

**Jeff Brasher, Ph.D.**

2207 Sheridan St., Laramie, WY 82070  
cell: 307-399-2803  
email: [jeff.brasher@sbcglobal.net](mailto:jeff.brasher@sbcglobal.net)

**SUMMARY**

I have a Ph.D. focused on biology of plants. My training is for research and teaching at a university but with my current job I use this background to effectively communicate well-studied decisions about land and natural resource management in the mining industry. I have an array of science-related knowledge and skills that I enjoy putting to use for my employer.

**EDUCATION**

- Wyoming Pesticide Applicator Licenses, 2007-2014
- Ph.D. Biological Education, University of Northern Colorado, Greeley, 2006
- Ph.D. Program: Plant Biology, Arizona State University, Tempe, 1996-2002
- M.S. Botany, Brigham Young University, 1996
- B.S. Botany/Biotechnology, Brigham Young University, Provo, 1995

**SCIENTIFIC CONTRIBUTIONS**

- Peer-reviewed paper publications numbering 12
- Invited presentations numbering 13

**PROFESSIONAL EXPERIENCE**

**QUARRY TECHNICIAN/ BOTANIST**

*Mountain Cement Company (subsidiary of Eagle Materials), 2008 – present*

**FAVORITE ACCOMPLISHMENTS**

Using GPS and GIS I mapped Noxious Weed infestations of high control priority for minimizing regulatory compliance costs. I applied principles of Early Detection and Rapid Response to develop and implement an Integrated Weed Management Plan. The top priority for control is an infestation with a high potential for wide dispersal by earth-moving equipment. Its eradication plan has resulted in an apparent population reduction of 70% over three years with zero documented spread.

I planned, conducted, wrote, submitted, and revised a Vegetation Inventory and a Re-vegetation Plan for a WY DEQ-LQD Mining Permit expansion. The land area for this permit is twice as big as any in company history and these permit documents are being held to higher standards than any in company history. The documents address biological and political issues much more challenging than the company's previous permits.

I led the effort to de-water a quarry pit for a mining campaign, accomplishing de-watering in about 25% of the time taken in the prior campaign. This has allowed the current campaign to be on schedule to be twice as productive as the last campaign within the 9-month window of opportunity allowed by legal agreements.

**OTHER WORK**

- environmental permitting
- regulatory compliance
- land management
- vegetation studies for mine permit expansions and revegetation bond release
- revegetation
- mine equipment operation

### **INSTITUTE FACULTY FELLOW**

*University of Wyoming - Summer High School Institute, Jun 2008*

- Developed & Taught Course entitled: "Discover the Secrets of Life: Come do Biological Research"
- Selected based on competitive application process including course proposal

### **POSTDOCTORAL ASSOCIATE**

*Wyoming Geographic Information Science Center (WyGIS), Univ. of WY., July – Nov. 2008*

I successfully led vegetation mapping crews comprising about 15 people in a large season-long field data collection campaign all over Wyoming.

### **ASSISTANT RESEARCH SCIENTIST – WEED SCIENCE PLANT TAXONOMIST**

*Univ. of Wyoming Cooperative Extension Service and Dept. of Plant Sciences, 2006-2008*

Conducted various research, writing, and teaching efforts pertaining to Noxious weeds & look-alikes

**FAVORITE ACCOMPLISHMENT:** I co-authored a Risk Assessment Ranking of invasive weeds for Wyoming. This included species that could become as problematic as those currently on the Wyoming Designated Noxious Weeds List.

### **GRADUATE RESEARCH ASSISTANT – BOTANY**

*Univ. of Northern Colorado – School of Biological Sciences, 2002-2006*

**FAVORITE ACCOMPLISHMENT:** I re-organized the University of Northern Colorado Herbarium of over 15,000 specimens to better serve research and teaching. To facilitate comparisons of related plants I repositioned the alphabetically arranged families of Angiosperms according to an Angiosperm Phylogeny Group phylogenetic arrangement. Within a family the genera and species remained alphabetical but nomenclature was updated according to a current species checklist. For better accessibility specimens were placed in new folders representing geographic categories.

### **ADJUNCT FACULTY**

*Chandler-Gilbert Community College (CGCC), 1999-2001*

Sole instructor:

- Biology 181 – General Biology I (for majors), 2<sup>nd</sup> Summer Session 1999
- Biology 100 – Biology Concepts (for non-majors), 1<sup>st</sup> Summer Session 2000, 2001

### **GRADUATE TEACHING & RESEARCH ASSISTANT**

*Arizona State University, Department of Plant Biology, 1996-2002*

By semester served as TA for various biology courses or RA for Arizona plant taxonomy research

### **FURTHER INFORMATION**

- Linked-In Profile 100% complete: [www.linkedin.com/in/jeffbrasher](http://www.linkedin.com/in/jeffbrasher)
- Full CV (18 pages) available on request