CURRICULUM VITAE

CHRISTOPHER POUL STORM LARSEN

Office Address

Department of Geography University at Buffalo, SUNY Buffalo NY 14261-0023 tel.716.645.0488 fax.716.645.2329 larsen@buffalo.edu

Educational Background

PhD in Geography, McMaster University, 1994. Dr. Glen MacDonald, major advisor. Title: Spatial and temporal variations in fire frequency in the boreal forest of northern Alberta.

MSc in Geography, McMaster University, 1989. Dr. Glen MacDonald, major advisor. Title: A fine-resolution palaeoecological record of boreal forest fire and vegetation dynamics.

BSc in Geography, University of Calgary, 1984.

Present Position

Associate Professor, Department of Geography, University at Buffalo Faculty: UB Graduate Group in Evolution, Ecology and Behavior (EEB)

Faculty: UB IGERT in Ecosystem Restoration through Interdisciplinary Exchange (ERIE)

Faculty: UB National Center for Geographic Information and Analysis (NCGIA)

Employment History

2001 to present, Associate Professor, Department of Geography, University at Buffalo 1994 to 2001, Assistant Professor, Department of Geography, University at Buffalo 1986 to 1993, Teaching Assistant, Department of Geography, McMaster University 1984 to 1985, Research Assistant, Department of Biology, University of Calgary

Professional Organisations

American Association of Geographers The International Biogeography Society

Scholarly and Professional Activities

Editorial Board

Geography Journal (June 2012 to present)

Session Organiser or Chair

2015. Historical ecology I and II. Co-organizer and Chair. The Association of American Geographers.

2014. Historical ecology I and II. Co-organizer and Chair. The Association of American Geographers.

1998. Temperate rain forest dynamics. Organizer and Chair. The Association of American Geographers.

1997. Remote sensing and climate. Chair. AAG Middle States and CAG Ontario Geography Meeting.

1996. Dendroecology I and II. Organizer. The Association of American Geographers Meeting.

Invited Speaker

- 2011. SUNY Buffalo. Department of Geography
- 2011. University of Manitoba. Department of Environment and Geography
- 2011. University of Victoria. Department of Geography
- 2010. SUNY Buffalo. Evolution, Ecology and Behavior
- 2009. SUNY Buffalo, ERIE IGERT
- 2003. SUNY Buffalo, GIScience IGERT
- 1999. Alfred University, Department of Environmental Studies
- 1999. University of Quebec at Montreal, Department of Biology
- 1998. Pennsylvania State University, Department of Geography
- 1995. McMaster University, Department of Geography

<u>Judge</u>

- 2013. Graduate student poster competition. International Biogeography Society Meeting.
- 2013. UB School of Management PhD poster competition.
- 2012. NSF IGERT trainee video and poster competition.
- 2010. Graduate student presentation competition, Biogeography Specialty Group, AAG Annual Meeting.
- 2000. Graduate student presentation competition, Biogeography Specialty Group, AAG Annual Meeting.
- 1998. Graduate student presentation competition, Biogeography Specialty Group, AAG Annual Meeting.
- 1998. Graduate student research grant competition. AAG Biogeography Specialty Group.
- 1997. Graduate student paper competition co-ordinator. AAG Middle State & CAG Ontario Geographers

Scientific Reviewer

Arctic, Alpine and Antarctic Research; Canadian Journal of Earth Science; Canadian Journal of Fisheries and Aquatic Sciences; Canadian Journal of Forest Research; Canadian Water Resources Journal; Cartography and Geographic Information Science; Ecological Monographs; Ecology; Ecoscience; Geocarto International; Global Ecology and Biogeography; Holocene; International Journal of Remote Sensing; International Journal of Wildland Fire Research; Journal of Biogeography; Journal of Ecology; Journal of Ecosystem and Ecography; Journal of Environmental Management; Journal of Geophysical Research – Atmospheres; Journal of Paleolimnology; Journal of Vegetation Science; Landscape Ecology; Middle States Geographer; Northwest Science; PLOS One; Professional Geographer; Remote Sensing Letters; Tree-Ring Research; Water, Air and Soil Pollution

American Chemical Society, Petroleum Research Fund

National Science and Engineering Research Council (Canada)

National Science Foundation: invited panel member to review IGERT pre-proposals

National Science Foundation (Atmospheric Sciences; Geography and Regional Science; Geography and Spatial Science; Geology and Paleontology; Global Change)

Textbook Reviewer

John Wiley & Sons; Prentice Hall; Sinauer and Associates

External Referee, Tenure Case

2011. Department of Geography. University of Hawaii at Manoa.

2007. Department of Geography. Carleton University, Ottawa.

Graduation Ceremony

Masters' Student Marshall – Social and Behavioral Sciences. UB Arts and Sciences Graduate Commencement. May, 2014.

Administrative Responsibilities

UB Geography, Co-Chair of the Global Environmental Change ATR (Fall 2014)

Outcome: hiring of Dr. Adam Wilson

UB. General Education science credit restructuring subcommittee. (March 2014 – present)

UB Geography, Co-chair of the Economic Geography ATR (Fall 2013)

Outcome: hiring of Dr. Abigail Cooke

- UB Geography, Judge for the Abrahams-Woldenberg Field and Lab Scholarship (April 2013 present)
- UB Graduate School, Member of the Schomburg Fellow Advisory Committee (January 2013 present)
- UB Geography, Director of Graduate Studies (August 2012 present)
- UB Geography, Chair of the Grievance Committee (July 2012 May 2014)
- UB Geography, Executive Committee member (August 2012 present)
- UB Geography, Faculty Student Committee member (August 2012 present)
- UB Geography, Chair of the Economic Geography ATR (Fall 2009)

Outcome: hiring of Dr. Marion Werner

- UB Geography Executive Committee (September 2009 December 2009; September 2009 May 2010)
- UB Geography Department, awards committee chair (September 2005 August 2010)

Outcomes: Professor David Mark was appointed SUNY Distinguished Professor, and Professor Athol Abrahams was given the SUNY Chancellor's Award for Excellence in Scholarship

and Creative Activities

- UB Geography Department, graduate student admissions committee (February 2002 December 2004)
- UB Science and Engineering Library, Budget Committee (1996 2002)
- UB Environment and Society Institute. Undergraduate curriculum task force (1999)
- UB Geography Department, graduate student admissions committee (Fall 1998)
- UB Geography Department, weekly colloquia series organisation (1997/98)
- UB Institute for Environment and Society, Curriculum Committee (1997)
- UB Environmental Task Force (1995-96)

Research Funding

Grants obtained

- 2005. Comparison of Changes in Forest Composition Resulting from 200 Years of Human Activity vs. a 2XCO₂ Climate Change Scenario. National University of Singapore, Academic Research Fund. PI: Yi-Chen Wang. Co-PIs: Kronenfeld and **Larsen**. \$44,143 US.
- 1998. Spatial and temporal movement patterns of white-tailed deer in a fragmented suburban landscape. SUNY UB Faculty of Social Sciences Research Development Matching Funds. \$2173 US.
- 1998. Spatial and temporal movement patterns of white-tailed deer in a fragmented suburban landscape. Town of Amherst. \$2173 US.
- 1997. Page charges for article in Ecology. SUNY UB Julian Park Publication Fund. \$550 US.
- 1996. Spatial patterns of lightning and human-caused fires in western Canada. Ling Bian co-PI. National Center for Geographic Information and Analysis. \$2500 US
- 1996. Spatial and temporal pattern of human and lightning caused fires on Vancouver Island. British Columbia Ministry of Forests. \$4000 CDN.
- 1995. History of forest disturbance in the temperate rainforest of west-central Vancouver Island, British Columbia. Forest Renewal, Province of British Columbia. \$30,000 CDN.

- 1992. Quantitative assessment of fire risk in Wood Buffalo National Park, Alberta. Institute for Risk Research, University of Waterloo. \$3000 CDN.
- 1992. Dendroclimatic research in northern Alberta. Northern Studies, McMaster University. \$2500 CDN.
- 1991. Paleomagnetic research in northern Alberta. Northern Studies, McMaster University. \$2700 CDN.
- 1990. Lake coring in northern Alberta. Northern Studies, McMaster University. \$3250 CDN.
- 1988. A fire history of Wood Buffalo National Park. Parks Canada. \$5000 CDN; \$75,000 CDN support.
- 1987. Fire history field research, northern Alberta. Northern Studies, McMaster University. \$2200 CDN.

Grants not obtained

2010. August. Collaborative Research: Comparison of the effects of multiple anthropogenic stresses on forested landscapes across the eastern USA over the past 100 to 400 years. Submitted to NSF Geography and Spatial Sciences. PI: Chris Larsen. \$67,334.

2010. January. Collaborative Research: Comparison of the effects of multiple anthropogenic stresses on forested landscapes across the eastern USA over the past 100 to 400 years. Submitted to NSF Geography and Spatial Sciences. PI: Chris Larsen. \$66,354. Ranked in the top 20-33% of submitted proposals.

2000. High-resolution, multi-proxy records of climate, vegetation and fire over the past 2000 years in the boreal forest of Alberta, Canada. Submitted to NSF Earth Systems History. PI: Chris Larsen. \$391,642.

1996. History of forest disturbance in the temperate rainforest of central Vancouver Island, British Columbia. Submitted to Forest Renewal, Province of British Columbia. PI: Chris Larsen \$34,000 CDN.

Grants in preparation

2015. September. Collaborative Research: Native savanna or colonial manor? Applying biogeography tools to disentangle cultural landscapes in the Seneca Iroquois homeland. To be submitted to NSF Geography and Spatial Sciences. PI: David Robertson. Co-PIs: Chris Larsen and Stephen Tulowiecki. \$120,000.

Courses Taught Annually at University at Buffalo

GEO 106 Physical Environmental Geography II: Climate Change

GEO 356 Forest Ecology

GEO 435/515 Conservation Biogeography

GEO 445/545 Restoration Ecology

Graduate Committees

Major advisor

Graduated

Tulowiecki, Stephen. 2014. PhD. Assessing the influences upon pre-European tree species composition in Western New York: an approach using original land survey records and species distribution models. Current: Adjunct instructor, Department of Geography, SUNY Geneseo

Himes, Heidi. 2014. MS. (EEB). Did the Round Goby invasion impact fish population sizes in seven harbors of Lake Erie, USA?

Current: Fish biologist, Lower Great Lakes Fish and Wildlife Office, U.S. Fish and Wildlife Service. Fan, Lei. 2013. MA. GIS Portfolio.

Kwon, Youngsang. 2012. PhD. A multi-scale assessment of forest primary production across the eastern USA using Forest Inventory Analysis (FIA) and MODIS data.

Current: Assistant Professor, Department of Earth Sciences, University of Memphis

Lanzara, Rosemary. 2012. MA. GIS portfolio.

Clark, Shawnna. 2010. MA. The effect of multiple combinations of cover crops and herbicides on corn biomass yield near Corning, New York.

Current: Natural Resources Specialist, USDA Natural Resources Conservation Service, Corning NY Martin, Cody. 2010. MA. GIS portfolio.

Current: GIS technician and environmental scientist, C&S Companies.

Garvey, Caitlin. 2009. MA. GIS portfolio.

Magiera, Robert. 2009 MA. GIS portfolio.

Current: GIS analyst, 39 Degrees North, Bloomington, Indiana.

Simon, James. 2007. MA. Moving towards the localization of United States climate change policy: an examination of local responses to a changing climate.

Current: Director of Sustainability, Gonzaga University, Spokane, Washington.

Miller, Wendy. 2006. PhD. Comparison of methodological approaches to identify features in the natural environment (Co-advised with David Mark).

Current: Associate Professor, Department of Geography, SUNY Cortland.

Wu, Chia-Chi. 2006. MA. An assessment of changing health conditions of three tree species across the Eastern USA, in relation to their predicted abundance in response to a 2XCO₂ climate.

Current: PhD candidate, Department of Ecology and Resource Management, University of Bonn

Stephens, Jeffrey. 2005. MA. Remote sensing of invasive species; a study utilizing Landsat imagery for detection of Eurasian Watermilfoil (*Myriophyllum spicatum*).

Kronenfeld, Barry. 2004. PhD. The tradeoff between information content and cognitive simplicity in graded area-class maps: a case study in vegetation mapping. (Co-advised with David Mark)

Current: Assistant Professor, Department of Geology/Geography, Eastern Illinois University

Wang, Yi Chen. 2004. PhD. A geographic information approach to analyzing and visualizing presettlement land survey records for vegetation reconstruction.

Current: Associate Professor, Department of Geography, National University of Singapore.

Robicheau, Kevin. 2002. MA. The effects of forest type, precipitation, and temperature on defoliation caused by *Lymantria dispar* in Massachusetts from 1978-1996.

Current: Senior GIS specialist, Commonwealth of Massachusetts Department of Fish and Game

Butler, Rachael. 2000. MA. Spatial and temporal analysis of landscape patterns in Amherst, New York

Olney, Chris. 1997. MA. A 670 year record of fire and vegetation dynamics in a coastal Douglas-fir forest, southeastern Vancouver Island.

Current: Director of Stewardship, Finger Lakes Land Trust, NY

Pew, Kelly.1997. MA. The spatial pattern of human-caused wildfires in the temperate rainforest of Vancouver Island, Canada: a GIS application.

Current: Program Manager, Integrated Training Area Management, West Point Military Academy

In progress

Du, Tianyi. MS. GIS portfolio.

Foster, Robin. PhD. (EEB). Conservation and restoration of Eastern hellbenders in New York and Pennsylvania.

Habberfield, Michael. PhD. The influence of pool and landscape features on the spatial patterns of amphibian breeding in a vernal pool complex in central New York.

Purpura, Christine. MS. Detecting changes in forest composition between 1800 and 2000 AD through a resurvey of lines from the original land survey of western New York.

Spiering, David. PhD. Woody plant restoration in brownfields of Erie and Niagara County NY. Current: Ecologist, Tifft Nature Preserve, Buffalo Museum of Science.

Wei, Xinyuan. MS. How many samples are required to conduct a robust tree-age based fire history? Zhu, Anye. MS. Native depopulation led to subsequent increases in mast tree and passenger pigeon abundance, Eastern and Midwestern USA.

Committee member

Graduated

Liu, Jia. 2015. MA (Geog). Detecting and predicting spatial patterns of crime in Buffalo, New York. DeMarchi, Alaya. 2015. MS (Geog). Predictive modelling of beach closure due to high *E. coli* levels at Evans Town Beach in Erie County, New York.

Roberts, David. 2011. MS (Geog). The development of a coupled ecosystem exchange plant hydraulic model to explore drought related plant mortality

Mitra, Bhaskar. 2010. PhD (Geog). Role of plant hydraulics in influencing the spatial distribution of carbon flux across the sagebrush ecosystem – a quantitative analysis.

Loranty, Mike. 2009. PhD (Geog). Towards a mechanistic understanding of spatial patterns of forest transpiration, and its implications for scaling.

Tait, Jennifer. 2009. MS (Biol). Insecticidal surfactant increases mortality and impairs phototaxis in hyponeustonic daphniids.

Winzenried, Jeff. 2009. MA (Geog). Influence of large woody debris structures upon hydrologic retention within stream corridors.

Downie, Chad. 2008. MA (Geog). An assessment of in-stream woody debris along Sprague Brook, Erie County, NY.

Li Li. 2008. PhD (Geog). Spatial distribution of mosquito in the context of malaria outbreaks in West Kenya highlands.

Sims, Taylor. 2006. MA (Geog). Prioritizing prescribed burning for the St. Marks National Wildlife Refuge using a Geographic Information System.

Rish, Oren. 2005. MA (Geog). Sequestration of saline effluents via artificial wetlands.

Feng, Jiu. 2000. PhD (Biol). Molecular approaches for conservation of endangered Caprini species in Asia.

Lee, Tae Soo. 2000. MA (Geog). Application of a GIS-based watershed model to estimate runoff and bacteria loads in Cazenovia Creek, NY.

Neave, Melissa. 1999. PhD (Geog). Modeling the impact of small mammal disturbances on the surface hydrology of a semiarid piedmont surface in southern New Mexico.

Parkansky, Steven. 1999. PhD (Geog). Deer problems in a suburban community: deer population, deervehicle collisions, and public opinion.

Barclay, David. 1998. PhD (Geol). Tree-ring and glacial records of Holocene climate change, northern Gulf of Alaska region.

Kracker, Laura. 1998. PhD (Geog). The quantification and classification of aquatic landscape structure.

McCabe, Scott. 1998. MA (Geog). Influence of coniferous and deciduous stands on surface soil properties.

Hurd, Robert. 1997. MA (Geog). Variations in soil organic matter in response to slope orientation.

In progress

Allen, Matt. MS (Geog). In-stream large woody debris.

Diao, Chunyuan. PhD (Geog).

Gallisdorfer, Michael. PhD (Geog).

Savoy, Philip. PhD (Geog).

Tai, Xiaonan. PhD (Geog).

External member

Larocque, Isabelle. 1999. PhD. Geography, University of Quebec in Montreal. Historique de la distribution et de la regeneration apres feu des communautes boreales.

Publications Google Scholar citation indices: total citations are 1893; h-index is 16; i10-index is 17

(a) Peer Reviewed

- (26) Tulowiecki, S.J., **Larsen. C.P.S.**, and Wang, Y-C. 2015. Effects of positional error on modeling species distributions: a perspective using presettlement land survey records. <u>Plant Ecology</u> 216: 67-85.
- (25) Kwon, Y. and **Larsen. C.P.S.** 2013. Effects of forest type and environmental factors on forest carbon use efficiency (CUE) assessed using MODIS and FIA data across the eastern USA. <u>International Journal of</u> Remote Sensing 34: 8425-8448.
- (24) Kwon, Y. and **Larsen. C.P.S.** 2013. An assessment of the optimal scale for the validation and mapping of MODIS NPP using FIA NPP across the eastern US. <u>Environmental Monitoring and Assessment</u> 185: 7263-7277.
- (23) Kwon, Y. and **Larsen, C.P.S.** 2012. Use of pixel- and plot-scale screening variables to validate MODIS GPP predictions with Forest Inventory and Analysis NPP measures across the eastern. <u>International Journal of Remote Sensing</u> 33: 6122-6148.
- (22) **Larsen, C.P.S.,** Kronenfeld B.J. and Wang, Y.-C. 2012. Forest composition: more altered by future climate change than by Euro-American settlement in western New York and Pennsylvania? <u>Physical Geography</u> 33: 3-20.
- (21) Wang, Y.-C., **Larsen, C.P.S.** and Kronenfeld, B.J. 2010. Effects of clearance and fragmentation on forest compositional change and recovery after 200 years in western New York. <u>Plant Ecology</u> 208: 245-258.
- (20) Kronenfeld, B.J., Wang, Y.-C., and **Larsen, C.P.S.** 2010. The influence of the "mixed pixel" problem on the detection of analogous forest communities between presettlement and present in western New York. The Professional Geographer 62: 182-196.
- (19) Wang, Y-C., Kronenfeld, B.J. and **Larsen, C.P.S.** 2009. Spatial distribution of forest landscape change in western New York from presettlement to the present. <u>Canadian Journal of Forest Research</u> 39: 76-88.
- (18) Power, M.J. and 74 other authors including **Larsen, C.** 2008. Changes in fire activity since the Last Glacial Maximum: an assessment based on a global synthesis and analysis of charcoal data. <u>Climate</u> Dynamics 30: 887-907.
- (17) Wang, Y-C and **Larsen, C.P.S.** 2006. Do coarse resolution U.S. presettlement land survey records correctly represent the spatial pattern of individual tree species? <u>Landscape Ecology</u> 21: 1003-1017.
- (16) Moser, K.A., Smol, J.P., MacDonald, G.M., and **Larsen, C.P.S**. 2002. 19th century eutrophication of a remote boreal lake: a consequence of climate warming? <u>Journal of Paleolimnology</u> 28: 269-281.

- (15) Pew, K.L and **Larsen, C.P.S.** 2001. GIS analysis of spatial and temporal patterns of human-caused wildfires in the temperate rain forest of Vancouver Island, Canada. <u>Forest Ecology and Management</u> 140: 1-18.
- (14) Whitlock, C. and **Larsen, C.P.S.** 2001. Charcoal as a fire proxy. In: Smol, J.P., Birks, H.J.B. and Last, W.M. (Eds.). <u>Tracking Environmental Change Using Lake Sediments: Terrestrial, Algal, and Siliceous Indicators (Vol. 3)</u>. Kluwer Academic Publishers, Dordrecht, pp. 75-97.
- (13) **Larsen, C.P.S.**, Morris, W.A. and MacDonald, G.M. 2000. Records of geomagnetic secular variation since 1200 AD and the potential for chronological control of lake sediments in northern Alberta. <u>Canadian Journal of Earth Sciences</u> 37: 1711-1722.
- (12) **Larsen, C.P.S.** 2000. Area burned reconstruction and expression: a comparison of methods. In: Innes, J.L., Verstraete, M.M., and Beniston, M. (Eds.). <u>Biomass Burning and its Inter-Relationships with the Climate System</u>. Kluwer Academic, Advances in Global Change Research Vol. 3. Boston, pp. 321-339.
- (11) **Larsen, C.P.S.** and MacDonald, G.M. 1998. An 840-year record of fire and vegetation in a boreal white spruce forest. <u>Ecology</u> 79: 106-118.
- (10) **Larsen, C.P.S.** and MacDonald, G.M. 1998. Fire and vegetation dynamics in a jack pine and black spruce forest reconstructed using fossil pollen and charcoal. <u>Journal of Ecology</u> 86: 815-828.
- (9) **Larsen, C.P.S.**, Pienitz, R., Smol, J.P., Moser, K.A. Cumming, B.F., Blais, J.M., MacDonald, G.M. and Hall, R.I. 1998. Relations between lake morphometry and the presence of laminated sediments: a reexamination of Larsen and MacDonald (1993). <u>Quaternary Science Reviews</u> 17: 711-717.
- (8) Reed, W.J., **Larsen, C.P.S.**, Johnson, E.A. and MacDonald, G.M. 1998. Estimation of temporal variations in historical fire frequency from dendrochronological time-since-fire data. <u>Forest Science</u> 44: 465-475.
- (7) **Larsen, C.P.S.** 1997. Spatial and temporal variations in boreal forest fire frequency in northern Alberta. Journal of Biogeography 24: 663-673.
- (6) Sugita, S., MacDonald, G.M. and **Larsen, C.P.S.** 1997. Reconstruction of fire disturbance and forest succession from fossil pollen in lake sediments: potential and limitations. In: Clark, J.S., Cachier, H., Goldammer, J.G. and Stocks, B. (Eds.). <u>Sediment Records of Biomass Burning and Global Change</u>. NATO ASI Series Vol. I 51, Springer-Verlag, Berlin, pp. 387-412.
- (5) **Larsen, C.P.S.** 1996. Fire and climate dynamics in the boreal forest of northern Alberta between AD 1850 and 1989. The Holocene 6: 449-456.
- (4) **Larsen, C.P.S.** and MacDonald, G.M. 1995. Relations between tree-ring widths, climate, and annual area burned in the boreal forest of Alberta. Canadian Journal of Forest Research 25: 1746-1755.
- (3) **Larsen, C.P.S.** and MacDonald, G.M. 1993. Lake morphometry, sediment mixing and the selection of sites for fine resolution palaeoecological studies. <u>Quaternary Science Reviews</u> 12: 781-792.

- (2) Johnson, E.A. and **Larsen, C.P.S.** 1991. Climatically induced change in fire frequency in the southern Canadian Rockies. <u>Ecology</u> 72: 194-201.
- (1) MacDonald, G.M., **Larsen, C.P.S.**, Szeicz, J.M., and Moser, K.A. 1991. The reconstruction of boreal forest fire history from lake sediments: a comparison of charcoal, pollen, sedimentological and geochemical indices. Quaternary Science Reviews 10: 53-71.

(b) Accepted

Larsen, C.P.S., Tulowiecki, S.J., Wang, Y-C., and Trgovac, A.B. (Accepted Jan. 8, 2015) Predicting historic forest composition using species lists in presettlement land survey records, Western New York. <u>Applied Vegetation Science</u>

(c) Under review or revision

Tulowiecki, S.J. and **Larsen, C.P.S.** (Accepted with minor revisions, Feb. 4, 2015) Native American impacts on past forest composition inferred using species distribution models, Chautauqua County, New York. <u>Ecological Monographs</u>

(d) In Preparation for Peer Review

Habberfield, M.H. and **Larsen. C.P.S.** Do species' body mass and home range size determine the functional connectivity of corridors? Results from a meta-analysis of tracking studies. In preparation for <u>Conservation Biology</u>.

Larsen, C.P.S. Climate oscillations, lake level variations, and alternations between peatland and boreal forest since 1392, Alberta. In preparation for <u>Geophysical Research Letters</u>.

Larsen, C.P.S., Wang, Y-C., and Kronenfeld, B.J. Changes in studies using presettlement land survey records in eastern USA, 1899-2011. In preparation for Progress in Physical Geography

(f) Not Peer Reviewed

Larsen, C.P.S. and Muscarella, L. (Accepted August 20, 2014) Dendrecological and dendroclimatic assessment of three species on Zoar Valley canyon slopes, New York. <u>Bulletin of the Buffalo Society of Natural Sciences</u>

Larsen, C.P.S. 2000. *Vestal Fire*. Book review. <u>Annals of the Association of American Geographers</u> 90: 195-196.

MacDonald, G.M. and **Larsen, C.P.S.** 1995. Palaeoecological studies of past fires. Proceedings of the Impacts of Fire on the Landscape Science Workshop. Ontario Aviation, Flood and Fire Management Branch Publication No. 315: 73-77.

MacDonald, G.M., **Larsen, C.P.S.**, Szeicz, J.M. and Dale, K. 1994. Post Little Ice Age warming and the western Canadian boreal forest: An analogue for future climate change? In: Riewe, R. and Oakes, J.(Eds). <u>Biological Implications of Global Change: Northern Perspectives</u>. Canadian Circumpolar Institute Environmental Research Series, Edmonton, pp. 25-35.

(g) Unpublished Reports

Larsen, C.P.S. 2004. Review of Niagara Power Project Relicensing Consolidated Issue 20: Investigation of Habitat Improvement Projects for the Niagara Power Project. Friends of the Buffalo Niagara Rivers. 37 pp.

Larsen, C.P.S. 2004. Review of Niagara Power Project Relicensing Consolidated Issue 59: Effects of Land Management Practices on Aquatic and Terrestrial Habitats. Friends of the Buffalo Niagara Rivers 13 pp.

Larsen, C.P.S. 1989. A fire history analysis of Wood Buffalo National Park. Canadian Parks Service, Prairie and Northern Region. Winnipeg. Contract No. K2585-C9-014. 84pp.

Presentations at Meetings

2015 Larsen, C.P.S. Climate driven variations in historic and paleo-lake levels, transgressions and regressions of peatland to forested wetland, northern Alberta, 1392 to 1991 AD. The Association of American Geographers, Chicago IL.

Roberts, D., **Larsen, C.P.S.** and Tulowiecki, S.J. Decolonizing the history of the Genesee Oaks and exploring Seneca landscape agency through integrative human-environment research. <u>The Association of American Geographers</u>, Chicago IL.

Spiering, D. and **Larsen, C.P.S.** The spatial pattern of woody vegetation establishment in urban post-industrial ecosystems.? <u>The Association of American Geographers</u>, Chicago IL.

Tulowiecik, S.J., **Larsen, C.P.S.** and Wang, Y-C. Lake-effect snowfall and tree species distributions in Western New York, USA. <u>The Association of American Geographers</u>, Chicago IL.

Wei, Xinyuan and **Larsen, C.P.S.** Using forest fire simulations to assess how many time-since-last-fire points are required to reliably estimate the fire cycle in a canopy fire ecosystem. <u>The Association of American Geographers</u>, Chicago IL.

2014 Larsen, C.P.S., Tulowiecki, S.J., Wang, Y.-C. and Trgovac, A.B. All species are not equal – the use and value of ranked species lists from presettlement land surveys, Western New York. <u>The Association of American Geographers</u>, Tampa FL.

Tulowiecki, S.J. and **Larsen, C.P.S.** Using boosted regression trees to assess the influence of Native American land-use upon forest composition. <u>The Association of American Geographers</u>, Tampa FL.

2013 Larsen, C.P.S., Wang, Y.-C. and Kronenfeld, B.J. A meta-analysis of studies employing presettlement land survey records from the Eastern USA, including study of natural, native and Euro-American disturbance. <u>International Biogeography Society Biennial Conference</u>. Miami FL.

Tulowiecki, S.J. and **Larsen, C.P.S.** Assessing Native American influence upon presettlement forests of Chautauqua County, New York: a species distribution modelling approach. <u>Middle States of the Association of American Geographers</u>. Buffalo NY.

- 2012 Kwon, Y. and Larsen, C.P.S. Effects of forest type and environmental factors on forest carbon use efficiency (CUE) assessed using MODIS and FIA data across the eastern USA. <u>American Geophysical Union</u>, Fall Meeting. San Francisco CA.
 - **Larsen, C.P.S.** Do charcoal size distributions in lake sediments help identify local paleo-fires? <u>The Association of American Geographers</u>, New York NY.
 - Trgovac, A.B., and **Larsen, C.P.S.** The effects of taxonomic aggregation on the species abundance patterns found in presettlement land survey records. <u>The Association of American Geographers</u>, New York NY.
 - Tulowiecki, S., **Larsen, C.P.S.**, and Wang, Y.-C. Assessing the geolocational accuracy and measurement error of presettlement land survey records. <u>The Association of American Geographers</u>, New York NY.
- Wang, Y.-C., **Larsen, C.P.S.**, and Kronenfeld, B.J. Presettlement land survey records for ecological analysis: geographical coverage and historical trends. <u>The Association of American Geographers</u>, Seattle WA.
- 2010 Habberfield, M.H. and Larsen. C.P.S. Do species' body mass and home range size determine the functional connectivity of corridors? Results from a meta-analysis of tracking studies.
 <u>International Congress for Conservation Biology, Society for Conservation Biology</u>, Edmonton, Alberta
 - **Larsen, C.P.S.**, Wang, Y.-C. and Kronenfeld, B.J. Changes in forest composition in western New York and northwestern Pennsylvania between presettlement, present and under 2X and 3XCO₂ climate. The Association of American Geographers, Washington DC.
 - Trgovac, A. and **Larsen, C.P.S.** Do the slopes of forest community rank abundance distributions differ in relation to climate and in response to the number of individuals employed? <u>The Association</u> of American Geographers, Washington DC.
- 2009 Trgovac, A. and Larsen, C.P.S. Does the slope of species rank abundance distributions vary between biomes? The Association of American Geographers, Las Vegas NV.
- **2008** Kwon, Y. and **Larsen, C.P.S.** Continental-scale forest growth responses to environmental conditions assessed using regression tree analysis. <u>The Association of American Geographers</u>, Boston MA.
- **2007** Kwon, Y. and **Larsen, C.P.S.** A comparison of forest growth rates across the eastern USA using Forest Inventory and Analysis plot-level data and MODIS-vegetation index products. <u>Middle States</u> Division of the Association of American Geographers. Reading PA.
 - Wang, Y-C, Kronenfeld, B.J. and **Larsen, C.P.S.** Forest landscape change in the western New York from presettlement to the present. <u>The Association of American Geographers</u>, San Francisco CA.

- Wang, Y-C, Kronenfeld, B.J. and **Larsen, C.P.S.** How have the forests of western New York changed since European settlement? A comparison of presettlement and current forest surveys. <u>UB Environment and Society Institute Meeting</u>. Buffalo, NY.
- 2000 Larsen, C.P.S. Centennial-scale relations between climate and pollen productivity: an 840-year record from northern Alberta. The Association of American Geographers, Pittsburgh, PA. Kronenfeld, B. and Larsen, C.P.S. Mapping forest biomes in the eastern USA using forest inventory analysis data. The Association of American Geographers, Pittsburgh, PA.
- **Larsen, C.P.S.** and Pew, K.L. A GIS model of the spatial pattern of human-caused wildfires in the temperate rainforest of Vancouver Island, Canada. <u>Wengen Workshops on Global Change Research:</u> Biomass Burning and its Inter-Relationships with the Climate System, Wengen, Switzerland.
 - **Larsen, C.P.S.** and Pew, K.L. Spatial variation in human-caused wildfire frequency in the temperate rain forest of Vancouver Island. <u>The Association of American Geographers</u>, Boston, MA.
 - Szeicz, J.M., MacDonald, G.M., Case, R.A. and **Larsen, C.P.S.** Holocene aridity patterns in the western interior of Canada. <u>Geological Society of America</u>, Toronto, ON.
- **Larsen, C.P.S.** Judgment and error in the decision whether humans have altered the natural fire cycle in Wood Buffalo National Park. <u>International Conference in Critical Geography</u>, Vancouver, BC.
- **Larsen, C.P.S.** Fire and climate dynamics in the boreal forest of northern Alberta from 1850 to 1989. The Association of American Geographers, Charlotte, NC.
- **Larsen, C.P.S.** Spatial and temporal variations in boreal forest fire frequency. <u>The Association of American Geographers</u>, Chicago, IL.
 - MacDonald, G.M. and **Larsen, C.P.S.** Palaeoecological studies of fire regimes. <u>Ontario Ministry of</u> the Environment Fire Workshop, Sault Ste. Marie ON.
 - Moser, K.A., **Larsen, C.P.S.**, MacDonald, G.M., Taylor, S.J., and Smol, J.P. A paleolimnological investigation of forest fires in northern Alberta, Canada. <u>The Association of American Geographers</u>, Chicago IL.
- **Larsen, C.P.S.** Fire-climate dynamics in northern Alberta since 1850. <u>International Boreal Forest Research Association</u>, Saskatoon SK.
 - **Larsen, C.P.S.** and MacDonald, G.M. Fine resolution fossil pollen and charcoal records from two boreal forest lakes in Alberta. <u>American Quaternary Association</u>, Minneapolis MN.
 - Sugita, S., MacDonald, G.M. and **Larsen, C.P.S.** Quantitative reconstruction of fire disturbance and forest succession from lake sediments: potential and limitations. <u>NATO Advanced Research</u> <u>Workshop: Sediment Records of Biomass Burning and Global Change</u>, Algarve, Portugal.
- **Larsen, C.P.S.** and MacDonald, G.M. The long term persistence of differences in fire frequencies in *Picea glauca* and *Pinus banksiana* forests. <u>Ecological Society of America</u>, Madison WI.

- **Larsen, C.P.S.** and MacDonald, G.M. A 1000 year fossil pollen record of boreal forest fire and succession. The Association of American Geographers, Atlanta GA.
- Moser, K.A., Taylor, S., Gladdy, J., **Larsen, C.P.S.**, MacDonald, G.M., and Smol, J.P. A high resolution record of past forest fire activity and limnological changes from northern Alberta. <u>American Society of Limnology and Oceanography</u>, Edmonton AB.
- **Larsen, C.P.S.** An assessment of the relationship between area burned and fire weather over various temporal scales, northern Alberta. Canadian Association of Geographers, Vancouver BC.
 - MacDonald, G.M., **Larsen, C.P.S.**, Szeicz, J.M. and Dale, K. The response of the boreal forest to post Little Ice-Age warming: an analogue for future climate warming? <u>Canadian Arctic Global Change Research Workshop</u>, Edmonton AB.
 - Moser, K.A., **Larsen, C.P.S.**, MacDonald, G.M. and Smol, J.P. Two hundred years of fire history recorded in the fossil record of the Rainbow Lakes Region, Wood Buffalo National Park, northern Alberta, Canada. <u>International Diatom Symposium</u>, Renesse, The Netherlands.
- **1989** Larsen, C.P.S. and MacDonald, G.M. Rates of change in boreal forest composition: integrating millennial to semi-decadal scales using palaeoecological data. <u>American Institute of Biological Sciences</u>, Toronto ON.
- **Larsen, C.P.S.** and MacDonald, G.M. A one thousand year record of boreal forest fire-vegetation dynamics. National Student Conference on Northern Studies, Ottawa ON.
 - MacDonald, G.M. and **Larsen, C.P.S.** High resolution pollen, charcoal and geochemical analysis of varved lake sediments from the Canadian boreal forest: a long-term record of fire-vegetation dynamics. <u>International Palynological Congress</u>, Brisbane, Australia.
 - MacDonald, G.M., **Larsen, C.P.S.**, Carlson, D., Szeicz, J.M. and Moser, K.A. The reconstruction of fire history from lake sediments: a comparison of visual charcoal analysis, automated charcoal counting, chemical-thermal analysis and trace-element analysis. <u>Canadian Association of Geographers</u>, Halifax NS.
 - MacDonald, G.M., **Larsen, C.P.S.**, Szeicz, J.M. and Moser, K.A. The reconstruction of fire history from lake sediments. <u>International Palynological Congress</u>, Brisbane, Australia.
- 1987 Johnson, E.A., Gregory, D., Larsen, C.P.S. and Pruden, M. Climatically induced change in fire frequency between 1586 and 1984 in the southern Canadian Rockies. <u>Ecological Society of America</u>, Columbus OH.