

- L. Oxtoby et al. **M.J. Wooller**. Feeding ecologies of key bivalve and polychaete species in the Bering Sea as elucidated by fatty acid and compound specific stable isotope analyses (In Press). MEPS. On-Line First.
- P. Rinta P, et al. **M.J. Wooller**. (2016) Land Use Affects Carbon Sources to the Pelagic Food Web in a Small Boreal Lake. (2016). PLoS ONE 11(8): e0159900. doi:10.1371/journal.pone.0159900
- A. Padilla. R. Brown and **M.J. Wooller** (In Press). Determining the movements and distribution of anadromous Bering Ciscoes (*Coregonus laurettae*) using otolith strontium isotopes. Transactions of the American Fisheries Society. On-Line First.
- K. Choy[#] Holly J. McKinney[#], B. Potter, J. Reuther, S. Wang², **M.J. Wooller**. (In Press). Chemical profiling of ancient hearths reveals recurrent salmon use in Ice Age Beringia. PNAS.
- Graham et al. **M.J. Wooller**. (2016). Declining freshwater availability caused the extinction of the last North 1 American mammoths PNAS. 113. doi:10.1073/pnas.1604903113.
- B. Gaglioti* et al. **M.J. Wooller** (2016). High-resolution records detect human-caused changes to the boreal forest wildfire regime in interior Alaska. The Holocene. 26: 1064-1074.
- S. Wang*, et al., **M.J. Wooller** (2016). Carbon sources and trophic relationships of ice seals during recent environmental shifts in the Bering Sea. Ecological Applications. 26: 830–845. DOI: 10.1890/14-2421.
- L. Oxtoby*, J.T. Mathis, L.W. Juranek, and **M.J. Wooller**. (2016). Constraining stable carbon isotope values of microphytobenthos (C₃ photosynthesis) in the Arctic for application to food web studies. Polar Biology. 39: 473–483. DOI: 10.1007/s00300-015-1800-2.
- M. Elvert, B. Gaglioti* et al. **M.J. Wooller** (2016). Methane turnover and environmental change from Holocene lipid biomarker records in a thermokarst lake in Arctic Alaska. The Holocene. On-Line First.
- S. Wang*, et al., **M.J. Wooller** (2015). Importance of sympagic production to Bering Sea zooplankton as revealed from fatty acid-carbon stable isotope analyses. Marine Ecology Progress Series, 518: 31-50.
- D. Kauffmann et al., **M.J. Wooller** (2015). Holocene climate changes in eastern Beringia (NW North America) — A systematic review of multi-proxy evidence. QSR. On-Line first.
- M.J. Wooller**, B. Gaglioti*, et al. (2015) Post-glacial dispersal patterns of Northern pike inferred from an 8,800 year old pike (*Esox cf. lucius*) skull from interior Alaska. QSR. 120: 118-125.
- U. Scharler, **M.J. Wooller**, et al. (2015) Variable nutrient stoichiometry (C:N:P) across trophic levels determines extent of nutrient limitations, transfer efficiencies and recycling in a mangrove ecosystem, Belize. Oecologia. 179: 863-876. DOI: 10.1007/s00442-015-3379-2.
- S. Brennan*, et al., **M.J. Wooller** (2015). Strontium isotopes provide new tool for fine-scale biodiversity conservation of Pacific salmon. Science Advances. 1: no. 4. DOI: 10.1126/sciadv.1400124.
- A. Padilla*, R. Brown, **M.J. Wooller** (2015) Strontium isotope analyses (87Sr/86Sr) of otoliths from anadromous Bering cisco (*Coregonus laurettae*) to determine stock composition. ICES Marine Biology. 72: 2110-2117. doi:10.1093/icesjms/fsv096.
- J. Schneider* et al., **M.J. Wooller** (2015). Experimental assessment of environmental influences on the stable isotopic composition of *Daphnia pulex* and their ephippia. Freshwater Biology. On-Line First.
- R. He[#], **M.J. Wooller**, J.W. Pohlman, J. Quensen, J.M. Tiedje, M.B. Leigh. (2015). Methane-derived carbon flow through microbial communities in arctic lake sediments. Environmental Microbiology. 17: 3233–3250. DOI: 10.1111/1462-2920.12773.
- G. Savory*, **M.J. Wooller**, D. O'Brien. (2014). Anthropogenic food use and niche overlap between red and arctic foxes in Prudhoe Bay, Alaska. Canadian Journal of Zoology. 92: 657-663. DOI: 10.1139/cjz-2013-0283

- S. Brennan*, D. Fernandez, C. Zimmerman, T. Cerling, R. Brown, **M.J. Wooller** (2014). Strontium isotopes in otoliths of a non-migratory fish (slimy sculpin): Implications for provenance studies. GCA. On-line first.
- B. Gaglioti*, et al., **M.J. Wooller** (2014). Radiocarbon age-offsets in an arctic lake describe responses of permafrost carbon to climate changes. On-line first.
- S. Brennan*, et al., **M.J. Wooller** (2014). $^{87}\text{Sr}/^{86}\text{Sr}$ variation and carbonate versus silicate weathering in rivers from across Alaska: implications for provenance studies. Chemical Geology. On-line first.
- C. Bataille, S. Brennan*, et al., **M.J. Wooller** (2014). A geostatistical framework to predict multi-scale $^{87}\text{Sr}/^{86}\text{Sr}$ variation in bedrock and rivers for provenance studies in Alaska. Chemical Geology. On-line first.
- J. Finch#, R. Marchant and **M.J. Wooller** (2014) Tracing long-term tropical montane ecosystem change. Journal of Quaternary Science. On-line first.
- M. Jones, D. Peteet, and **M.J. Wooller** (2014) A deglacial and Holocene record of climate variability in south-central Alaska from stable oxygen isotopes and plant macrofossils in peat. Quaternary Science Reviews. Online-first.
- S. Wang*, S. Budge, K. Iken, R. Gradinger, **M.J. Wooller** (2013) Fatty acid and stable isotope characteristics of sea ice and pelagic particulate organic matter in the Bering Sea: tools for estimating sea ice algal contribution to Arctic food web production. Oecologia. On-Line first.
- C. Graham*, S. Wang*, L. Oxtoby*, S. Budge, **M.J. Wooller** (2014) Sourcing fatty acids to juvenile polar cod (*Boreogadus saida*) in the Beaufort Sea using compound-specific stable carbon isotope analyses. Polar Biology. 37: 697-705.
- J. Seymour*, L. Horstmann-Dehn, **M.J. Wooller** (2014) Contributions of Higher Trophic Level Prey to the Diets of Pacific Walrus Estimated Using Stable Isotopes and a Bayesian Mixing Model. Polar Biology. Online-first.
- J. Seymour*, L. Horstmann-Dehn, **M.J. Wooller** (2014) Inter-Annual Variability in the Proportional Contribution of Higher Trophic Levels to the Diet of Pacific Walrus. Online-first.
- J. Lenz*, Dipl.; M. Fritz, L. Schirrmeister, H. Lantuit, **M. J. Wooller**, W. H Pollard, S. Wetterich, (2013) Periglacial landscape dynamics in the western Canadian Arctic: Results from a thermokarst lake record on a push moraine (Herschel Island, Yukon Territory). PALEO3.
- M.J. Wooller**, J. Pohlman, B. Gaglioti*, P. Langdon, M. Jones, K. Walter-Anthony, K. Becker, K. Hinrichs, M. Elvert (2012). Reconstruction of past methane availability in an Arctic Alaska wetland indicates climate influenced methane release during the past similar to 12,000 years. Journal of Paleolimnology. 48: 27-42.
- M.J. Wooller**, J. Kurek, B. Gaglioti*, L. Cynar, N. Bigelow, J. Reuther, C. Gelvin-Reymiller, J. Smol. (2012). An ~11,200 year paleolimnological perspective for emerging archaeological findings at Quartz Lake, Alaska. Journal of Paleolimnology. 48: 83-99.
- R. He#, **M.J. Wooller**, J.W. Pohlman, J. Quensen, J.M. Tiedje, M.B. Leigh. (2012) Diversity of active aerobic methanotrophs along depth profiles of arctic and subarctic lake water column and sediments. The ISME Journal. DOI:10.1038/ismej.2012.34
- R. He#, **M.J. Wooller**, J.W. Pohlman, J. Quensen, J.M. Tiedje, M.B. Leigh. (2012) Shifts in identity and activity of methanotrophs in arctic lake sediments in response to temperature changes. Applied and Environmental Microbiology. DOI: 10.1128/AEM.00853-12
- T. Larsen#, **M.J. Wooller**, M. Fogel, Di. O'Brien. (2012). Can amino acid carbon isotope ratios distinguish primary producers in a mangrove ecosystem? Rapid Communications in Mass Spectrometry. 26: 1541-1548.
- R. He#, **M. J. Wooller**, J.W. Pohlman, J. Quensen, J.M. Tiedje, M.B. Leigh. (2012) Identification of functionally active aerobic methanotrophs in sediments from an arctic lake using stable isotope probing. Environmental Microbiology. 14: 1403-1419. DOI: 10.1111/j.1462-2920.2012.02725.x

- J. Weems*, K. Iken, R. Gradinger, **M.J. Wooller**. (2012) Carbon and nitrogen assimilation in the Bering Sea clams *Nuculana radiata* and *Macoma moesta*. *Journal of Experimental Marine Biology and Ecology*. DOI: 10.1016/j.jembe.2012.06.015
- R. Federer*, T. Hollmen, D. Esler, **M.J. Wooller**. (2012). Stable carbon and nitrogen isotope discrimination factors for quantifying Spectacled Eider nutrient allocation to egg production. *Condor*.
- M.J. Wooller**, G. Zazula, M. Blinnikov, B. Gaglioti*, et al., (2012). The detailed paleoecology of a mid-Wisconsinan interstadial (~31,000 14C years) paleo-turf from interior Alaska. *Journal of Quaternary Science*. 26: 746-756.
- M. Blinnikov, B. Gaglioti*, S. Walker, **M.J. Wooller**, G. Zazula. (2011). Pleistocene graminoid-dominated ecosystems in the Arctic. *Quaternary Science Reviews*. 30: 21-22.
- N. Monacci*, Behling H., B. Finney, U. Meirs-Groenhagen, **M.J. Wooller**. (2011). Paleocology of mangroves along the Sibun River, Belize. *Quaternary Research*: 76: 220-228.
- B. Gaglioti*, B. Barnes, G. Zazula, A. Beadoin, **M.J. Wooller**. (2011). Late Pleistocene paleoecology of arctic ground squirrel (*Urocitellus parryii*) caches and nests from Interior Alaska's mammoth steppe ecosystem, USA. *Quaternary Research*. 76: 373-382.
- S. Budge, S. Wang*, T. Hollmén, and **M.J. Wooller**. (2011). Carbon isotopic fractionation in eider adipose tissue varies with fatty acid structure: Implications for trophic studies. *Journal of Experimental Biology*. 214: 3790-3800.
- B. Gaglioti*, K. Severin, **M.J. Wooller**. (2010). Developing graminoid cuticle analysis for application to Beringian paleoecology. *Review of Palaeobotany and Palynology*. 162: 95-110.
- R. Federer*, T. Hollmén, D. Esler, **M.J. Wooller**, and S.W. Wang*. (2010) Stable Carbon and Nitrogen Isotope Discrimination Factors from Diet to Blood Plasma, Cellular Blood, Feathers, and Adipose Tissue Fatty Acids in Spectacled Eiders (*Somateria fischeri*), *Canadian Journal of Zoology*. 88: 866-874.
- A. Booth#, **M.J. Wooller**, T. Howe, N. Haubenstock. (2010). Tracing geographic and temporal trafficking patterns for marijuana in Alaska using stable isotopes (C, N, O and H). *Forensic Science International*. 202 45 - 53.
- N. Misarti*, B. Finney, H. Maschnerb, **M.J. Wooller**. (2009). Changes in Northeast Pacific marine ecosystems over 4,500 years: Evidence from stable isotope analysis of bone collagen from archaeological middens. *Holocene*. 20 151-157.
- M.J. Wooller** et al., (2009). Permafrost Gas Hydrates and Climate Change: Lake-Based seep studies on the Alaskan north slope Fire in the Ice 4, 6-9.
- O. Heiri, **M.J. Wooller**, M. van Hardenbroek, and Y. Wang*. (2009) Stable isotopes in chitinous fossils of aquatic invertebrates. *PAGES*. 17 21 –25.
- N. Monacci*, **M.J. Wooller**, et al. (2009) Mangrove ecosystem changes during the Holocene at Spanish Lookout Cay, Belize. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 280: 37-46.
- M.J. Wooller**, H. Behling, J. Guerrero*, N. Jantz, M. Zweigert. (2009). Late Holocene Hydrologic and Ecosystem Changes at Turneffe Atoll, Belize, with comparison to mainland records. *PALAIOS*. 24: 650-656.
- P. Deines, J. Grey and **M.J. Wooller**. (2009). Isotope markers of benthic food web ecology. *Freshwater Biology*. 54: 2243-2251.
- Y. Wang*, D. O'Brien, D. Francis, J. Benson and **M.J. Wooller**. (2009) The influence of diet and water on the stable oxygen and hydrogen isotope composition of aquatic organisms (Chironomidae: Diptera) with paleoecological implications. *Oecologia*. 2: 225-233.
- S. Hazlett*, N. Misarti*, G. McFarlane*, **M.J. Wooller**. (2009). Determining long-term feeding habits of the spiny dogfish (*Squalus acanthias*) using stable isotope analysis. *AFS North American Fisheries Management Journal*. 25: 17 – 20.

- G. Zazula and **M.J. Wooller**. (2008). Comment on "Environmental setting (micro) morphologies and stable C-O isotope composition of cold climate carbonate - a review and evaluation of their potential as paleoclimatic proxies" by Denis Lacelle. *Quaternary Science Reviews* 26: 1670-1689. *Quaternary Science Reviews*. 27: 1655-1660.
- M. Fogel, **M.J. Wooller**, et al., (2008). Unusually negative nitrogen isotopic compositions of mangroves and lichens in an oligotrophic, microbially-influenced ecosystem. *Biogeosciences*. 5: 1693–1704.
- F.A. Street-Perrott, P. Barker, M. Leng, H. Sloane, **M.J. Wooller**, K. Ficken, D. Swain. (2008). Towards an understanding of late Quaternary variations in the continental biogeochemical cycle of silicon: multi-isotope and sediment-flux data for Lake Rutundu, Mt Kenya, East Africa, since 38 ka BP. *Journal of Quaternary Science*: 23(4): 375-387.
- S. M. Budge, **M.J. Wooller**, A.M. Springer, S. J. Iverson, C. McRoy, and G.J. Divoky (2008). Tracing carbon flow in an arctic marine food web using fatty acid-stable isotope analysis *Oecologia* 157 (1): 117-129.
- T.W. Bentzen*, E. Follmann, S.C. Amstrup, G.S. York, **M.J. Wooller**, D.C.G. Muir, and T.M. O'Hara. (2008). Dietary biomagnification of organochlorine contaminants in Alaskan polar bears. *Canadian Journal of Zoology*. 86: 177-191.
- L. Bremond, A. Alexandre, **M.J. Wooller**, et al. (2008). Phytolith indices as proxies of grass subfamilies on East African tropical mountains. *Global and Planetary Change*. 61: 209-224.
- Y. Wang*, D. O'Brien, D. Francis and **M.J. Wooller**. (2008). A protocol for preparing subfossil Chironomid head capsules (Diptera: Chironomidae) for stable isotope analysis in paleoclimate reconstruction and considerations of contamination sources. *Journal of Paleolimnology*. 40: 771-781.
- C.T. Mumbi, R. Marchant, H. Hooghiemstra, **M.J. Wooller**. (2007). Late quaternary reconstruction from the Eastern Arc Mountains, Tanzania. *Quaternary Research*. 69: 326-341.
- M.J. Wooller**, R. Boone et al. (2007). A survey of the stable isotope (C and N) composition of eastern Beringian grasses and sedges: investing their potential as indicators of past environmental conditions. *Arctic, Antarctic and Alpine Research*. 39: 318-331.
- M.J. Wooller**, Y. Axford* and Y. Wang*. (2007). A multiple stable isotope record of Late Quaternary limnological changes and chironomid paleoecology from northeastern Iceland. *Journal of Paleolimnology*. 40 (1): 63-77.
- M.J. Wooller**, R. Morgan*, S. Fowell H. Behling and M. Fogel. (2007). A multi-proxy peat record of Holocene mangrove paleoecology from Twin Cays, Belize. *The Holocene*. 17: 1129-1139.
- D. O'Brien and **M.J. Wooller**. (2007). Tracking human travel using stable oxygen and hydrogen isotope analyses of hair and urine. *Rapid Communications in Mass Spectrometry*. 21: 2422–2430.
- M. Knoche*, A. Powell, **M.J. Wooller**, L. Quakenbush and L.M. Phillips. (2007). Further evidence of fidelity to molt site locations by King Eiders: Combining stable isotope analyses and satellite telemetry. *Waterbirds* 30 (1): 52-57.
- F.A. Street-Perrott, P. Barker, K. Ficken, **M.J. Wooller**, et al. (2007). Late Quaternary changes in ecosystems and carbon cycling on Mt. Kenya, East Africa: a landscape-ecological perspective based on multi-proxy lake-sediment fluxes. *Quaternary Science Reviews*. 26: 1838–1860.
- T.W. Bentzen*, E.H. Follmann S.C. Amstrup G.W. York, **M.J. Wooller** and T.M. O'Hara. (2007). Variation in winter feeding ecology of southern Beaufort Sea polar bears inferred from stable isotope analysis. *Canadian Journal of Zoology*. 85: 596-608.
- R. Greenberg P. Mara and **M.J. Wooller** (2007). Stable isotope (C,N,H) analyses locate the unknown winter range of the Coastal Plain Swamp Sparrow (MELOSPIZA GEORGIANA NIGRESCENS). *Auk*. 124: 1137-1148 (cover story).
- Y. Wang* and **M.J. Wooller**. (2006). The stable isotopic (C and N) composition of modern plants from northern Iceland: with paleoenvironmental implications. *JoKull*. 56: 27-37.

- J. Briner, N. Michelutti, D. Francis, G. Miller, Y. Axford, **M.J. Wooller**, A. Wolfe. (2006). A multi-proxy lacustrine record of Holocene environmental change on northeastern Baffin Island, Arctic Canada. *Quaternary Research*. 65: 431-442.
- M.K. Schweizer*, **M.J. Wooller**, J. Toporski, M.L. Fogel, A. Steele. (2006). Examination of an Oligocene lacustrine ecosystem using C and N stable isotopes. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 230: 335 – 351.
- M.J. Wooller**, M. Fogel, et al., (2005). Stable isotope characteristics across a sharp ecotone in Wolfe Creek Meteorite Crater, Western Australia: palaeoecological implications. *Oecologia*. 145: 100-112.
- M.J. Wooller**, M. Fogel, et al., (2004). Mangrove ecosystem dynamics and elemental cycling at Twin Cays, Belize, during the Holocene. *Journal of Quaternary Science*. 19 (7): 703-711.
- M.J. Wooller**, D. Francis, M. L. Fogel, G. Miller, I. Walker, A.P. Wolfe. (2004). Quantitative paleotemperature estimates from $\delta^{18}\text{O}$ in chironomid head capsules from arctic lake sediment. *Journal of Paleolimnology*. 31: 267-274.
- B. Smallwood, **M.J. Wooller**, M. Jacobson, M. Fogel. (2003). Compound specific stable isotope analyses of *R. mangle* leaves. *Geochemical Transactions*. 7: 14 – 27.
- M.J. Wooller**, D.L. Swain, K. Ficken, A.D.Q. Agnew and F.A. Street Perrott, (2003). Late Quaternary environmental change on Mount Kenya: multi-proxy evidence from Lake Rutundu. *Journal of Quaternary Science* 18(1) 3-15.
- M.J. Wooller**, B. Smallwood, U. Scharler, M. Jacobson and M. Fogel, (2003). Towards a multi-proxy approach to mangrove palaeoecology: A taphonomic study of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ values in *R. mangle* leaves. *Organic Geochemistry*. 34: 1259-1275.
- M.J. Wooller**, B. Smallwood, M. Jacobson and M. Fogel, (2003). Carbon and nitrogen stable isotopic variation in *Laguncularia racemosa* from Florida and Belize: Implications for trophic level studies. *Hydrobiologia*. 499: 13-23.
- K.J. Ficken, **M.J. Wooller**, D.L. Swain, F.A. Street-Perrott, and G. Eglinton. (2002). Reconstruction of a sub-alpine grass dominated ecosystem, Lake Rutundu, Mount Kenya: A novel multi-proxy approach. *Palaeogeography, Palaeoclimatology, Palaeoecology* (special issue). 177: 137-149.
- M.J. Wooller** and K. Beuning (guest editors). (2002). Introduction to the reconstruction and modelling of grass dominated environments. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 2708: 1-3.
- M.J. Wooller**. (2002). A method for the analysis of grass cuticles from lacustrine sediment cores. *The Holocene*, 12, 1: 107-115.
- M.J. Wooller** and A.D.Q. Agnew (2002). Changes in graminoid stomatal morphology over the last glacial-interglacial transition: evidence from Mount Kenya, East Africa. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 2716: 1-14.
- A.D.Q. Agnew and **M.J. Wooller**. (2001). New and interesting records of grasses and sedges in Kenya. *Journal of East African Natural History*. 91: 75-84.
- M.J. Wooller**, A.D.Q. Agnew, S. Mathai, D.L. Swain and F.A. Street-Perrott, (2001). An altitudinal and stable carbon isotope survey of grasses on Mount Kenya, East Africa. *Journal of East African Natural History*. 90: 69-85.
- M.J. Wooller**, B. Collins, M.L. Fogel. (2001). The elemental analyzer sample carousel: Loading an autosampler made easy. *Rapid Communications in Mass Spectrometry*. 15: 1-3.
- M.J. Wooller** and K. Beuning. (2001). Workshop Report: Paleo-Grassland Research (PGR) 2000: a conference on the reconstruction and modelling of past grass dominated ecosystems. *PAGES News*. 9: 16-17.
- M.J. Wooller**. (2001). contributions In: J. A. Matthews et al. (editor), *The Encyclopedic Dictionary of Environmental Change*. Edward Arnold.
- M.J. Wooller**, F.A. Street-Perrott, A.D.Q. Agnew. (2000). Late Quaternary fires and grassland palaeoecology of Mt. Kenya, East Africa: Evidence from charred grass cuticles in lake sediments. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 164: 207-230.

M.J. Wooller (2000). Reconstructing past grasslands using grass cuticles: an optimum size (area) for micromorphological investigation. *Swansea Geographer*. 35: 9-17.