

Bradley A. Miller

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O B J E C T I V E

Advancement of the agronomical and environmental sciences through the understanding of biological, physical, and chemical principles for the sustainability of ecosystem services and human well-being

E D U C A T I O N

MS in Water Resources & Soil Science, with minor in Political Science

Iowa State University, Ames, Iowa, May 2006
(GPA: 3.29 / 4.00)

BS in Environmental Science

Iowa State University, Ames, Iowa, May 2000
(GPA in major: 3.67 / 4.00)

Relevant Study: Soil Genesis & Landscape Position, Soil Management, GIS Landscape Modeling, Environmental Engineering Chemistry, Hydrology & Surficial Processes, Watershed Biogeochemistry, Environmental Law, Science Technology & Public Policy

P R O F E S S I O N A L E X P E R I E N C E

Environmental Programs, Iowa State University, Ames, Iowa

Academic Advisor - March 2004 to Present

- Provide students with advice for academic success

Teaching Assistant, Environmental Systems Modeling - August 2001 to December 2003

- Assist students with laboratory exercises and troubleshooting simulation models
- Conduct review sessions and offer supplemental instruction for students
- Assist with the creation and grading of assignments

Information Technology Specialist - August 2001 to Present

- Support and manage systems of departmental workstations and application servers
- Administer mobile computer classroom of 28 networked, wireless laptops

Wetlands Research Group, Iowa State University, Ames, Iowa

Research Associate – July 2003 to present, Research Assistant - March 2001 to July 2003

- Analysis of the Des Moines lobe's landscape and its implications for agriculture and water quality
- Manage GPS data and GIS projects in ArcGIS
- Conduct research focused on the use of wetlands for water quality improvement in the Upper Mississippi & Ohio River basins
- Manage 2 large capacity servers for collaborative work environment and data security

Pedometrics Laboratory, Agronomy, Iowa State University, Ames, Iowa

Environmental Scientist - September 2000 to March 2001

- Collect soil core samples
- Analyze soil core samples for: carbon content, nitrogen content, electrical conductivity, particle size, aggregate stability, and pH
- Data recording and reporting

Soil Management Laboratory, Agronomy, Iowa State University, Ames, Iowa

Laboratory & Field Technician - August 1999 to September 2000

- Model watersheds using USDA's Soil & Water Assessment Tool (now EPA's BASINS model)
- Assist rainfall runoff simulation research

Prairie Roots Environmental Consulting, Ames, Iowa

Field Specialist / Consultant - May 1999 to Present

- Analyze and design areas for wetland and prairie restoration
- Provide plants, materials, labor, and expertise resulting in the successful establishment of prairie/wetland ecosystems
- Develop public relations for support of projects

Minnesota State Senate, St. Paul, Minnesota

Senate Page - December 1997 to April 1998

- Serve the Agriculture & Rural Development Committee
- Organize materials
- Communicate with the public

Boy Scouts of America, Mid-Iowa Council, Des Moines, Iowa

Program Director – Summer 2001, Ecology/Conservation Director – Summers of 1994, 1995, 1996

- As Program Director, responsible for all program operations for camp serving more than 2,500 customers during a 6 week period
- As Ecology/Conservation Director, develop Ecology/Conservation Program
- Train teaching staff
- Teach environmental concepts to groups of 5-80

S K I L L S

GIS Applications: ArcView 3, ArcGIS 9

ESRI Certification: Migrating from ArcView 3.x to ArcGIS, ArcGIS Spatial Analyst

GPS: Garmin / MapSource software, Trimble / Pathfinder software

Environmental System Modeling: USDA's Soil & Water Assessment Tool (SWAT), RUSLE, QUAL2E, ModelMaker, Stella

Operating Systems: Windows 9x/NT/2000/2000server/XP/server 2003, Macintosh

Computer Networking: Website development, File servers, Applications servers, Terminal servers

Applications: Terminal Services/Remote Desktop, Word, Excel, Access, PowerPoint, Photoshop, Illustrator, InDesign, Dreamweaver, AutoCAD

Training: OSHA Laboratory Standard

O R G A N I Z A T I O N S

Soil & Water Conservation Society

- President, Iowa State University Chapter, 2002
- Co-Adviser, Iowa State University Chapter, 2003-Present

Boy Scouts of America

- Volunteer: Trainer, Event Organizer, and Youth Adviser

H O N O R S & A C T I V I T I E S

Eagle Scout, Boy Scouts of America

Vigil Honor, Boy Scouts of America's National Honor Society

Founder's Award, Boy Scouts of America's National Honor Society

Zoning Board of Adjustments, City of Ames, Iowa

Senator, Government of the Student Body, Iowa State University

Research Assistantship, Iowa State University

Dean's List

Iowa State University Teaching Excellence Award

Donald A. Williams Soil Conservation Scholarship, Soil & Water Conservation Society