

# Ellen D. Furness

GIS Analyst, Web Developer, Biologist

## Resume

### Skills

ArcGIS Suite, Janus

Biological Research

Web Development

### Hobby/Interest

Snowshoeing

Hiking alleys with my dog

Working on my REACT Portfolio

Watching PBS documentaries

Continuous Learning -- GIS, Web

- **University of Denver, Full-Stack Web Development**
  - **Projects:** Bike station App using JavaScript Web API
    - <https://github.com/bward3/spokes-people.git>
  - **Portfolio:** <https://efurness.github.io/ellen-s-react-portfolio/>
- **Biologist research experience:** Working on projects involving surveying, mapping, and monitoring of ecological resources.
- **Master's Degree of Science, GIS, University of Denver.**
- **ESRI ArcGIS suite.** Graduate project mapping study of Three-toed woodpecker in old growth forests, Rocky Mountains

## Work History

2023-03  
- present

### Associate GIS/Geospatial Analyst

*CACI International, Fort Collins*

- Collected, compiled or integrated Geographic Information Systems (GIS) data, remote sensing and orthoimagery
- Analyzed still and motion imagery and data

### Biologist, Website Developer, GIS, 2010

*National Park Service, Air Resources Division, Lakewood, CO*

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

### GIS Technician, 2001

*US Forest Service, Pikes Peak National Forest*

- Used aerial photographs, Digital Ortho Quads, Orthoimagery to interpret major vegetation/forest types
  - Turkey Creek watershed
  - Digitized heterogeneous vegetation polygons onto DOQ's GIS Info/Arc Edit Tools
  - Set up Arc Info coverages watershed/riparian/vegetation for final maps
- Collected, verified digitized vegetation maps.
  - Region 2 CSE Common Stand Exams

### BAER Team Technical Specialist/Project Leader, 2000

*US Forest Service*

- 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
- Received certificate for BAER work called Above and Beyond
- As Project Leader and BAER Team Trainee, led technicians in conducting rehabilitation treatment plans that contributed to Final Burned Area Rehabilitation Reports

### Website maintenance and design, 2009

*Colorado College*

- Website developer, design and maintenance of
  - Geology Department and Professors' websites.
  - Integrated Solid Earth Sciences (ISES) Antarctica website
- Provided front-end website development using Dreamweaver nand other editing software.

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## Education

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2022-02

**Full-stack Web Development, Bootcamp**

*University of Denver*

**GIS, Geographic Information Systems, M.S. Masters of Science, 2006**

*University of Denver*

Graduate Teaching Assistantship

**Population Biology, M.S Masters of Science, 1995**

*University of Colorado, Boulder*

**Biology, B.A., 1989**

*Colorado College*

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

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## Volunteering

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Boulder Flood Relief 2013-2014

Production Assistant for Kamchatka Wildlife Documentary

Volunteer for Conservation Treaty Support Fund supporting

- CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

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## Certificates

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**Full-stack Web Development, University of Denver**

**Burned Area Emergency Rehabilitation, US Forest Service**

**Above and Beyond award, US Forest Service**