

Patrick Glenn Lawrence

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Summary of Qualifications:

Skilled ecological scientist specializing in data acquisition, field methodology and landscape analysis. Adept with remote sensing/GIS software and change-detection analysis. Background includes land management, river restoration, non-profit operations, and assistant teaching at the college level. Professional approach emphasizes holistic decision-making, cultural sensitivity, and stakeholder participation.

Professional Experience:

Weed Ecology Researcher

Montana State University, Bozeman, MT

July - October, 2007,
December - May 2008,
July 2009 - Present

Responsible for a suite of research projects including population modeling, viability studies and dispersal monitoring. Duties involve fieldwork in the Greater Yellowstone Ecosystem and computer-based lab analysis.

- *Directly involved with 3 published academic articles*
- *Developed a statistically based propagation model incorporating environmental variables, propagule pressure and time-series data.*

GIS Specialist

River Design Group, Inc., Whitefish, MT

Aug 2008 - June 2009

Worked as the primary GIS coordinator for a river restoration firm operating in Montana, Idaho and Oregon. Responsible for general geographic data management/analysis and integration with hydrologic engineering CAD data. Produced cartographic outputs for government organizations and private clients.

- *Collected and managed infrastructure/ecological data for the restoration of a 50-mile stretch of the Kootenai River, Idaho.*
- *Analysis included 100-year flood simulation, habitat assessment and sedimentation prediction. Client: Kootenai Tribes of Idaho.*
- *Analyzed and produced a comprehensive report for a Total Maximum Daily Load (TMDL) assessment of the Lower Clark Fork Tributaries, Montana. Client: Montana Department of Environmental Quality (MDEQ)*
- *Managed LiDAR data, analyzed historical stream migration metrics and measured historical vegetation change with satellite imagery.*

Program Assistant and Researcher

BioRegions International, Bozeman, MT

Jan - Aug 2007

Researched the movement and dynamics of sand dunes and eroded areas in the Darhad Valley, Mongolia. Assisted with other environmental research projects and helped develop an ecological education curriculum for local secondary schools. Assisted with trip organization and graphic design for publication materials.

- *Individually organized the execution of a pasture fertility change-detection research project culminating in a report sent to the American Center of Mongolia Studies.*
- *Worked with the organization's director to implement long-term strategic plans for the local community and economic viability of the organization*
- *Learned skills to navigate effectively in Mongolian culture while being culturally sensitive; improved ability to seek input from the local populace without imposing outside perspectives or regulations.*

Education:

Montana State University - Bozeman, MT

Graduated May 2007

Bachelor of Science in Land Resources Analysis and Management.

- Undergraduate coursework in soil science, ecology, spatial analysis and other ecosystem processes, finalized with a research-based capstone class. Graduated Summa Cum Laude. GPA: 3.93 cumulative.

Other college-level coursework completed at Whatcom Community College and the University of British Columbia

Other Work Experience:

GIS/GPS Technician & Gravel Pit Inspector - *Gallatin County Weed District, Montana*

May - Aug 2008

Employed by Gallatin County to coordinate a county-wide weed mapping and monitoring program.

Also involved in a weed-free certification program for gravel pits throughout the Greater Yellowstone Area

Field Instructor - *Three Rivers, Montana*

Oct - Dec 2007

Led and instructed at-risk youth through 6-week wilderness therapy courses

Teaching Assistant - *Montana State University*

Spring 2007,

Assisted with LRES 421 - Holistic Thought & Management, & taught a Soil Science Laboratory course

Fall 2006 & 2007

Lancy Summer Scholars Program - *Montana State University*

Summer 2006

Conducted an independent research project evaluating policy decisions on bioprospecting

in Yellowstone National Park

Intern with the Student Conservation Association

Summer 2005

Served as an intern in Wrangell-St. Elias National Park & Preserve in Alaska, a 13 million acre wilderness

Intern with ReclaimDemocracy.org

Fall 2004 - Spring 2007

Assisted with outreach, fundraising and marketing for a national non-profit focusing on

corporate personhood & accountability.

Other Experience, Awards & Honors:

Dean's list at MSU Fall 2004 through Fall 2006, President's list Spring 2007

Scholarships Received:

- Helen & E. Clyde Erskine Fund for Excellence in Agriculture Scholarship
- Bayard L. Taylor Scholarship (2006)
- Land Resources Stewardship Scholarship (2006)

Technical Proficiencies:

- ESRI ArcMap (3x through 9.3)
- Database management
- R Statistical Software
- Remote Sensing & Spatial Analysis
- Adobe Photoshop, Illustrator and InDesign.
- S-Plus Statistical Software
- Precision GPS
- MS Office Suite

Proficient with **French** Language

Completed **Yamnuska Mountain Skills Semester** emphasizing mountaineering skills and leadership - Canmore, Alberta (Fall 2003).

References:

Lisa Rew, PhD - weed ecology professor and employer

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John Muhlfeld - hydrologist and principal of River Design Group, Inc.

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Cliff Montagne, PhD - soil science professor and director of BioRegions International

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