

CURRICULUM VITAE:

Geraldine Bergmans Jordan

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Geography Program
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POSITIONS

- 2002 – present: Assistant Professor, Geography Program, Trinity Western University, Langley, BC
Summer 2000: GIS Research Assistant, School of Resource and Environmental Management, Simon Fraser University, Burnaby, BC
1997 – 1999: Geography Instructor and Lab Coordinator, Geography Program, Trinity Western University, Langley, BC
1995 – 1996: Remote Sensing Research Assistant, Ministry of Forests, Victoria, BC
Summer 1993: NSERC Research Assistant, Laboratory for Earth Observation and Information Systems, Ottawa University, Ottawa, ON
Summer 1992: Environmental Inspector, City of Laval, Laval, PQ

EDUCATION

- Ph.D. 2002. Resource and Environmental Management, Simon Fraser University, Burnaby, BC.
Advisor: Dr. Marie-Josée Fortin.
M.Sc. 1997. Department of Geography, University of Victoria, BC. Advisor: Dr. Olaf Niemann.
H.B.Sc. 1994. Geography Department, Mathematics Department (Double Major), Lakehead University, ON. Geography Honours thesis co-advisors: Dr. Harun Rasid (Lakehead) and Dr. Claude Duguay (University of Ottawa).

RESEARCH FUNDING AND SCHOLARSHIPS

- 2008: Langley Bog Stewardship Project (\$40 000); Principal Investigators: P. Brown, D. Clements, D. Jordan, **G. Jordan**.
2001: Applied Sciences Graduate Fellowship, Simon Fraser University, Burnaby, BC (summer)
1999 – 2000: Graduate Fellowship, Simon Fraser University, Burnaby, BC (fall and spring)
1994 – 1996: NSERC University Graduate Student Research Award
1993: NSERC University Undergraduate Student Research Award (summer)
1990 – 1993: Canada Scholar, Lakehead University, Thunder Bay, ON

AWARDS

- 2007: Five Year Service Award, Trinity Western University
- 2004: Best Student Poster: Loewen, D. (B.Sc. student) and **G. Jordan**, 2004. Spatial database compilation and analysis of Trinity Western University. Association of Washington Geographers, April 23-24, 2004, UCFV, Abbotsford, BC.
- 2001: Best Student Poster: **Jordan, G.** (Ph.D. student), M-J. Fortin, K. Lertzman and S. Karpuk, 2001. Boundary persistence in natural fire regimes: The influence of topographic discontinuities. Geomatics for Informed Decisions Annual General Meeting, Fredericton, NB.
- 1994: President's Award, Lakehead University, Thunder Bay, ON
- 1990 – 1992: Academic All-Canadian Athlete, Lakehead University, Thunder Bay, ON

RESEARCH INTERESTS

Landscape ecology: natural disturbance processes, GIS and spatial analysis
Resource management and restoration ecology in forest environments and northern regions

PUBLICATIONS

Theses

- Jordan, G.** 2002. Space, Time, and Uncertainty: Detecting and Characterizing Boundaries in Forest Fire Disturbances. Ph.D. Dissertation, School of Resource and Environmental Management, Simon Fraser University, Burnaby, BC, 246 pp.
- Jordan (Bergmans), G.** 1997. Estimating the Appropriate Resolution for the Interpretation of Digital Images for Forestry Purposes Using a Texture Algorithm. M.Sc. Thesis, Department of Geography, University of Victoria, Victoria, BC, 87 pp.
- Jordan (Bergmans), G.** 1994. Estimating the Change in Surface Albedo over Mountainous Terrain from Landsat-5 Thematic Mapper and Digital Terrain Data. H.B.Sc. Honours Thesis, Geography Department, Lakehead University, Thunder Bay, ON, 88 pp.

Papers

- Jordan, G.**, M-J. Fortin and K. Lertzman, *in preparation*. Detection and significance testing of spatial-temporal characteristics of fire boundaries in a low-severity regime. To be submitted to Landscape Ecology.
- Jordan, G.**, M-J. Fortin and K. Lertzman, 2008. Spatial pattern and persistence of historical fire boundaries in southern interior British Columbia. Environmental and Ecological Statistics 15:523–535 [online URL: <http://www.springerlink.com/content/a6706765532r2646/>]
- Jordan, G.**, M-J. Fortin and K. Lertzman, 2005. Assessing spatial uncertainty associated with forest fire boundary delineation. Landscape Ecology 20: 719-731.
- Jordan, G.** and M.-J. Fortin, 2002. Scale and topology in the ecological economics sustainability paradigm. International Journal of Ecological Economics 41:361-366.

Proceedings

- Jordan, G.** 2004. Garry oak (*Quercus garryana*) meadows and boundaries: A focus on size and spatial distribution of oaks in selected meadows on Salt Spring Island, British Columbia, Canada. 16th Int'l Conference, Society for Ecological Restoration, Victoria, BC, August 24-26.

Jordan, G., M.-J. Fortin, K. Lertzman, S. Karpuk. 2002. Geomatics for Informed Decisions (GEOIDE): A case study of forest fire boundaries under a low severity fire regime. Joint International Symposium on Geospatial Theory, Processing and Applications, Ottawa, ON, July 8-12.

Presentations

Wiens, C, **G. Jordan**, J. Bird and M. Ofosuhen, 2007. A case study of spatial patterns of church and parachurch organizations in Vancouver, BC, Western Division of the Canadian Association of Geographers, University (College) of the Fraser Valley, March 2003.

Jordan, G., M.-J. Fortin, K. Lertzman and S. Karpuk, 2003. Detection of spatio-temporal characteristics of fire disturbance boundaries in a forested landscape and their relationship with riparian zones. *Invited speaker* to US Regional Chapter of the International Association for Landscape Ecology, Banff, AB, April 2-5, 2003.

Jordan, G., M.-J. Fortin, K. Lertzman and S. Karpuk, 2002. Geomatics for Informed Decisions (GEOIDE): A case study of forest fire boundaries under a low severity fire regime. Joint International Symposium on Geospatial Theory, Processing and Applications, Ottawa, July 8-2, 2002.

Jordan, G., M.-J. Fortin, K. Lertzman and S. Karpuk, 2002. Historical fire boundary persistence at riparian fuel breaks: A spatially-explicit analysis of low-severity fire tree ring scars in the Stein River watershed, BC, Canada. International Association for Landscape Ecology, US Chapter, Lincoln, Nebraska, April 23-27, 2002.

Jordan, G., M.-J. Fortin, K. Lertzman and S. Karpuk, 2002. Boundary persistence in natural fire regimes: The influence of topographic discontinuities. Western Division of the Canadian Association of Geographers, March 2002.

Posters

Loewen, D. and **G. Jordan**, 2004. Spatial Database Compilation and Analysis of Trinity Western University, Association of Washington Geographers, April 23-24, 2004, UCFV, Abbotsford, BC. *Best Student Poster Award.*

Koole, R., Jordan, D. and **G. Jordan**, 2004. Mapping meadows: A case study of ecological transition zones. Association of Washington Geographers, April 23-24, 2004, UCFV, Abbotsford, BC.

Jordan, G., M.-J. Fortin, K. Lertzman and S. Karpuk, 2001. Boundary persistence in natural fire regimes: The influence of topographic discontinuities, Geomatics for Informed Decisions Annual General Meeting, Fredericton, June. *Best Student Poster Award.*

Jordan (Bergmans), G., E. Heyerdahl, and K. Lertzman, 2001. A comparison of methods for estimating historical fire extents. Natural Disturbance and Forest Management Symposium, Foothills Model Forest, and the Sustainable Forest Management Network, Edmonton, Alberta, March 5-7.

Other non-refereed

Jordan, D., **Jordan, G.**, Neufeldt, T., Remigio, A., 2005. Introduction to Physical Geography Lab Manual: Weather and Climate, Trinity Western University, Langley, BC.

Steensma, K. P. Brown, D. Clements, C. Hall, D. Jordan, **G. Jordan**, S. Morris, S. Olson, J. VanDyke, G. Weeks, 2003. Environmental Impact Statement on the RNT Addition. Ecological Stewardship Committee, Internal Report. Trinity Western University, Langley, BC.

Jordan (Bergmans), G. 1998 – 1999. Editor. Introduction to Physical Geography Lab Manual, Trinity Western University, Langley, BC.

Jordan (Bergmans), G. 1994. Reinvesting our education: A report on the Provincial Renewal Conference. Nor'wester Magazine, The Alumni Association of Lakehead University, Thunder Bay, Winter 15-17.

TEACHING INTERESTS

Physical Geography
Landscape Ecology / Biogeography
Techniques in Geography, including Geographic Information Systems, Cartography, Field Methods and Remote Sensing
Resource and Environmental Management

TEACHING EXPERIENCE

1997 –1999, 2002 – present: Undergraduate courses in Global Environmental Issues, Introduction to Weather and Climate, Introduction to Geomorphology, Environmental Concerns, Foundations of Cartography, Introduction to Geographic Information Systems, Quantitative Methods in Geography, Field Methods and Techniques in Geography, Climatology, Economic Geography, Resource and Environmental Management; and Geography of Resource Development; undergraduate Directed Studies in: Remote Sensing, Soils Geography, Applied GIS, and Advanced GIS (Geography Program, Trinity Western University, Langley, BC)

Spring 2001: Teaching Assistant: Graduate course in GIS for Environmental Management (Resource and Environmental Management, Simon Fraser University, Burnaby, BC)

Spring 2000: Teaching Assistant: Quantitative Methods in Geography (Geography Department, Simon Fraser University, Burnaby, BC)

Summer 1995 and Spring 1996: Teaching Assistant: GIS (Geography Department, University of Victoria, Victoria, BC)

1992 – 1993: Teaching Assistant for introductory mathematics course: Calculus and Algebra (Mathematics Department, Lakehead University, ON)

STUDENT SUPERVISION

Advisor

Current: Glori Liu (B.A. Environmental Studies)
2008: D. Budi Ayu (B.Sc. Environmental Studies)
2004: T. DeMasters (B.Sc. Environmental Studies), D. Loewen (B.Sc. Environmental Studies)
2003: J. Berg (B.Sc. Environmental Studies)

Training/work supervision

2008: D. Budi Ayu and K. vander Gugten, Langley Bog Stewardship Research. A co-supervised project with Paul Brown (PI) and David Jordan.

2007: K. vander Gugten, Dendroecology and Landscape Dynamics in Garry Oak Meadows, Salt Spring Island, BC. NSERC Undergraduate Student Research Award. Co-supervisor: David Jordan.

2004: T. Laidman, TWU Walking Trail Map, Trinity Western University Campus, Langley, BC.

2004: C. Fay, 57 Acres Mapping Project, Trinity Western University Campus, Langley, BC.

2002 – 2003: Undergraduate student teaching assistant (Cartography), Trinity Western University, Langley, BC.

2003: R. Koole, Environmental Science Program (Trinity Western University) summer student, Project: Mapping and GIS database development of Garry Oak meadows on Salt Spring Island, BC.

1997 – 1999: Undergraduate student teaching assistants (Introduction to Physical Geography: Weather and Climate, Introduction to Physical Geography: Geomorphology), Trinity Western University, Langley, BC.

STUDENT THESES

- Liu, G. (2008-present), Carbon Footprint Analysis of Trinity Western University. Senior Student Environmental Studies project, Trinity Western University, Langley, BC.
- Budi Ayu, D. (2006-2008), Characterizing Vegetation Structure Associated with Garry Oak Meadow Boundaries on Salt Spring Island, BC. Senior Student Environmental Science project, Trinity Western University, Langley, BC.
- DeMasters, T. (2003 – 2004), An Analysis of the Mountain Park Fire in Kelowna, BC with a Focus on Topography and Weather. Senior Student Environmental Science project, Trinity Western University, Langley, BC.
- Loewen, D. (2003 – 2004), Spatial Database Compilation of Trinity Western University. Senior Student Environmental Science project, Trinity Western University, Langley, BC.
- Berg, J. (2002 – 2003), Spatial Patterning of Persistence in Low-Severity Fire. Senior Student Environmental Science project, Trinity Western University, Langley, BC.

COMMITTEES

- 2003 – present: Ecological Stewardship Committee, Trinity Western University, Langley, BC
- 2003 – present: Environmental Studies Research Property Planning Sub-Committee, Trinity Western University, Langley, BC
- 2002 – 2005: Derby Reach Brae Island Park Partners Association, Langley, BC
- 2000 – 2001: PhD student representative, Faculty Hiring Search committee, School of Resource and Environmental Management, Simon Fraser University, Burnaby, BC
- 1999 – 2001: PhD student representative, Executive Committee, School of Resource and Environmental Management, Simon Fraser University, Burnaby, BC

MEMBERSHIPS

Canadian Association of Geographers
United States Regional Association International Association of Landscape Ecology (*in renewal process*)
A Rocha Canada
Society of Ecological Restoration
Ruby Lake Lagoon Nature Reserve Society

GEOMATICS SKILLS

ArcGIS, Arc/Info, ArcView, SPANS, PCI Easi/Pace, IDRISI, Corel Draw, SPlus, BoundarySeer.

OTHER PROFESSIONAL EXPERIENCE

Coordination and Liaison

- 2008 – present: Geography Co-op Education Coordinator
- 2006: Organizer for International GIS Day and Geography Awareness Week, November 13 – 17 (Trinity Western University)
- 2002 – 2004: Faculty coordinator for Student Association of Geographers and Environmental Studies
- 2004: Faculty liaison for the Environmental and Ecological Ambassadors Club, Trinity Western University Student Association
- 2003: Organizer for Geography Town Hall, October 30 (Trinity Western University)
- 2003: Faculty liaison for Geography at Program Fair, November 5 (Trinity Western University)
- 2001 – 2002: BC student representative to the Western Division of the Canadian Association of Geographers
- 2001: Coordinator assistant for GEOIDE at GIS 2001, Vancouver, BC. February 2001

Guest Speaker Experience

- 2008: Lecture: “Maps for Everyone” (THEATRE 391), November 5
- 2008: Lecture: “Spatial Tools for Resource Management and Decision-Making: An Introduction to Geomatics and Landscape Ecology Research” (BIO482), April 7
- 2006: Lecture: “Local to Global Footprints and Impacts” (NATS487/IDIS400), November 15
- 2005: GIS tutorial in Introductory Human Geography class (GEOG110), January 31
- 2005: Lecture: “Economics of Natural Resources in Resource Geography class” (GEOG 347), January 26
- 2004: GIS tutorial in introductory Human Geography class (GEOG110), Fall 2004.
- 2004: Georeferencing workshop for TWU Outdoor Club, Langley, BC. March 18, 2004
- 2004: Poster presentation tutorial for Contemporary Political Philosophy (POLS 415), TWU, Langley, BC. February 2, 2004
- 2003: Forestry lecture in Environmental Management Issues (GEOG 400), TWU, Langley, BC. October 27
- 2003: GIS tutorial in introductory Human Geography class (GEOG110), Fall 2003.
- 2002: Research presentation to Environmental Science Thesis Preparation class (ENVS 409), TWU, Langley, BC. Fall 2002
- 2001: Introduction to GIS lecture to cartography class (GEOG280), TWU, Langley, BC. Fall 2001

Other Conference and Meeting Attendance

- 2003: Canadian Association of Geographers Annual General Meeting, Victoria, BC. May 2003
- 2003: BC Geography Articulation Meeting, Sechelt, BC. March 2003
- 2001: Western Division of the Canadian Association of Geographers, Calgary, AB. March 2001
- 2001: GIS 2001, Vancouver, BC, February 2001.
- 2000: GEOIDE Annual General Meeting, Calgary, AB, May 2000
- 1995: GIS'95. Vancouver, BC. March 1995
- 1993: 16th Canadian Symposium on Remote Sensing, Sherbrooke, PQ. June 1993

Workshop Participation

- 2003: Finding, Measuring, and Representing Pattern in Spatial Data, GEOIDE workshop, Victoria, BC
- 2001: GEOIDE workshop, Québec City, PQ