

REFERENCES

- ACIA 2005. Arctic Climate Impact Assessment. Cambridge University Press, New York.
- AEWA 2012. Draft International Species Management Plan for the Svalbard Population of the Pink-footed Goose *Anser brachyrhynchus*. African-Eurasian Waterbird Agreement. www.unep-aewa.org/meetings/en/mop/mop5_docs/pdf/mop5_30_draft_smp_pfg_jkrev1.pdf
- AHDR 2004. Arctic Human Development Report. Stefansson Arctic Institute, Akureyri.
- Alisauskas, R.T., Drake, K.L. & Nichols, J.D. 2009. Filling a void: Abundance estimation of North American populations of Arctic geese using hunter recoveries. *Environmental and Ecological Statistics* 3: 463-489.
- Alisauskas, R.T., Rockwell, R.F., Dufour, K.W., Cooch, E.G., Zimmerman, G., Drake, K.L. et al. 2011. Harvest, survival, and abundance of midcontinent lesser snow geese relative to population reduction efforts. *Wildlife Monographs* 179: 1-42.
- AMAP 1998. AMAP assessment report: Arctic pollution issues. Arctic Monitoring and Assessment Programme, Oslo.
- AMAP 2004. AMAP assessment 2002: Persistent organic pollutants in the Arctic. Arctic Monitoring and Assessment Programme, Oslo.
- AMAP 2007. Arctic Oil and Gas 2007. Arctic Monitoring and Assessment Programme, Oslo.
- AMAP 2009a. Update on Selected Climate Issues of Concern. Observations, Short-lived Climate Forces, Arctic Carbon Cycle, and Predictive Capability. Arctic Monitoring and Assessment Programme, Oslo.
- AMAP 2009b. Oil and gas activities in the Arctic: Effects and potential effects. Arctic Monitoring and Assessment Programme, Oslo.
- AMAP 2009c. AMAP assessment 2009: Human health in the Arctic. Arctic Monitoring and Assessment Programme, Oslo.
- AMAP 2010. Assessment 2009: Persistent Organic Pollutants (POPs) in the Arctic. *Science of the Total Environment* Special Issue 408: 2851-3051.
- AMAP 2011a. Snow, water, ice and permafrost in the Arctic (SWIPA): Climate change and the cryosphere. Arctic Monitoring and Assessment Programme, Oslo.
- AMAP 2011b. Arctic pollution 2011. Arctic Monitoring and Assessment Programme, Oslo.
- AMAP 2011c. The Impact of Black Carbon on Arctic Climate. AMAP Technical Report No. 4. Arctic Monitoring and Assessment Programme, Oslo.
- AMAP 2013. Arctic Ocean Acidification 2013: Summary Report. Arctic Monitoring and Assessment Programme, Oslo.
- AMSA 2009. Arctic Marine Shipping Assessment 2009 Report. Arctic Council.
- Amstrup, S.C., Marcot, B.G. & Douglas, D.C. 2008. A Bayesian network modeling approach to forecasting the 21st century range wide status of polar bears. In: E.T. DeWeaver, C.M. Bitz & L.-B. Tremblay (eds.). *Arctic Sea Ice Decline: Observations, Projections, Mechanisms, and Implications*, pp 213-268. Geophysical Monograph Series, Vol. 180.
- Anderson, W.L., Havera, S.P. & Zercher, B.W. 2000. Ingestion of lead and nontoxic shotgun pellets by ducks in the Mississippi Flyway. *J. Wildl. Manage.* 64: 848-857.
- ARCUS 2009. Arctic Forum Abstracts 2008. Tipping Points – The Arctic and Global Change. The Arctic Research Consortium of the U.S. (ARCUS), Fairbanks, AK.
- Ariya, P.A., Dastoor, A.P., Amyot, M., Schroeder, W.H., Barrie, L., Anlauf, K. et al. 2004. The Arctic: a sink for mercury. *Tellus* 56B: 397-403.
- ASTM 2009. Standard E2590, Standard Guide for Conducting Hazard Analysis-Critical Control Point (HACCP) Evaluations. www.astm.org/Standards/E2590.htm
- Bakken, V. & Falk, K. 1998. Incidental Take of Seabirds in Commercial Fisheries in the Arctic Countries. CAFF Technical Report No. 1.
- Barnosky, A.D., Hadly, E.A., Bascompte, J., Berlow, E.L., Brown, J.H., Fortelius, M. et al. 2012. Approaching a state shift in Earth's biosphere. *Nature* 486: 52-58.
- Barry, T. & McLennan, D. 2010. Changes in protected areas. In: Arctic Biodiversity Trends 2010. Selected indicators of change, pp 96-98. CAFF International Secretariat, Akureyri.
- Bates, N.R. & Mathis, J.T. 2009. The Arctic Ocean marine carbon cycle: evaluation of air-sea CO₂ exchanges, ocean acidification impacts and potential feedbacks. *Biogeosciences* 6: 2433–2459.
- Batt, B.D.J. (ed.) 1997. Arctic ecosystems in peril: report of the Arctic Goose Habitat Working Group. Arctic Goose Joint Venture Special Publication. U.S. Fish and Wildlife Service, Washington, D.C. and Canadian Wildlife Service, Ottawa, Ontario.

- Beaumont, L.J., Pitman, A., Perkins, S., Zimmermann, N.E., Yoccoz, N.G. & Thuiller, W. 2011. Impacts of climate change on the world's most exceptional ecoregions. PNAS 108: 2306-2311.
- Berkes, F. 1999. Sacred Ecology. Traditional Ecological Knowledge and Resource Management. Taylor & Francis, Philadelphia and London.
- BirdLife International 2012. www.birdlife.org/datazone/info/ibacritglob [accessed July 2012]
- Birnbaum, C. 2007. NOBANIS – Invasive Alien Species Fact Sheet – *Mustela vison*. www.nobanis.org
- Boertmann, D. 2007. Grønlands rødliste. Direktoratet for Miljø og Natur, Grønlands Hjemmestyre, Nuuk.
- Bogoyavlenskiy, D. & Siggner, A. 2004. Arctic demography. In: Arctic Human Development Report, pp 27-41. Akureyri, Iceland.
- Born, E. & Böcher, J. (eds.) 2001. The Ecology of Greenland. Ilminiusorfiq, Nuuk.
- Born, E., Heide-Jørgensen, M.P. & Davis, R.A. 1994. The Atlantic walrus (*Odobenus rosmarus rosmarus*) in West Greenland. Meddr. Grønl., Biosci. 40: 1-33.
- Braune, B.M., Outridge, P.M., Fisk, A.T., Muir, D.C.G., Helm, P.A., Hobbs, K. et al. 2005. Persistent organic pollutants and mercury in marine biota of the Canadian Arctic: an overview of spatial and temporal trends. Science of the Total Environment 351-352: 4-56.
- Brochmann, C., Brysting, A.K., Alsos, I.G., Borgen, L., Grundt, H.H., Scheen, A.C. & Elvenn, R. 2004. Polyploidy in arctic plants. Biol. J. Linn. Soc. 82: 521-536.
- Brody, H. 1976. Land occupancy: Inuit perceptions. In: M.M.R. Freeman (ed.): Inuit Land Use and Occupancy Project, Volume 1. Department of Supply and Services, Ottawa.
- Brooke, M. 2004. Albatrosses and petrels across the world. Oxford University Press.
- Bustnes, J.O., Gabrielsen, G.W. & Verreault, J. 2010. Climate Variability and Temporal Trends of Persistent Organic Pollutants in the Arctic: A Study of Glaucous Gulls. Environ. Sci. Technol. 44: 3155-3161.
- CAFF 2002. Arctic Flora and Fauna. Recommendations for Conservation. CAFF International Secretariat, Akureyri, Iceland.
- CAFF 2012. Opening statement on Arctic biodiversity at Subsidiary Body on Scientific, Technical and Technological Advice 15th meeting, November 2011. CAFF International Secretariat, Akureyri, Iceland. www.cbd.int/doc/meetings/sbstta/sbstta-15/official/sbstta-15-14-en.pdf
- Callaghan, T.V. 2005. Arctic tundra and polar desert ecosystems. In: ACIA. Arctic Climate Impact Assessment, pp 243-352. Cambridge University Press, New York.
- Callaghan, T.V., Björn, L.O., Chernov, Y., Chapin, T., Christensen, T.R., Huntley, B. et al. 2004a. Biodiversity, distributions and adaptations of arctic species in the context of environmental change. Ambio 33: 404-417.
- Callaghan, T.V., Björn, L.O., Chernov, Y., Chapin, T., Christensen, T.R., Huntley, B. et al. 2004b. Responses to projected changes in climate and UV-B at the species level. Ambio 33: 418-435.
- Callaghan, T.V., Johansson, M., Brown, R.D., Groisman, P.Y., Labba, N. & Radionov, V. 2011a. Changing snow cover and its impacts. Chapter 4 in: AMAP 2011. Snow, water, ice and permafrost in the Arctic (SWIPA): Climate change and the cryosphere. Arctic Monitoring and Assessment Programme, Oslo.
- Callaghan, T.V., Dahl-Jensen, D., Johansson, M., Kallenborn, R., Key, J.R., Macdonald, R. et al. 2011b. Cross-cutting scientific issues. Chapter 11 in: AMAP 2011. Snow, water, ice and permafrost in the Arctic (SWIPA): Climate change and the cryosphere. Arctic Monitoring and Assessment Programme, Oslo.
- Carmack, E. & McLaughlin, F. 2011. Towards recognition of physical and geochemical change in Subarctic and Arctic Seas. Progress in Oceanography 90: 90-104.
- Carrie, J., Wang, F., Saneei, H., Macdonald, R.W., Outridge, P.M. & Stern, G.A. 2010. Increasing contaminant burdens in an arctic fish, Burbot (*Lota lota*), in a warming climate. Environmental Science & Technology 44: 316-322.
- CAVM Team 2003. Circumpolar Arctic Vegetation Map. Scale 1:7,500,000. Conservation of Arctic Flora and Fauna (CAFF) Map No. 1. U.S. Fish and Wildlife Service, Anchorage, Alaska.
- Chardine, J. & Mendenhall, V. 1998. Human disturbance at Arctic seabird colonies. Technical Report No. 2 from the Circumpolar Seabird Working Group, CAFF.
- Chardine, J.W., Porter, J.M. & Wohl, K.D. 2000. Workshop On Seabird Incidental Catch In The Waters Of Arctic Countries. Report and recommendations. CAFF Technical Report No. 7.

- Chen, I-C., Hill, J.K., Ohlemüller, R., Roy, D.B. & Thomas, C.D. 2011. Rapid range shifts of species associated with high levels of climate warming. *Science* 333: 1024-1026.
- Cherenkov, A., Mustonen, T. & Zavalko, S. 2004. 'If There Are No Reindeers We Have Nothing To Do Here Either' – Kola Sámi Nation - Voices From the Community of Lovozero. In: T. Mustonen & E. Helander (ed.). *Snowscapes, Dreamscapes - A Snowchange Community Book on Community Voices of Change*, pp 319-334. Tampere University of Applied Sciences, Tampere.
- Christensen, K.D. & Falk, K. 2001. Status of the Common Eider breeding in the municipality of Avangersuaq (Thule), Northwest Greenland. *Polar Research* 20: 109-114.
- Christie, P. & Sommerkorn, M. 2011. RACER – Rapid Assessment of Ecosystem Resilience. WWF Global Arctic Programme, Ottawa.
- Clarke, A. 1992. Is there a latitudinal diversity cline in the sea? *Trends Ecol. Evol.* 7: 286-287.
- Clavero, M. & Garcia-Berthou, E. 2005. Invasive species are a leading cause of animal extinctions. *TREE* 20(3): 110.
- Comeau, S., Gattuso, J.P., Nisumaa, A.M. & Orr, J. 2011. Impact of aragonite saturation state changes on migratory pteropods. *Proc. Roy. Soc. B*. doi:10.1098/rspb.2011.0910
- Cramp, S. (red.) 1983-1989. *Handbook of the Birds of Europe, the Middle East and North Africa*. Vols 1-4. Oxford University Press.
- Currie, D.J., Mittelbach, G.G., Cornell, H.V., Field, R., Guegan, J.-F., Hawkins, B.A. et al. 2004. Predictions and tests of climate-based hypotheses of broad-scale variation in taxonomic richness. *Ecol. Lett.* 7: 1121-1134.
- Dahl-Jensen, D., Bamber, J., Bøggild, C.E., Buch, E., Christensen, J.H., Dethloff, K. et al. 2011. The Greenland Ice Sheet in a changing climate. Chapter 8 in: AMAP 2011. *Snow, water, ice and permafrost in the Arctic (SWIPA): Climate change and the cryosphere*. Arctic Monitoring and Assessment Programme, Oslo.
- Daniëls, F.J.A. & de Molenaar, J.G. 2011. Flora and Vegetation of Tasiilaq, Formerly Angmagssalik, Southeast Greenland: A comparison of Data Between Around 1900 and 2007. *Ambio* 40: 650-659.
- Danish Ministry of Food, Agriculture and Fisheries 2012. www.fvm.dk/yield_of_fish.aspx?ID=24957
- Danmarkshistorien.dk 2012. danmarkshistorien.dk/leksikon-og-kilder/vis/materiale/groenland [accessed August 2012]
- Davies, H. 2007. Inuit Observations of Environmental Change and Effects of Change in Anaktalâk Bay, Labrador. Thesis submitted to the School of Environmental Studies for the degree of Master of Environmental Studies Queen's University Kingston, Ontario, Canada.
- Derksen, C. & Brown, R. 2012. Spring snow cover extent reductions in the 2008-2012 period exceeding climate model projections. *Geophysical Research Letters* 39, L19504, doi:10.1029/2012GL053387
- Dietz, R., Sonne, C., Basu, N., Braune, B., O'Hara, T., Letcher, R.J. et al. 2013. What are the toxicological effects of mercury in Arctic biota? *Sci. Total Environ.* 443: 775-90.
- Doming, D.P. 1978. Sirenian evolution in the North Pacific Ocean. *Univ. Calif. Publ. Geol. Sci.* 118: 1-176.
- Downie, D.L. & Fenge, T. (eds.) 2003. Northern lights against POPs: combating toxic threats in the Arctic. McGill-Queen's University Press, Montreal.
- Duhaime, G. 2004. Economic systems. In: J.N. Larsen (ed.). *Arctic Regional Human Development Report*, pp 291-298. Stefansson Arctic Institute, Iceland.
- Durner, G.M., Douglas, D.C., Nielson, R.M., Amstrup, S.C., McDonald, T.L., Stirling, I. et al. 2009. Predicting 21-st century polar bear habitat distribution from global climate model. *Ecological Monographs* 79:25-58.
- Ebinger, C.K. & Zambetakis, E. 2009. The geopolitics of Arctic melt. *International Affairs* 85: 1215-1232.
- Egevang, C. 2011. *Greenland – land of animal and man*. Milik Publishing.
- Elders Conference on Climate Change 2001. *Nunavut Tunngavik Incorporated*. Cambridge Bay, NU.
- Ely, C.R. & Dzubin, A.X. 1994. Greater White-fronted Goose (*Anser albifrons*). *The Birds of North America Online* (A. Poole, ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: bna.birds.cornell.edu.bnaproxy.birds.cornell.edu/bna/species/131 [accessed 3 April 2012]
- Erikstad, K.E., Reiertsen, T.K., Barrett, R.T., Vikebø, F. & Sandvik, H. 2013. Seabird-fish interactions: the fall and rise of a common guillemot *Uria aalge* population. *Marine Ecology Progress Series* 475: 267-276.
- FAO 2005. FAO fishery country profile – the Kingdom of Norway. www.fao.org/fi/fcp/en/NOR/profile.htm [accessed 12 March 2012]

- Finstad, A.G. & Hein, C.L. 2012. Migrate or stay: terrestrial primary productivity and climate driven anadromy in Arctic char. *Global Change Biology* 18: 2487-2497.
- Forbes, B.C. 1998. Cumulative impacts of vehicle traffic on high Arctic tundra: soil temperature, plant biomass, species richness and mineral nutrition. *Nordicana* 55: 269-274.
- Freese, C.H. 2000. The Consumptive Use of Wild Species in the Arctic: Challenges and Opportunities for Ecological Sustainability. WWF Canada and WWF International Arctic Programme.
- Gaston, A.J., Gavrilo, M. & Eberl, C. 2012. Ice bridging as a dispersal mechanism for Arctic terrestrial vertebrates and the possible consequences of reduced sea ice cover. *Biodiversity* 13: 182-190.
- Gilg, O., Kovacs, K.M., Aars, J., Fort, J., Gauthier, G., Grémillet, D. et al. 2012. Climate change and the ecology and evolution of Arctic vertebrates. – *Ann. N.Y. Acad. Sci.* 1249: 166-190.
- Gilliland, S., Gilchrist, H.G., Rockwell, R., Robertson, G.J., Savard, J.-P., Merkel, F.R. & Mosbech, A. 2009. Evaluating the sustainability of harvest among Northern Common Eiders in Greenland and Canada. *Wildlife Biology* 15: 24-36.
- Graham, B., Reilly, W.K., Beinecke, F., Boesch, D.F., Garcia, T.D., Murray, C.A. & Ulmer, F. 2011. Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling. Report to the President. National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. www.oilspillcommission.gov/sites/default/files/documents/DEEPWATER_ReporttothePresident_FINAL.pdf [accessed 26 December 2012]
- Graversen, R.G., Mauritsen, T., Tjernström, M., Källén, E. & Svensson, G. 2008. Vertical structure of recent Arctic warming. *Nature* 541: 53-56.
- Grinsted, A., Moore, J.C. & Jevrejeva, S. 2010. Reconstructing sea level from paleo and projected temperatures 200 to 2100 AD. *Climate Dynamics* 34: 461-472.
- Gross, M.R. 1987. The evolution of diadromy in fishes. *Am. Fish. Soc. Symp.* 1: 14-25.
- Grønlands Statistik 2011. Grønlands energiforbrug 2010. Energi 2011-01. www.stat.gl/publ/da/EN/201001/pdf/Gru%C3%98nlands%20energiforbrug%202010.pdf
- Guisan, A. & Thuiller, W. 2005. Predicting species distribution: offering more than simple habitat models. *Ecology Letters* 8: 993-1009.
- Hansen, J.C., Deutch, B. & Odland, J.O. 2008. Dietary transition and contaminants in the Arctic: emphasis on Greenland. *Circumpolar Health Supplements* 2008:2.
- Hansen, B.B., Grøtan, V., Aanes, R., Sæther, B.E., Stien, A., Fuglei, E. et al. 2013. Climate events synchronize the dynamics of a resident vertebrate community in the high-Arctic. *Science* 339: 313-315.
- Hay, K., Aglukark, D., Igutsaq, D., Ikkidluak, J. & Mike, M. 2000. Of the Inuit Bowhead Knowledge Study, Nunavut, Canada. Nunavut Wildlife Management Board, Iqaluit, Nunavut.
- Heal, O.W., Flanagan, P.W., French, D.D. & MacLean, S.F. 1981. Decomposition and the accumulation of organic matter. In: L.C. Bliss, O.W. Heal & J.J. Moore (ed.). *Tundra Ecosystems: a Comparative Analysis*, pp 587-633. Cambridge University Press, Cambridge.
- Helander, E., Mustonen, T. & Salin, T. 2004. Sámi Nation Environmental Concerns from the Kaldoaivi Reindeer Herding Region. In: T. Mustonen & E. Helander (eds.). *Snowscapes, Dreams - A Snowchange Community Book on Community Voices of Change*, pp 291-298. Tampere University of Applied Sciences, Tampere.
- Higuera, P.E., Brubaker, L.B., Anderson, P.M., Brown, T.A., Kennedy, A.T. & Hu, F.S. 2008. Frequent Fires in Ancient Shrub Tundra: Implications of Paleorecords for Arctic Environmental Change. *PLoS ONE* 3(3): e0001744. doi:10.1371/journal.pone.0001744
- Hof, A.R., Jansson, R. & Nilsson, C. 2012. Future climate change will favour non-specialist mammals in the (sub)arctics. *PLoS ONE* 7(12): e52574.
- Hope, A.G., Waltari, E., Payer, D.C., Cook, J.A. & Talbot, S.L. 2013. Future distribution of tundra refugia in northern Alaska. *Nature Clim. Change* 3: 931-938.
- Hovelsrud, G.K., Poppel, B., van Oort, B.E.H. & Reist, J.D. 2011. Arctic societies, cultures, and peoples in a changing cryosphere. Chapter 10 in: AMAP 2011. *Snow, water, ice and permafrost in the Arctic (SWIPA): Climate change and the cryosphere*. Arctic Monitoring and Assessment Programme, Oslo.
- Hu, F.S., Higuera, P.E., Walsh, J.E., Chapman, W.L., Duffy, P.A., Brubaker, L.B. & Chipman, M.L. 2010. Tundra burning in Alaska: linkages to climatic change and sea ice retreat. *Journal of Geophysical Research, Biogeosciences*. 115. G04002 doi:10.1029/2009JG001270.

- Huet, C., Rosol, R. & Egeland, G.M. 2012. The prevalence of food insecurity is high and the diet quality poor in Inuit communities. *Journal of Nutrition* 142: 541-547.
- Hurrell, J.W., Kushnir, Y., Ottersen, G. & Visbeck, M. 2003: An overview of the North Atlantic Oscillation. *Geophysical Monograph* 134: 1-35.
- Hvid, H.N. 2007. Climate change and the Greenland society. WWF Denmark.
- Ims, R.A. & Fuglei, E. 2005. Trophic Interaction Cycles in Tundra Ecosystems and the Impact of Climate Change. *BioScience* 55: 311-322.
- IPCC 2007a. 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.
- IPCC 2007b. Climate Change 2007: Synthesis report. IPCC, Geneva, Switzerland.
- IPCC 2007c. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press.
- IUCN 2012. Biological invasions: a growing threat to biodiversity, human health and food security. Policy recommendations for the Rio+20 process drafted by IUCN SSC Invasive Species Specialist Group and IUCN's Invasive Species Initiative. www.issg.org/pdf/RioPolicybrief.pdf
- Jia, G.J., Epstein, H.E. & Walker, D.A. 2007: Trends in vegetation greenness in the Arctic from 1982-2005. *Eos, Trans. Amer. Geophys. Union*, 88 (Fall Meeting Suppl.), Abstract B21-0041.
- Johnsen, K.I., Alfthan, B., Hislop, L. & Skaalyvik, J.F. (eds.) 2010. Protecting Arctic Biodiversity. Limitations and strengths of environmental agreements. United Nations Environment Programme, GRID-Arendal.
- Jorgenson, J.C., Ver Hoef, J.M. & Jorgenson, M.T. 2010. Long-term recovery patterns of arctic tundra after winter seismic exploration. *Ecological Applications* 20: 205-221.
- Kallenborn, R., Borgå, K., Christensen, J.H., Dowdall, M., Evensen, A., Odland, J.Ø. et al. 2011. Combined effects of selected pollutants and climate change in the Arctic environment. *Arctic Monitoring and Assessment Programme*, Oslo.
- Kaplan, J.O. 2005. Climate change and Arctic vegetation. In: L. Rosentrater (ed.). Evidence and Implications of Dangerous Climate Change in the Arctic, pp 25-41. WWF International Arctic Programme.
- Karamushko, O.V. 2012. Structure of ichthyofauna in the Arctic seas off Russia. *Berichte zur Polar- und Meeresforschung* 640: 129-136.
- Kattsov, V.M. & Källén, E. 2005. Future climate change: modelling and scenarios for the Arctic. In: ACIA. Arctic Climate Impact Assessment, pp 99-150. Cambridge University Press, New York.
- Kevan, P.G., Forbes, B.C., Kevan, S.M. & Behan-Pelletier, V. 1995. Vehicle tracks on high Arctic tundra: their effects on the soil, vegetation, and soil arthropods. *J. Appl. Ecol.* 32: 655-667.
- Klein, D.R. 2005. Management and conservation of wildlife in a changing Arctic environment. In: ACIA. Arctic Climate Impact Assessment, pp 597-648. Cambridge University Press, New York.
- Krupnik, I. 1993. Arctic adaptations. Native whalers and reindeer herders of northern Eurasia. University Press of New England.
- Laursen, K., Kahlert, J. & Frikke, J. 2005. Factors affecting escape distance of staging waterbirds. *Wildlife Biol.* 11: 13-19.
- Leary, D. 2008. Bioprospecting in the Arctic. UNU-IAS Report.
- Leitch, D.R., Carrie, J., Lean, D., Macdonald, R.W., Stern, G.A. & Wang, F. 2007. The delivery of mercury to the Beaufort Sea of the Arctic Ocean by the Mackenzie River. *Science of the Total Environment* 373: 178-195.
- Lenton, T.M. 2012. Arctic climate tipping points. *Ambio* 41: 10-22.
- Letcher, R.J., Bustnes, J.O., Dietz, R., Jenssen, B.M., Jørgensen, E.H., Sonne, C. et al. 2010. Exposure and effects assessment of persistent organohalogen contaminants in arctic wildlife and fish. *Sci. Total Environ.* 408: 2995-3043.
- Lindenmayer, D.B., Likens, G.E., Krebs, C.J. & Hobbs, R.J. 2010. Improved probability of detection of ecological "surprises". *Proceedings of the National Academy of Sciences* 107: 21957-21962.
- Lloyd's & Chatham House 2012. Arctic opening: Opportunity and risk in the high North. Lloyd's, London. www.lloyds.com/~/media/Files/News%20and%20Insight/360%20Risk%20Insight/Arctic_Risk_Report_20120412.pdf
- Lorenzen, E.D., Nogués-Bravo, D., Orlando, L., Weinstock, J., Binladen, J., Marske, K.A. et al. 2011. Species-specific

- responses of Late Quaternary megafauna to climate and humans. *Nature*. doi:10.1038/nature10574.
- Lunt, D.J., Haywood, A.M., Schmidt, G.A., Salzmann, U., Valdes, P.J. & Dowsett, H.J. 2010. Earth system sensitivity inferred from Pliocene modelling and data. *Nature Geoscience* 3: 60-64.
- Mack, M.C., Bret-Harte, M.S., Hollingsworth, T.N., Jandt, R.R., Schuur, E.A.G., Shaver, G.R. & Verbyla, D.L. 2011. Carbon loss from an unprecedented Arctic tundra wildfire. *Nature* 475: 489-492.
- MacKinnon, J., Verkuil, Y.I. & Murray, N. 2012. IUCN situation analysis on East and Southeast Asian intertidal habitats, with particular reference to the Yellow Sea (including the Bohai Sea). Occasional Paper of the IUCN Species Survival Commission No. 47. IUCN, Gland and Cambridge.
- MacNeil, M.A., Graham, N.A.J., Cinner, J.E., Dulvy, N.K., Loring, P.A., Jennings, S. et al. 2010. Transitional states in marine fisheries: adapting to predicted global change. *Philosophical Transactions of the Royal Society B-Biological Sciences* 365(1558): 3753-3763.
- Madsen, J. & Fox, T. 1995. Impacts of hunting disturbance on waterbirds – a review. *Wildl. Biol.* 1: 193-207.
- Madsen, J., Cracknell, G. & Fox, A.D. (red.) 1999. Goose Populations of the Western Palearctic. A review of status and distribution. – Wetlands International, Wageningen, and National Environmental Research Institute, Denmark.
- Mateveyeva, N.V. 1998. Zonation of Plant Cover of the Arctic. Russian Academy of Sciences Proceedings of the Komarov Botanical Institute 21.
- McBean, G. 2005. Arctic climate: past and present. In: ACIA. Arctic Climate Impact Assessment, pp 21-60. Cambridge University Press, New York.
- MEA 2005. Ecosystems and human well-being: synthesis. Millennium Ecosystem Assessment. Island Press, Washington, D.C.
- Meier, W.N., Gerland, S., Granskog, M.A., Key, J.R., Haas, C., Hovedsrud, G.K. et al. 2011. Sea ice. Chapter 9 in: AMAP 2011. Snow, water, ice and permafrost in the Arctic (SWIPA): Climate change and the cryosphere. Arctic Monitoring and Assessment Programme, Oslo.
- Meinshausen, M., Meinshausen, N., Hare, W., Raper, S.C.B., Frieler, K., Knutti, R. et al. 2009. Greenhouse-gas emission targets for limiting global warming to 2 °C. *Nature* 458: 1158-1162.
- Melgaard, M. 1988. The great auk, *Pinguinus impennis* (L.) in Greenland. *Historical Biology* 1: 145-178.
- Meltofte, H. 2001. Unsustainable take of murres in Greenland. In H.P. Huntington: Arctic Flora and Fauna. Status and conservation, pp 88-89. Edita, Helsinki.
- Meltofte, H. & Clausen, P. 2011. The occurrence of swans, ducks, coot and great crested grebe in the Tipperne Reserve 1929-2007 in relation to environmental conditions in the brackish lagoon, Ringkøbing Fjord, Denmark. – *Dansk Orn. Foren. Tidskr.* 105: 1-120 [in Danish, with English summary].
- Meltofte, H., Piersma, T., Boyd, H., McCaffery, B., Ganter, B., Golovnyuk, V.V. et al. 2007: Effects of climate variation on the breeding ecology of Arctic shorebirds. – *Meddr. Grønl.*, Biosci. 59: 1-48.
- Merkel, F.R. 2002. Ederfugleoptællinger i Ilulissat, Uummannaq og Upernivik kommune, 1998-2001. Greenland Institute of Natural Resources, Technical Report No. 43.
- Merkel, F.R. 2004a. Evidence of population decline in common eiders breeding in western Greenland. *Arctic* 57: 27-36.
- Merkel, F.R. 2004b. Impact of hunting and gillnet fishery on wintering eiders in Nuuk, southwest Greenland. *Waterbirds* 27: 469-479.
- Merkel, F.R. 2010. Evidence of recent population recovery in common eiders breeding in western Greenland. *Journal of Wildlife Management* 74: 1869-1874.
- Merkel, F.R. 2011. Gillnet bycatch of seabirds in Southwest Greenland, 2003 – 2008. Greenland Institute of Natural Resources Technical Report No. 85
- Merkel, F., Mosbech, A. & Riget, F.F. 2009. Common eider *Somateria mollissima* feeding activity and the influence of human disturbances. *Ardea* 97: 99-107.
- Miljeteig, C., Gabrielsen, G.W., Strøm, H. & Gavrilo, M.V. 2012. Eggshell thinning and decreased concentrations of vitamin E are associated with contaminants in eggs of ivory gulls. *Sci. Total Environ.* 431: 92-99.
- Miller-Rushing, A.J., Hoye, T.T., Inouye, D.W. & Post, E. 2010. The effects of phenological mismatches on demography. *Phil. Trans. R. Soc. B* 365: 3177-3186.
- Moore, S.E., Reeves, R.R., Southall, B.L., Ragen, T.J., Suydam, R.S. & Clark, C.W. 2012. A new framework for assessing the effects of anthropogenic sound on marine mammals in a rapidly changing Arctic. *Bioscience* 62: 289-295.

- Moores, N., Rogers, D.I., Kim, R.-H., Hassell, C., Gosbell, K., Kim, S.-A. & Park, M.-N. 2008. The 2006–2008 Saemangeum Shorebird Monitoring Program Report. Birds Korea, Busan.
- Mosbech, A. & Glahder, C. 1991. Assessment of the impact of helicopter disturbance on moulting pink-footed geese *Anser brachyrhynchus* and barnacle geese *Branta leucopsis* in Jameson Land, Greenland. – *Ardea* 79: 233–238.
- Mowbray, T.B., Ely, C.R., Sedinger, J.S. & Trost, R.E. 2002. Canada Goose (*Branta canadensis*), The Birds of North America Online (A. Poole, ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: bna.birds.cornell.edu.bnaproxy.birds.cornell.edu/bna/species/682 [accessed 3 April 2012]
- Murray, M.S., Anderson, L., Cherkashov, G., Cuyler, C., Forbes, B., Gascard, J.C. et al. 2010. International Study of Arctic Change: Science Plan. ISAC International Program Office, Stockholm.
- Mustonen, T. & Mustonen, K. 2011. Eastern Saami Atlas. Snowchange Cooperative, Finland.
- Müller, R. 1906. Vildtet og jagten i Sydgrønland. H. Aschehoug,
- Myers, N., Mittemeier, R.A., Mittemeier, C.G., da Fonseca, G.A.B. & Kent, J. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403: 853–858.
- National Research Council 2003. Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope. National Research Council, Committee on the Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope. National Academies Press.
- Nellemann, C., Kullerud, L., Vistnes, I., Forbes, B.C., Husby, E., Kofinas, V. et al. 2001. GLOBIO. Global Methodology for Mapping Human Impacts on the Biosphere. UNEP/DEWA/TR.01-3.
- Nettleship, D.N. & Evans, P.G.H. 1985. Distribution and status of the Atlantic Alcidae. In: D.N. Nettleship & T.R. Birkhead (eds). *The Atlantic Alcidae*, pp 53–154. Academic Press.
- Newsham, K.K. & Robinson, S.A. 2009. Responses of plants in polar regions to UVB exposure: a meta-analysis. *Global Change Biology* 15: 2574–2589.
- Nichols, T., Berkes, F., Jolly, D., Snow, N.B. & the Community of Sachs Harbour (N.W.T.) 2004. Climate Change and Sea Ice: Local Observations from the Canadian Western Arctic. *Arctic* 57: 68–79.
- Niemi, A., Paulic, J. & Cobb, D. 2010. Ecosystem status and trends report: Arctic marine ecozones. Research Document 2010-066. Canadian Science Advisory Secretariat, Fisheries and Oceans Canada, Ottawa.
- Nowak, R.M. 1999. Walker's mammals of the World. Sixth edition. Vol. II. John Hopkins University Press.
- Nørrevang, A. 1986. Traditions of sea bird fowling in the Faroes: An ecological basis for sustained fowling. *Orn. Scand.* 17: 275–281.
- NPFMC 2009. Fishery management plan for fish resources of the Arctic management area. North Pacific Fisheries Management Council. www.fakr.noaa.gov/npfmc/current_issues/Arctic/ArcticEA109.pdf [accessed 22 September 2011]
- Nuttall, M. 2005. Hunting, Herding, Fishing, and Gathering: Indigenous Peoples and Renewable Resource Use in the Arctic. In: ACIA. Arctic Climate Impact Assessment, pp 649–690. Cambridge University Press, New York.
- Olsen, B. & Nørrevang, A. 2005. Seabird fowling in the Faroe Islands. In J. Randall (ed.): *Traditions of sea-bird fowling in the North Atlantic region*, pp 162–180. The Islands Book Trust, Port of Ness, Isle of Lewis.
- Overland, J.E., Wood, K.R. & Wang, M. 2011. Warm Arctic – cold continents: climate impacts of the newly open Arctic Sea. *Polar Research* 30, 15787, DOI: 10.3402/polar.v30i0.15787
- Overrein, Ø. 2002. Effects of motorized traffic on fauna and vegetation: knowledge relevant to Svalbard. Norwegian Polar Institute Rapportserie 119 [in Norwegian with English summary].
- Pamperin, N.J., Follmann, E.H. & Petersen, B. 2006. Inter-specific killing of an Arctic fox by red fox at Prudhoe Bay, Alaska. *Arctic* 59: 361–364.
- Pearson, R.G., Phillips, S.J., Loranty, M.M., Beck, P.S.A., Damoulas, T., Knight, S.J. & Goetz, S.J. 2013. Shifts in Arctic vegetation and associated feedbacks under climate change. *Nature Clim. Change* 3: 673–677.
- Pielou, E.C. 1994. *A Naturalist's Guide to the Arctic*. The University of Chicago Press, Chicago.
- Pitcher, T.J. & Lam, M.E. 2010. Fishful thinking: rhetoric, reality, and the sea before us. *Ecology and Society* 15: 12.
- Polar Science Center 2013. Arctic Sea Ice Volume Anomaly, version 2. psc.apl.washington.edu/wordpress/research/projects/arctic-sea-ice-volume-anomaly. [accessed 19 October 2013]

- Poole, K.G., Gunn, A., Patterson, B.R. & Dumond, M. 2010. Sea ice and migration of the Dolphin and Union caribou herd in the Canadian Arctic: an uncertain future. *Arctic* 62: 414-428.
- Post, E., Forchhammer, M.C., Bret-Harte, M.S., Callaghan, T.V., Christensen, T.R., Elberling, B. *et al.* 2009. Ecological dynamics across the Arctic associated with recent climate change. *Science* 325: 1355-1358.
- Prokosch, P. 2003. Tourism – threat or benefit to conservation. In H.P. Huntington: Arctic Flora and Fauna. Status and conservation, pp 102-103. Edita, Helsinki.
- Prowse, T., Alfredsen, K., Beltaos, S., Bonsal, B., Duguay, C., Korhola, A. *et al.* 2011a. Effects of Changes in Arctic Lake and River Ice. *Ambio* 40: 53-62.
- Prowse, T., Alfredsen, K., Beltaos, S., Bonsal, B., Duguay, C., Korhola, A. *et al.* 2011b. Arctic Freshwater Ice and Its Climate Role. *Ambio* 40: 46-52.
- Ray, N. & Adams, J.M. 2001. A GIS-based vegetation map of the world at the last glacial maximum (25,000-15,000 BP). *Internet Archaeology* 11: intarch.ac.uk/journal/issue11/rayadams_toc.html [accessed 15 March 2013]
- Reist, J.D., Wrona, F.J., Prowse, T.D., Power, M., Dempson, J.B., Beamish, R.J. *et al.* 2006. General effects of climate change on Arctic fishes and fish populations. *Ambio* 35: 370-380.
- Rennert, K.J., Roe, G., Putkonen, J. & Bitz, C.M. 2009. Soil thermal and ecological impacts of rain on snow events in the circumpolar Arctic. *J. Climate* 22: 2302-2315.
- Richardson, K., Steffen, W. & Liverman, D. 2011. Climate Change: Global Risks, Challenges and Decisions. Cambridge University Press.
- Rigét, F., Bignert, A., Braune, B., Stow, J. & Wilson, S. 2010. Temporal trends of legacy POPs in Arctic biota, an update. *Sci. Total Environ.* 408: 2874-2884.
- Rigét, F., Vorkamp, K., Hobson, K.A., Muir, D.C.G. & Dietz, R. 2013. Temporal trends of selected POPs and the potential influence of climate variability in a Greenland ringed seal population. *Environ. Sci.: Processes Impacts* 15: 1706-1716.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin III, F.S., Lambin, E. *et al.* 2009. Planetary boundaries: exploring the safe operating space for humanity. *Ecology and Society* 14: 32. www.ecologyandsociety.org/vol14/iss2/art32
- Rosing-Asvid, A. 2010. Grönlands sæler. Ilminiosiorfik, Nuuk. Schmidt, N.M., Ims, R.A., Høye, T.T., Gilg, O., Hansen, L.H., Hansen, J. *et al.* 2012. Response of an arctic predator guild to collapsing lemming cycles. *P. Roy. Soc. B-Biol.* 279: 4417-4422.
- Scott, D. 1998. Global overview of the conservation of migratory Arctic breeding birds outside the Arctic. CAFF Technical Report No. 4.
- Screen, J.A. & Simmonds, I. 2010. The central role of diminishing sea ice in recent Arctic temperature amplification. *Nature* 464: 1334-1337.
- Sejr, M.K., Batty, P., Josefson, A., Blicher, M.E., Hansen, J. & Rysgaard, S. 2011. Survey of macrobenthic invertebrates in the eastern Baffin Bay including estimates of biogeochemical activity and PAH levels of the sediment. In: D. Boermann & A. Mosbæk (eds.). Eastern Baffin Bay – A strategic environmental impact assessment of hydrocarbon activities. Scientific Report from DCE – Danish Centre for Environment and Energy no. 9.
- Settele, J., Penev, L.D., Georgiev, T.A., Grabaum, R., Grobelnik, V., Hammen, V. *et al.* 2010. *Atlas of Biodiversity Risk*. Pensoft Publishers, Sofia.
- Shakhova, N. & Semiletov, I. 2007. Methane release and coastal environment in the East Siberian Arctic shelf. *Journal of Marine Systems* 66: 227-243.
- Shirihai, H. 2008. *The Complete Guide to Antarctic Wildlife: Birds and Marine Mammals of the Antarctic Continent and the Southern Ocean* (2nd ed.). Princeton University Press.
- Skov, H., Heinänen, S., Žydelis, R., Bellebaum, J., Bzoma, S., Dagys, M. *et al.* 2011. Waterbird Populations and Pressures in the Baltic Sea. TemaNord 2011: 550.
- Smetacek, V. & Nicol, S. 2005. Polar ocean ecosystems in a changing world. *Nature* 437: 362-368.
- SNAP 2012. Predicting future potential climate biomes for the Yukon, Northwest Territories and Alaska. Scenarios Network for Arctic Planning, University of Alaska, Fairbanks.
- Solstadt, H. 2009. Taxonomy and evolution of the diploid and polyploid Papaver sect. Meconella (Papaveraceae). PhD Dissertation. University of Oslo.
- Southall, B.L., Bowles, A.E., Ellison, W.T., Finneran, J., Gentry, R., Green, C.R. *et al.* 2007. Marine Mammal Noise Exposure Criteria. *Aquat. Mamm.* 33: 411-521.
- Sørstrøm, S.E., Brandyk, P.J., Buist, I., Daling, P., Dickins, D., Faksness, L.-G. *et al.* 2010. Joint industry program on oil spill contingency for Arctic and ice-covered waters. Summary report. SIN-TEF report no. 32.

- Springer, A.M., Estes, J.A., van Vliet, G.B., Williams, T.M., Doak, D.F., Danner, E.M. *et al.* 2003. Sequential mega-faunal collapse in the North Pacific Ocean: An ongoing legacy of industrial whaling? *PNAS* 100 (21) 12223-12228 doi:10.1073/pnas.1635156100
- Steffen, W., Persson, Å., Deutsch, L., Zalasiewicz, J., Williams, M., Richardson, K. *et al.* 2011: The Anthropocene: From Global Change to Planetary Stewardship. *AMBIO: A Journal of the Human Environment* 40: 739-761.
- Stirling, I. & Derocher, A.E. 2012. Effects of climate warming on polar bears: a review of the evidence. *Global Change Biology* 18: 2694-2706.
- Storå, N. 1968. Mass capture of waterfowl in northern Eurasia. An ethnological study of the methods used. Åbo Akademi, Åbo. [in Swedish with English summary]
- Stroeve, J., Holland, M.M., Meier, W., Scambos, T. & Serreze, M. 2007. Arctic sea ice decline: Faster than forecast. *Geophys. Res. Lett.* 34, L09501, doi: 10.1029/2007GL029703
- Sutherland, W.J., Bardsley, S., Bennun, L., Clout, M., Côté, I.M., Depledge, M.H. *et al.* 2011. Horizon scan of global conservation issues for 2011. *Trends in Ecology and Evolution* 26: 10-16.
- Syroechkovski, E.E. 2006. Long-term declines in Arctic goose populations in eastern Asia. In: G.C. Boere, C.A. Galbraith & D.A. Stroud (eds.). *Waterbirds around the World*, pp 629-642. The Stationery Office, Edinburgh.
- Thurstan, R.H., Brockington, S. & Roberts, C.M. 2010. The effect of 118 years of industrial fishing on UK bottom trawl fisheries. *Nature Communications*, DOI:10.1038/ncomms1013.
- Tillin, H.M., Hiddink, J.G., Jennings, S. & Kaiser, M.J. 2006. Chronic bottom trawling alters the functional composition of benthic invertebrate communities on a sea-basin level. *Marine Ecology Progress Series* 318: 31-45.
- Trewby, M. (ed.) 2002. *Antarctica: An Encyclopedia from Abbott Ice Shelf to Zooplankton*. Firefly Books.
- Turvey, S.T. & Risley, C.L. 2006. Modelling the extinction of Steller's sea cow. *Biol. Lett.* 2: 94-97.
- UNEP/AEWA 2008. Update report on the use of non-toxic shot for hunting in wetlands, 2007. UNEP/AEWA Secretariat. Report retrieved from www.unep-aewa.org/surveys/hunting_and_trade/lead_shot_review_adopted_mop4.pdf [accessed 31 March 2011]
- UNEP/AMAP 2011. Climate Change and POPs: Predicting the Impacts. Report of the UNEP/AMAP Expert Group. Secretariat of the Stockholm Convention, Geneva.
- UNEP, WMO & SEI 2011. Integrated Assessment of Black Carbon and Tropospheric Ozone. Summary for Decision Makers. The UN Environment Programme, the World Meteorological Organization and the Stockholm Environment Institute.
- UNFCCC 2010. Decision 1/CP.16. The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention. unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2
- USGS 2011. Arctic Portal interactive map. Potential oil and gas fields. US Geological Survey. portal.inter-map.com/#mapID=D=26&groupID=256&z=1.0&up=1286.9&left=0.0
- Vaktskjold, A., Deutch, B., Skinner, K. & Donaldson, S.G. 2009. Food, diet, nutrition and contaminants. In: S.J. Wilson & C. Symon (eds.). *Human Health in the Arctic*, pp 21-48. Arctic Monitoring and Assessment Programme, Oslo.
- van der Putten, W.H., Macel, M. & Visser, M.E. 2010. Predicting species distribution and abundance responses to climate change: why it is essential to include biotic interactions across trophic levels. *Philosophical Transactions of the Royal Society B-Biological Sciences* 365: 2025-2034.
- Vane-Wright, R.I., Humphries, C.J. & Williams, P.H. 1991. What to protect? Systematics and the agony of choice. *Biological Conservation* 55: 235-254.
- Vatka, E. 2011. Warming climate advances breeding and improves synchrony of food demand and food availability in a boreal passerine. *Global Change Biology* 17: 3002-3009.
- Verreault, J., Gabrielsen, G.W. & Bustnes, J.O. 2010. The Svalbard glaucous gull as bioindicator species in the European Arctic: insight from 35 years of contaminants research. *Rev. Environ. Contam. Toxicol.* 205: 77-116.
- Vibe, C. 1967. Arctic animals in relation to climatic fluctuations. *Meddr. Grönland* 170(5): 1-227.
- Vincent, W.F., Hobbs, J.E. & Laybourn-Parry, J. 2008. Introduction to the limnology of high-latitude lake and river ecosystems. In: W.F. Vincent & J. Laybourn-Parry (eds.). *Polar Lakes and Rivers*, pp 1-23. Oxford University Press.
- Vitousek, P.M., d'Antonio, C.M., Loope, L.L., Rejmánek, M. & Westbrooks, R. 1997. Introduced species: a significant component of human-caused global change. *N.Z.J. Ecol.* 21: 1-16.

- Vonlanthen, C.M., Walker, D.A., Raynolds, M.K., Kade, A., Kuss, P, Daniëls, F.J.A. & Matveyeva, N.M. 2008. Patterned-Ground Plant Communities along a bioclimate gradient in the High Arctic, Canada. *Phytocoenologia* 38: 23-63.
- Walsh, J.E., Overland, J.E., Groisman, P.Y. & Rudolf, B. 2011. Arctic climate: Recent variations. Chapter 2 in: AMAP 2011. Snow, water, ice and permafrost in the Arctic (SWIPA): Climate change and the cryosphere. Arctic Monitoring and Assessment Programme, Oslo.
- Walther, G.-R. 2010. Community and ecosystem responses to recent climate change. *Philosophical Transactions of the royal Society B* 365: 2019-2024.
- Weiser, E.L. & Powell, A.N. 2011. Reduction of garbage in the diet of non breeding glaucous gulls corresponding to a change in waste management. *Arctic* 64: 220-226.
- Wetlands International 2012. Waterbird Population Estimates, Fifth Edition. Wetlands International, Wageningen. www.wetlands.org/LinkClick.aspx?fileticket=k1Lr%2FSeNbiw%3D&tabcid=56
- Wheeler, P., Ford, V., Klokov, K. & Syroechkovskiy 2010. Changes in harvest. In: Arctic Biodiversity Trends 2010. Selected Indicators of Change, pp 92-95. CAFF International Secretariat, Akureyri.
- Wiese, F. & Robertson, G.J. 2004. Assessing seabird mortality from chronic oil discharges at sea. *J. Wildlife Manage.* 68: 627-638.
- Williams, T.D. 1995. The Penguins. Oxford University Press.
- Williams, J.W., Jackson, S.T. & Kutzbach, J.E. 2007. Projected distributions of novel and disappearing climates by 2100 AD. *Proceedings of the National Academy of Sciences of the United States of America* 104: 5738-5742.
- Witting, L. & Born, E.W. 2005. An assessment of Greenland walrus populations. *ICES J. Mar. Sci.* 62: 266-284.
- WMO 2012. 2010 in the top three warmest years, 2001-2010 warmest 10-year period. Press Release No. 904. www.wmo.int/pages/mediacentre/press_releases/pr_904_en.html
- Wrona, F.J., Prowse, T.D., Reist, J.D., Hobbie, J.E., Levesque, L.M.J. & Vincent, W.F. 2006. Climate change effects on aquatic biota, ecosystem structure and function. *Ambio* 35: 359-369.
- Yurtsev, B.A. 1994. Floristic division of the Arctic. *Journal of Vegetation Science* 5: 765-776.
- Zimov, S.A, Schuur, E.A. & Chapin III, F.S. 2006. Permafrost and the global carbon budget. *Science* 312: 1612-1613.
- Zöckler, C. 1998. Patterns of Biodiversity in Arctic Birds. WCMC Biodiversity Bulletin No. 3.
- Zöckler, C., Htin Hla, T., Clark, N., Syroechkovskiy, E., Yakshe, N., Daengphayon, S. & Robinson, R. 2010. Hunting in Myanmar is probably the main cause of the decline of the Spoon-billed Sandpiper *Calidris pygmaea*. *Wader Study Group Bull.* 117: 1-8.