks.* Academic Press, San Diego, California.
- Stirling, I. 1988. *Polar bears.* University of Michigan Press, Ann Arbor, Michigan, USA. 220 pp.
- Stirling, I. 1980. The biological importance of polynyas in the Canadian Arctic. *Arctic* 33:303-315.
- Stirling, I. and D. Andriashek. 1992. Terrestrial maternity denning of polar bears in the eastern Beaufort Sea area. *Arctic* 45:363-66.
- Stirling, I. and W.R. Archibald. 1977. Aspects of predation of seals by polar bears. *Journal of the Fisheries Research Board of Canada* 34:1126-29.
- Stirling, I. and A.E. Derocher. 1993. Possible impacts of climatic warming on polar bears. *Arctic* 46:240-45.
- Stirling, I., and A. E. Derocher. 1990. Factors affecting the evolution and behavioral ecology of the modern bears. *International Conference on Bear Research and Management* 8:189-204.
- Stirling, I. and N.J. Lunn. 1997. Environmental fluctuations in arctic marine ecosystems as reflected by variability in reproduction of polar bears and ringed seals. Pages 167-181 in Woodin, S.J. and M. Marquiss, *eds.* *Ecology of arctic environments.* Special Publication No. 13 of the British Ecological Society, Blackwell Science Ltd., Oxford, England.
- Stirling, I. and M. McEwan. 1975. The caloric value of whole ringed seals (*Phoca hispida*) in relation to polar bear (*Ursus maritimus*) ecology and hunting behavior. *Canadian Journal of Zoology* 53:1021-1027.
- Stirling, I. and N.A. Øritsland. 1995. Relationships between estimates of ringed seal (*Phoca hispida*) and polar bear (*Ursus maritimus*) populations in the

Canadian Arctic. Canadian Journal of Fisheries and Aquatic Sciences
52:2594–2612.

- Stirling, I. and C. L. Parkinson. 2006. Possible effects of climate warming on selected populations of polar bears (*Ursus maritimus*) in the Canadian Arctic. *Arctic* 99(3): 261-275.
- Stirling, I. and M.A. Ramsay. 1986. Polar bears in Hudson Bay and Foxe Basin: present knowledge and research opportunities. Pages 341–54 in I. P. Martini, ed. *Canadian inland seas*. Elsevier, Amsterdam, Netherlands.
- Stirling, I. and T.G. Smith. 2004. Implications of warm temperatures and unusual rain event for survival of ringed seals on the coast of southeastern Baffin Island. *Arctic* 57(1):59-67.
- Stirling, I. and T.G. Smith. 1975. Interrelationships of Arctic Ocean mammals in the sea ice habitat. *Circumpolar Conference on Northern Ecology* 2:129–36.
- Stirling, I., E. Richardson, G. W. Thiemann, and A. E. Derocher. 2008. In press. Unusual predation attempts of polar bears on ringed seals in the Southern Beaufort Sea: Possible significance of changing spring ice conditions. *Arctic*. 00:000-000.
- Stirling, I., T.L. McDonald, E.S. Richardson, and E.V. Regehr. 2007. Polar bear population status in the northern Beaufort Sea. U.S. Dept. of the Interior, U.S. Geological Survey Administrative Report. 31 pp.
- Stirling, I., N.J. Lunn, J. Iacozza, C. Elliot, and M. Obbard. 2004. Polar bear distribution and abundance on the southwestern Hudson Bay coast during open water season in relation to population trends and annual ice patterns. *Arctic* 57:15-26.
- Stirling, I., N. J. Lunn, and J. Iacozza. 1999. Long-term trends in the population ecology of polar bears in Western Hudson Bay in relation to climatic change. *Arctic* 52:294–306.
- Stirling, I., D. Andriashek, and W. Calvert. 1993. Habitat preferences of polar bears in the western Canadian Arctic in late winter and spring. *Polar Record* 29:13–24.
- Stirling, I., H. Cleator, and T.G. Smith. 1981. Marine mammals. Pages 44–58 in Stirling, I. and H. Cleator, eds. *Polynyas in the Canadian Arctic*. Occasional Paper No. 45. Canadian Wildlife Service, Ottawa, Canada.

- Stishov, M.S. 1991a. Distribution and numbers of polar bear maternity dens on Wrangel and Herald Islands during 1985-1989. Pages 91-113 in A.M. Amirkhanov, *ed.* Population and Communities of Mammals on Wrangel Island. CNIL Glavokhoty RSFSR, Moscow, Russia.
- Stishov, M.S. 1991b. Results of aerial counts of the polar bear dens on the Arctic coast of the extreme Northeast Asia. Pages 90-92 in Amstrup, S.C. and Ø Wiig, *eds.* Polar bears: proceedings of the tenth working meeting of the IUCN/SSC Polar Bear Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.
- Stishov, M.S., G.W. Garner, S.M. Arthur, and V.G. Barnes, Jr. 1991. Distribution and relative abundance of maternal polar bears dens in the Chukotka Peninsula region, U.S.S.R. Page 67 in Abstracts, 9th Biennial Conference on the Biology of Marine Mammals, 5-9 December 1991, Chicago, Illinois, U.S.A.
- Stroeve, J. and W. Maslowski. 2007. Arctic Sea Ice Variability during the last half century, in Special Volume Proceedings of the Conference on Climate Variability and Extremes During the Past 100 Years, Springer.
- Stroeve, J., M. Holland, W. Meier, T. Scambos, and M. Serreze. 2007. Arctic sea ice decline: faster than forecast. *Geophysical Research Letters* 34: L09501, doi: 10.1029/2007GL029703.
- Stroeve, J., T. Markus, W.N. Meier, and J. Miller. 2006. Recent changes in the Arctic melt season. *Annals of Glaciology* 44 (1): 367-374. November 2006.
- Stroeve, J.C., M.C. Serreze, F. Fetterer, T. Arbetter, W. Meier, J. Maslanik, and K. Knowles. 2005. Tracking the Arctic's shrinking sea ice cover: Another extreme September minimum in 2004, *Geophysical Research Letters* 32 L0451 doi: 10.1029/2004GL021810.
- Sturm, M., J. A. Maslanik, D. Perovich, J.C. Stroeve, J. Richter-Menge, T. Markus, J. Holmgren, J.F. Heinrichs, and K. Tape. 2006. Snow depth and ice thickness measurements from the Beaufort and Chukchi Seas collected during the AMSR-Ice03 campaign. *IEEE Transactions on Geoscience and Remote Sensing* 44(11): 3009-3020, doi:10.1109/TGRS.2006.878236.
- Sturm, M., D.K. Perovich, and M.C. Serreze. 2003. Meltdown in the North. *Scientific American* 289(4): 60-67.
- Talbot, S.L. and G.F. Shields. 1996a. A phylogeny of the bears (*Ursidae*) inferred from complete sequences of three mitochondrial genes. *Molecular Phylogenetics and Evolution* 5:567-75.

- Talbot, S.L., and G.F. Sheilds. 1996b. Phylogeography of brown bears (*Ursus arctos*) of Alaska and paraphyly within the Ursidae. *Molecular phylogenetics and evolution* 5:477-494.
- Taylor, M.K. and L.J. Lee. 1995. Distribution and abundance of Canadian polar bear populations: A management perspective. *Arctic* 48:147-154.
- Taylor, M., B. Elkin, N. Maier, and M. Bradley. 1991. Observation of a polar bear with rabies. *Journal of Wildlife Diseases* 27:337-39.
- Taylor, M.K., D. DeMaster, F. Bunnell, and R.E. Schweinsburg. 1987. Modeling the sustainable harvest of female polar bears. *Journal of Wildlife Management* 51(4):811-820.
- Taylor, M. K., T. Larsen, and R.E. Schweinsburg. 1985. Observations of intraspecific aggression and cannibalism in polar bears (*Ursus maritimus*). *Arctic* 38:303-9.
- Thompson, D.W.J. and J.M. Wallace. 2000. Annular models in the extratropical circulation. Part I: Month-to-month variability. *Journal of Climate* 13:1018-1036.
- Treseder, L. and A. Carpenter. 1989. Polar bear management in the southern Beaufort Sea. *Information North* 15(4):2-4.
- Tucker, W. B. III, J. W. Weatherly, D. T. Eppler, L. D. Farmer, and D. L. Bentley. 2001. Evidence for rapid thinning of sea ice in the western Arctic Ocean at the end of the 1980s. *Geophysical Research Letters* 28, 2851-2854.
- Tynan, C.T. and D.P. DeMaster. 1997. Observations and predictions of Arctic climatic change: potential effects on marine mammals. *Arctic* 50:308-322.
- Uppala, S. M., and coauthors. 2005. The ERA-40 reanalysis. *Quarterly Journal of the Royal Meteorological Society* 131, Part B: 2961-3012.
- U.S. Department of the Interior (USDI). 2007c. Memorandum (Solicitor's Opinion) to Director, U.S. Fish and Wildlife Service entitled "The meaning of 'In danger of extinction throughout all or a significant portion of its range.'" Office of the Solicitor, DOI, Washington D.C. 36pp.
- U.S. Fish and Wildlife Service (USFWS). 2003. Chukchi Sea polar bears: a population concern, Fact Sheet Report, Marine Mammals Management, Anchorage, AK. 2pp.

- U.S. Fish and Wildlife Service (USFWS). 1997. Importation of polar bear trophies from Canada under the 1994 amendments to the Marine Mammal Protection Act; final rule. 62 FR 7301. 31pp.
- U.S. Fish and Wildlife Service (USFWS). 1995. Habitat conservation strategy for polar bears in Alaska. Marine Mammals Management, Anchorage, Alaska. 232pp.
- U.S. Fish and Wildlife Service (USFWS). 1990. Internal correspondence to David Purington, USFWS, from Joseph P. Green, ARCO Alaska, Inc. re: Polar bear incident at the Stinson Exploratory Well. May 2, 1990.
- Uspenski, S M., *ed.* 1977. The polar bear and its conservation in the Soviet Arctic. A collection of scientific papers. Central Laboratory of Nature Conservation, Moscow, Russia.
- Uspenski, S.M. and A.A. Kistchinski. 1972. New data on the winter ecology of the polar bear (*Ursus maritimus*) on Wrangell Island. International Conference on Bear Research and Management 2:181–97.
- Vibe, C. 1967. Arctic animals in relation to climatic fluctuations. Meddelelser om Grønland 170: 1-227.
- Viranta, S. 2003. Geographic and temporal ranges of Middle and Late Miocene carnivores. Journal of Mammalogy 84: 1267–1278.
- Visbeck, M., E.P. Chassignet, R.G. Curry, T.L. Delworth, R.R. Dickson, and G. Krahnmann. 2002. The ocean's response to North Atlantic Oscillation variability *in*. Hurrell, J.W., Y. Kushnir, G. Ottersen, and M. Visbeck, *eds.*, The North Atlantic Oscillation: Climatic Significance and Environmental Impact, American Geophysical Union, Geophysical Monograph Series Volume 134.
- Wagemann, R., S. Innes, and P.R. Richard. 1996. Overview and regional and temporal differences of heavy metals in arctic whales and ringed seals in the Canadian Arctic. The Science of the Total Environment 186:41-66.
- Walther, G –R., E. Post, P. Convey, A. Menzel, C. Parmesan, T. J. C. Beebee, J-M. Fromentin, O. Hoegh-Guldberg, and F. Bairlein. 2002. Ecological responses to recent climate change. Nature 416:389-395.
- Walton, J.H. 2004. Canada's new endangered species legislation: planning, enforcement, and lessons learned from the ESA experience *in* International regulation of endangered species (course materials). CLE International Endangered Species Act Conference, Denver, Colorado, USA, October 21-22, 2004. Pages M1-17.

- Walczowski, W., and J. Piechura. 2006. New evidence of warming propagating toward the Arctic Ocean. *Geophysical Research Letters* 33, L12601, doi:10.1029/2006GL025872.
- Wang, M., J.E. Overland, V. Kattsov, J.E. Walsh, X.D. Zhang, and T. Pavlova. 2007. Intrinsic versus forced variation in coupled climate model simulations over the Arctic during the twentieth century. *Journal of Climate* 20:1093-1107.
- Wania, F. and C.B. Dugani. 2003. Assessing the long-range transport potential of olybrominated diphenyl-ethers: a comparison of four multimedia models. *Environmental Toxicological Chemistry* 22:1252-1261.
- Watts, P.D. and S.E. Hansen. 1987. Cyclic starvation as a reproductive strategy in the polar bear. *Symposium of the Zoological Society of London* 57:306–18.
- Welch, C. A., J. Keay, K.C. Kendall, and C.T. Robbins. 1997. Constraints on frugivory by bears. *Ecology* 78:1105-1109.
- Weslawski, J.M., M. Ryg, T.G. Smith, and N.A. Oritsland. 1994. Diet of ringed seals (*Phoca hispida*) in a fjord of West Svalbard. *Arctic* 47(2):109-114.
- Wiig, Ø. 1998. Survival and reproductive rates for polar bears at Svalbard. *Ursus* 10:25-32.
- Wiig, Ø., E.W. Born, and L.T. Pedersen. 2003. Movements of female polar bears (*Ursus maritimus*) in the east Greenland pack ice. *Polar Biology* 26:509-516.
- Wiig, Ø., A. E. Derocher, and S. E. Belikov. 1999. Ringed seal (*Phoca hispida*) breeding in the drifting pack ice of the Barents Sea. *Marine Mammal Science* 15:595-598.
- Wiig, Ø., A.E. Derocher, M.M. Cronin, and J.U. Skaare. 1998. Female pseudohermaphrodite polar bears at Svalbard. *Journal of Wildlife Diseases* 34:792–96.
- Wiig, Ø., Belikov, S.E., Boltunov, A.N., and Garner, G.W. 1996. Selection of marine mammal Valued Ecosystem Components and description of impact hypotheses in the Northern Sea Route Area. *International Northern Sea Route Program (INSROP) Working Paper* 40: 1-70.

- Wiig, Ø., E.W. Born, and G.W. Garner, *eds.* 1995. Polar bears: proceedings of the eleventh working meeting of the IUCN/SSC Polar Bear Specialist Group. IUCN, Gland Switzerland, and Cambridge, UK. v + 192pp.
- Wilcove, D.S., D. Rothstein, J. Dubow, A. Phillips, and E. Losos. 1998. Quantifying threats to imperiled species in the United States. *Bioscience* 48:607-615.
- Wilson, D.E. 1976. Cranial variation in polar bears. *International Conference on Bear Research and Management* 3:447-53.
- Wimsatt, W.A. 1963. Delayed implantation in the Ursidae, with particular reference to the black bear (*Ursus americanus* Pallas). Pages 49-76 in A.C. Enders, *ed.* Delayed implantation. University of Chicago Press, Chicago.
- Wolkers, H., B. Van Bavel, A.E. Derocher, Ø. Wiig, K.M. Kovacs, C. Lydersen, and G. Lindstrøm. 2004. Congener-specific accumulation and food chain transfer of polybrominated diphenyl ethers in two arctic food chains. *Environmental Science and Technology* 38:1667-1674.
- Yu, Y., G.A. Maykut, D.A. Rothrock. 2004. Changes in the thickness distribution of Arctic sea ice between 1958-1970 and 1993-1997. *Journal of Geophysical Research* 109, C08004, doi:10.1029/2003JC001982.
- Zakharov, V.F. 1994. On the character of cause and effect relationships between sea ice and thermal conditions of the atmosphere. *Berichte zur Polarforschung* 144:33-43.
- Zhang, X. and J.E. Walsh. 2006. Toward a seasonally ice-covered Arctic ocean: Scenarios from the IPCC AR4 model simulations, *J. Climate* 19:1730-1747.