

Ellen D. Furness

Summary of Qualifications

- **Biologist research experience**
 - Working on projects involving surveying, mapping, and monitoring of habitat and natural resources.
- **Masters Degree of Science, GIS**, Geography Department at the University of Denver.
- **ArcGIS**
 - Continued education of successive GIS courses at University of Colorado, Boulder.
 - Graduate project study of Three-toed woodpecker in old growth forests of the Colorado Rocky Mountains, repopulation after forest fires.
- **Goal** is to advance as a biologist working in natural resource management and conservation of essential species.

-- Professional Experience --

Biologist, National Park Service, Air Resources Division *2005-2009*

- Compiling GIS maps, reports and documents for the Air Resources Division.
- Assisted Chief Biologist in compilation of air pollution research in National Parks.
- Assisted Webmaster in the design, maintenance, and conversion of the Air Resources Division websites to XHTML using Adobe Dreamweaver/ColdFusion.

GIS/Forestry Technician, Pikes Peak National Forest *2000-2001*

- Used aerial photographs and stereography to interpret major vegetation and forest types for Pike National Forest watersheds, primarily Turkey Creek watershed.
- Digitized heterogeneous vegetation polygons onto Digital Ortho Quads (DOQ's) using GIS Arc Info/Arc Edit Tools. Set up Arc Info coverages – watershed/riparian/vegetation for final maps.
- Collected Region 2 CSE Common Stand Exams and other surveys to verify digitized vegetation maps.

BAER Team Technical Specialist/Project Leader, Colorado, various posts, *2001*

- Burned Area Emergency Rehabilitation (BAER) projects in watershed assessment of burned areas, aerial reconnaissance by helicopter, topographic mapping of treatment sites and hydrophobicity soil testing.
- As Project Leader and BAER Team Trainee, led technicians in conducting rehabilitation treatment plans that contributed to Final Burned Area Rehabilitation Reports.

--Additional Experience--

Volunteer, Boulder Flood Relief, website/blog and office work 2013-2014

Website Contractor for Geology Department, Colorado College 2003-2007

- Responsible for the design and maintenance of Geology Department and Professors' websites and Integrated Solid Earth Sciences (ISES) Antarctica website.

Volunteer for Conservation Treaty Support Fund for CITES

- Convention on International Trade of Endangered Species, Traffic/World Wildlife Fund, 1990-1995
- Production Assistant for Kamchatka Wildlife Documentary 1998-2000

-- Education --

M.S. Masters of Science in GIS, University of Denver, Geography Department, 2006

- Graduate Teaching Assistantship and graduate projects in Geographic Information Systems.

M.S Masters of Science, Population Biology at University of Colorado, Boulder, 1994

- Graduate teaching assistantship.
Master's Thesis Paper: *Conservation of Psittacine Parrot Species in a Park System*.
- Independent research of Northern Red-shafted Flickers (*Colaptes auratus*) including monitoring of nesting pairs for daily activity levels, foraging behavior and use of feeding sites.
- Research Assistant at La Selva Research Station, Costa Rica (summer 1993): Group project and research of individual versus group foraging for the *Paraponia* ant.

B.A. Biology, Colorado College, 1989

- Behavioral Ecology of Mammals, 1987. Wilderness Field Station in Ely, Minnesota (BWCA).
- Worked at the National Institutes of Health genetic research project