

2009 Refereed Publications / Articles publiés avec comité de lecture

Antoniades, D., Veillette, J., Martineau, M.-J., Belzile, C., Tomkins, J.D., Pienitz, R., Lamoureux, S., Vincent, W.F., 2009, Bacterial Dominance of Phototrophic Communities in a High Arctic Lake and Its Implications for Paleoclimate Analysis, *Polar Science* 3: 147-161, Elsevier Published

Asplin, M.G., Lukovich, J.V., Barber, D.G., 2009, Atmospheric Forcing of the Beaufort Sea Ice Gyre: Part I: Lower-Troposphere-Surface Coupling, *Journal of Geophysical Research* 114:C00a06, doi:10.1029/2008jc005127, American Geophysical Union Published

Aznar, J.-C., Richer-Lafleche, M., Bégin, C., Bégin, Y., 2009, Detoxification and Translocation Processes in Black Spruce (*Picea mariana* Mill. Bsp): How Do Forests Deal With Highly Contaminated Environment?, *Tree Physiology*, Oxford

Aznar, J.-C., Richer-Lafleche, M., Bégin, C., Bégin, Y., 2009, Lead Exclusion and Copper Translocation in Black Spruce Needles, *Water Air and Soil Pollution* 203:139-145, Springer Published

Aznar, J.-C., Richer-Lafleche, M., Paucar-Munoz, H., Bégin, Y., 2009, Is Tree Growth Depletion Related to Direct Foliar Injuries or Soil Chemistry Modifications?, *Chemosphere* 76:1366-1371, Elsevier Published

Barber, D.G., Asplin, M., Gratton, Y., Lukovich, J., Galley, R., Raddatz, R., Leitch, D., 2009, The International Polar Year (IPY) Circumpolar Flaw Lead (CFL) System Study: Introduction and Physical System, *Atmosphere-Ocean* Submitted

Barber, D.G., Galley, R., Asplin, M.G., De Abreu, R., Warner, K.-A., Pučko, M., Gupta, M., Prinsenberg, S.J., Julien, S., 2009, Perennial Pack Ice in the Southern Beaufort Sea Was Not as it Appeared in the Summer of 2009, *Geophysical Research Letters* 36:L24501, doi:10.1029/2009GL041434, American Geophysical Union Published

Beaudoin, J., Hiebert, J., Calder, B., Imahori, G., 2009, Estimation of Sounding Uncertainty from Measurements of Water Mass Variability, *International Hydrographic Review* 2:20-38, International Hydrographic Organization Published

Berninger, F., Nicault, A., Savva, C., Dunn, A., Savard, M.M., Bégin, Y., 2009, Modeling Winter Climate Influence Growth of Black Spruce in Northeastern Canada, *Global Change Biology*, Wiley-Blackwell Submitted

Berrang-Ford, L., MacLean, R., Gyorokos, T., Ford, J., Ogden, N., 2009, Climate Change and Malaria in Canada: a Systems Approach, *Interdisciplinary Perspectives on Infectious Diseases* vol. 2009, Article ID 385487, 13 p., doi:10.1155/2009/385487, Hindawi Publishing Published

Berzins, L., Gilchrist, H.G., Burness, G., 2009, No Assortative Mating Based on Size in Black Guillemots Breeding in the Canadian Arctic, *Waterbirds* 32:459-463, The Waterbird Society Published

Bonilla, S., Rautio, M., Vincent, W.F., 2009, Phytoplankton and Phytobenthos Pigment Strategies: Implications for Algal Survival in the Changing Arctic. *Polar Biology* 28: 846-861, Springer Published

Boucher, É., Bégin, Y., Arseneault, D., 2009, Impacts of Recurring Ice-Jams on Channel Geometry and Geomorphology in a Small High-Boreal Watershed, *Geomorphology* 108:273-281, Elsevier Published

Boucher, É., Bégin, Y., Arseneault, D., 2010, Hydro-Climatic Analysis of Mechanical Breakups Reconstructed From Tree-Rings, Necopastic Watershed, Northern Québec, Canada, *Journal of Hydrology* 375:373-382, Elsevier Published

Breton, J., Vallières, C., Laurion, I., 2009, Limnological Properties of Permafrost Thaw Ponds in Northeastern Canada, *Canadian Journal of Fisheries and Aquatic Sciences* 66:1635-1648, NRC Research Press Published

Brown, T.M., Edinger, E.N., Hooper, R.G., Belliveau, K., 2009, Benthic Marine Fauna and Flora, and Coastal Landscape Instability of Two Locations in the Western and Central Canadian Arctic, Arctic, Arctic Institute of North America Submitted

Brown, T.M., Sheldon, T.A., Burgess, N.M., Reimer, K.J., 2009, Reduction of PCB Contamination in an Arctic Coastal Environment: a First Step in Assessing Ecosystem Recovery After the Removal of a Point Source, *Environmental Science & Technology* 43:7635-7642, ACS Publications Published

Carrie, J., Sanei, H., Goodarzi, F., Stern, G.A., Wang, F., 2009, Characterization of Organic Matter in Surface Sediments of the Mackenzie River Basin, Canada, *International Journal of Coal Geology* 77:416-423, Elsevier Published

Chambellant, M., Ferguson, S.H., 2009, Ageing Live Ringed Seals (*Phoca hispida*): Which Tooth to Pull?, *Marine Mammal Science* 25:478-486, The Society for Marine Mammalogy Published

Chen, W., Lévesque, E., Tremblay, B.L., 2009, Correspondence Between Land Cover Change and Climate in Northeast Canada, *International Journal of Remote Sensing*, Taylor & Francis Submitted

Cherry, S.G., Stirling, I., Richardson, E.S., Derocher, A.E., 2009, Fasting physiology of polar bears in relation to environmental change and breeding behavior in the Beaufort Sea, *Polar Biology* 32:383-391, Springer Berlin Published

Chutko, K.J., Lamoureux, S.F., 2009, Biolaminated Sedimentation in a High Arctic Freshwater Lake, *Sedimentology*, 56:1642-1654, Blackwell Publishing Published

Counil, É., Julien, P., Lamarche, B., Chateau-Degat, M.L., Ferland, A., Dewailly, É., 2009, Association Between Trans-Fatty Acids in Erythrocytes and Proatherogenic Lipid Profiles Among Canadian Inuit of Nunavik: Possible Influences of Gender and Age, *British Journal of Nutrition* 102:766-776, Cambridge Press Published

Couturier, S., Côté, S.D., Huot, J., Otto, R.D., 2009, Body Condition Dynamics in a Northern Ungulate Gaining Fat in Winter, *Canadian Journal of Zoology* 87:367-378, NRC Research Press Published

Couturier, S., Côté, S.D., Otto, R.D., Weladji, R., Huot, J., 2009, Variations in Calf Body Mass in Migratory Caribou: the Role of Habitat, Climate, and Movements, *Journal of Mammalogy* 90:442-452, American Society of Mammalogists Published

Descamps, S., Gilchrist, H.G., Bêty, J., Butler, I., 2009, Costs of Reproduction in a Long-Lived Bird: Large Clutch Size Is Associated to Low Survival in the Presence of a Highly Virulent Disease, *Biology Letters* 23:278-281, Royal Society Publishing Published

Dibike, Y., Prowse, T.D., Ahmed R., Saloranta, T., 2009, Evolution of Northern Hemisphere Lake-Ice Phenology and Lake Water Temperature Profiles Under a Changing Climate, *Proceedings of the 20th IAHR International Symposium on Ice* Submitted

Dibike, Y., Prowse, T.D., Bonsal, B., De Rham, L., Saloranta, T., 2009, Simulation of North American Lake-Ice Cover Under Contemporary and Future Climate Conditions, *International Journal of Climatology*, Royal Meteorological Society Submitted

Dimitrenko, I.A., Kirillov, S.A., Tremblay, L.B., Bauch, D., Willmes, S., 2009, Sea-Ice Production Over the Laptev Sea Shelf Inferred from Historical Summer-To-Winter Hydrographic Observations of 1960s-1990s', *Geophysical Research Letters* 36:L13605, doi:10.1029/2009GL03877, American Geophysical Union Published

Dimitrenko, I.A., Sergey, S., Kirillov, A., Tremblay, B.L., Bauch, D., Hölemann, J.A., Krumpfen, T., Kassens, H., Wegner, C., Heinemann, G., Shroder, D., 2009, The Arctic Ocean Atlantic Water Layer Impacts the Siberian, *Journal of Geophysical Research*, American Geophysical Union Submitted

Dimitrenko, I.A., Kirillov, S.A., Ivanov, V.V., Woodgate, R.A., Polyakov, I.V., Koldunov, N., Fortier, L., Lalande, C., Kaleschke, L., Bauch, D., Hölemann, J.A., Timokhov, L.A., 2009, Seasonal Modification of the Arctic Ocean Intermediate Water Layer Off the Eastern Laptev Sea Continental Shelf Break, *Journal of Geophysical Research* *Journal of Geophysical Research* 114:06010, doi:10.1029/2008jc005229, American Geophysical Union Published

Dugan, H., Lamoureux, S.F., Lafrenière, M.J., Lewis, T., 2009, Hydrological and Sediment Yield Response to Summer Rainfall in a Small High Arctic Watershed, *Hydrological Processes* 23:1514-1526, Wiley Inter-Science Published

Dumont, D., Gratton, Y., Arbetter, T.E., 2009, Modelling the Formation of the North Water Ice Bridge, *Journal of Physical Oceanography* 39:1448-1461, Published

Dutilleul, P., Haltigin, T.W., Pollard, W.H., 2009, Analysis of Polygonal Terrain Landforms on Earth and Mars Through Spatial Point Patterns, *Environmetrics* 20:206-220, John Wiley & Sons Published

Else, B.G.T., Papakyriakou, T.N., Yackel, J.J., Granskog, M.A., 2008, Observations of Sea Surface Fco2 and Estimated Air-Sea CO2 Fluxes in the Hudson Bay Region (Canada) During the Open-Water Season, *Journal of Geophysical Research* 113:C08026, doi:10.1029/2007jc004389, American Geophysical Union Published

Ford, J.D., 2009, Dangerous Climate Change and the Importance of Adaptation for the Arctic's Inuit Population, *Environmental Research Letters* 4:9pp., IOP Publishing Published

Ford, J.D., Berrang-Ford, L., 2009, Food Insecurity in Igloolik, Nunavut: a Baseline Study, *Polar Record* 45:225-236, Scott Polar Research Institute Published

Ford, J.D., Gough, B., Laidler, G., Macdonald, J., Qrunnut, K., Irgaut, C., 2009, Sea Ice, Climate Change, and Community Vulnerability in Northern Foxe Basin, Canada, *Climate Research* 38:138-154, Inter-Research Published

Gade, A., Ferguson, S.H., Harwood, L., Melling, H., Stern, G.A., 2009, Mercury Trends in Ringed Seals (*Phoca hispida*) From the Western Canadian Arctic Since 1973: Associations With Sea Ice Duration, *Environmental Science and Technology*, American Chemistry Society Publications Published

Gagnon, C.A., Berteaux, D., 2009, Integrating Traditional Ecological Knowledge and Ecological Science: a Question of Scale, *Ecology and Society* 14:19. [Online] Url: <http://www.ecologyandsociety.org/Vol14/Iss2/Art19/>, Ecology and Society Published

Galand, P.E., Casamayor, E.O., Kirchman, D.L., Lovejoy, C., 2009, Ecology of the Rare Microbial Biosphere of the Arctic Ocean, *Proceedings of the National Academy of Sciences*, 106(52):22427-22432, National Academy of Sciences of the United States Published

Galand, P.E., Casamayor, E.O., Kirchman, D.L., Potvin, M., Lovejoy, C., 2009, Unique Archaeal Assemblages in the Arctic Ocean Unveiled by Massively Parallel Tag Sequencing, *The ISME Journal* 3:860-869, Nature Publishing Published

Galand, P.E., Potvin, M., Casamayor, E.O., Lovejoy, C., 2010, Hydrography Shapes Biogeography of the Deep Arctic Ocean, *The ISME Journal of Microbial Ecology* 4:564-576 Published

Galley, R.G., Barber, D.G., Key, E., Prinsenberg, S.J., 2009, On the Relative Contributions of Sea Ice Dynamic and Thermodynamic Processes Controlling the Annual Evolution of the Cape Bathurst Flaw Lead Polynya System, *Journal of Geophysical Research*, American Geophysical Union Submitted

Galley, R.J., Trachtenberg, M., Langlois, A., Barber, D.G., Shafai, L., 2009, Observations of Geophysical and Dielectric Properties and Ground Penetrating Radar Signatures for Discrimination of Snow, Sea Ice and Freshwater Ice Thickness, *Cold Regions Science and Technology* 57:29-38, Elsevier Published

Galley, R.J., Trachtenberg, M., Langlois, A., Barber, D.G., Shafai, L., 2009, Physical, Dielectric and Ground Penetrating Radar Observations of Snow, Sea Ice and River Ice Near Churchill, Mb. Canada., *Cold Regions Science and Technology* 57:29-38, Elsevier Published

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Gantner, N., Michaud, W.K., Veillette, J., Bajno, R., Muir, D.C., Vincent, W.F., Dixon, B., Power, M., Reist, J. D., Pienitz, R., Hausmann, S., 2009, Arctic Char (*Salvelinus alpinus*) in Pingualuk Lake (Nunavik, Canada): Genetics, Trophic Ecology, and Contaminant Analysis, *Ambio* Submitted

Geldsetzer, T., Langlois, A., Yackel, J.J., 2009, Dielectric Properties of Brine-Wetted Snow on First-Year Sea Ice, *Cold Regions Science and Technology* 58:47-56, Elsevier Published

Granskog, M.A., Macdonald, R.W., Kuzyk, Z.A., Senneville, S., Mundy, C.J., Barber, W.G., Stern, G.A., Saucier, F., 2009, Coastal Conduit in Southwestern Hudson Bay (Canada) in Summer: Rapid Transit of Freshwater and Significant Loss of Colored Dissolved Organic Matter, *Journal of Geophysical Research* 114:C08012, doi:10.1029/2009jc005270, American Geophysical Union Published

Haberzettl, T., St-Onge, G., Lajeunesse, P., 2009, High-Resolution Multi-Proxy Records of Environmental Changes in Hudson Bay and Strait Since the Final Outburst Flood of Lake Agassiz-Ojibway, *Marine Geology* 270:93-105, Elsevier Published

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Han, G., 2009, Mean Dynamic Topography and Surface Circulation in the Western Labrador Sea and Newfoundland Offshore: Satellite Observations and Ocean Modelling, *International Journal of Remote Sensing*, Taylor & Francis Accepted

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- Hanert, E., Le Roux, D.Y., Pietrzak, J., Walters, R., 2009, A Tale of Two Elements: P1nc-P1 and Rt0, Ocean Modelling 28:24-33, The Sixth International Workshop on Unstructured Mesh Numerical Modelling of Coastal, Shelf and Ocean Flows Published
- Higden, J.W., Ferguson, S.H., 2009, Sea Ice Declines Causing Punctuated Change as Observed With Killer Whale (*Orcinus orca*) Sightings in the Hudson Bay Region Over the Past Century, Ecological Applications 19:1365-1375, Ecological Society of America, Accepted
- Higdon, J.W., Ferguson, S.H., 2009, Loss of Arctic Sea Ice Causing Punctuated Change in Sightings of Killer Whales (*Orcinus Orca*) Over the Past Century, Ecological Applications 19:1365-1375 Ecological Society of America Published
- Hoque, Md.A., Pollard, W.H., 2009, Arctic Coastal Retreat Through Block Failure, Canadian Geotechnical Journal 46:1103-1115, NRC Research Press Published
- Isleifson, D., Langlois, A., Barber, D.G., Shafai, L., 2009, C-Band Scatterometer Measurements of Late Season Multiyear Sea Ice in the Canadian Arctic, IEEE Transactions on Geoscience and Remote Sensing 47:1651-1661, IEEE Published
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- Kanda, H., Convey, P., Naganuma, T., Vincent, W.F., Wilmotte, A., 2009, Microbiological and Ecological Responses to Global Environmental Changes in the Polar Regions, Science (MERGE Special Issue), 3(3), p. 139-212 Published
- Kuzyk, Z.A., Macdonald, R.W., Stern, G.A., 2009, Towards a Sediment and Organic Carbon Budget for Hudson Bay, Marine Geology 264: 190-208, Elsevier Published
- Lalande, C., Bélanger S., Fortier L., 2009, Impact of a Decreasing Sea Ice Cover on the Vertical Export of Particulate Organic Carbon in the Northern Laptev Sea, Siberian Arctic Ocean, Geophysical Research Letters 36: L21604, American Geophysical Union Published

Lalande, C., Forest, A., Barber, D.G., Gratton, Y., Fortier, L., 2009, Variability in the Annual Cycle of Vertical Particulate Organic Carbon on Arctic Shelf: Contrasting the Laptev Sea, Northern Baffin Bay and the Beaufort Sea, *Continental Shelf Research* 29:2157-2165, Elsevier

Lamoureux, S.F., Lafrenière, M.J., 2009, Fluvial Impact of Extensive Active Layer Detachments, Cape Bounty, Melville Island, Canada, Arctic, Antarctic and Alpine Research 41:59–68, Institute of Arctic and Alpine Research Published

Lantuit, H., Rachold, V., Pollard, W.H., Steenhuisen, F., Ødegård, R., Hubberten, H.-W., 2009, Towards a Calculation of Organic Carbon Release From Erosion of Arctic Coasts Using Non-Fractal Coastline Datasets, *Marine Geology* 257:1-10, Elsevier Published

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Lecomte, N., Gauthier, G., Giroux, J.-F., Milot, E., Bernatchez L., 2009, Tug of War Between Continental Gene Flow and Rearing Site Philopatry in a Migratory Bird: the Sex-Biased Dispersal Paradigm Reconsidered, *Molecular Ecology* 18:593-602, Blackwell Publishing Published

Ledu, D., Rochon, A., De Vernal, A., Barletta, F., St-Onge, G., 2009, Holocene Sea-Ice History and Climate Variability Along the Main Axis of the Northwest Passage, Canadian Arctic, *Paleoceanography*, AGU Accepted

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Lemieux, J.F., Tremblay, L.B., 2009, Numerical Convergence of Viscous-Plastic Sea Ice Models, *Journal of Geophysical Research* 114, C05009, doi:10.1029/2008jc005017, American Geophysical Union Published

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Loseto, L.L., Stern, G.A., Deibel, D., Connelly, T.L., Gemmill, B., Prokopowicz, A., Fortier, L., Ferguson, S.H., 2009, Summer Diet of Beluga Whales Inferred by Fatty Acid Analysis of the Eastern Beaufort Sea Food Web, *Journal of Experimental Marine Biology and Ecology* 374:12-18, Elsevier Published

Love, O.P., Gilchrist, H.G., Bêty, J., Wynne-Edwards, K.E., Berzins, L., Williams, T.D., 2009, Using Life-Histories to Predict and Interpret Variability in Yolk Hormones, *General and Comparative Endocrinology Special Issue* 163:169-174, Elsevier Published

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Lukovich, J.V., Mcbean, G.A., 2009, Addressing Human Security in the Arctic in the Context of Climate Change Through Science and Technology, *Mitigation and Adaptation of Strategies for Global Change* 14:697-710, Springer Published

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Macdonald, R.W., Wang, F., Stern, G.A., Outridge, P.M., 2009, Mercury in the Arctic: Are We Overlooking the Ocean?, *Integrated Environmental Assessment and Management* 5:6-8, Society of Environmental Toxicology and Chemistry Published

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- Mcdonald, D.M., Lamoureux, S.F., 2009, Hydroclimatic and Channel Snowpack Controls Over Suspended Sediment and Grain Size Transport in a High Arctic Catchment, Earth Surface Processes and Landforms 34:424-436, Wiley Inter-Science Published
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- Muir, D.C., Wang, X., Yang, F., Nguyen, N., Jackson, T.A., Evans, M.S., Douglas, M., Kock, G., Lamoureux, S., Pienitz, R., Smol, J.P., Vincent, W.F., Dastoor, A., 2009, Spatial Trends and Historical Deposition of Mercury in Eastern and Northern Canada Inferred From Lake Sediment Cores, Environmental Science and Technology 43:4802-4809, American Chemistry Society Publications Publications Published
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