

# ELLEN D. FURNESS

- **ESRI ArcGIS suite:** ArcGIS Pro, ArcCatalog/ArcMap, Spatial Analyst, Learning Python for Arc Pro
- **Biologist -- Researcher, Project Management/Monitoring of ecological resources.**
- **University of Denver, Full-Stack Web Development**
  - **Projects:** Bike station App using JavaScript Web API, <https://github.com/bward3/spokes-people>
  - **REACT APP**
  - **Story Map (ArcGIS)**  
<https://storymaps.arcgis.com/stories/32404e9d37564136bb64c1cfc354d9a2>

--Organized and dependable candidate successful at managing multiple priorities with a positive attitude. Willingness to take on added responsibilities to meet team goals.

## WORK HISTORY

### ■ **Biologist, Web 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.
- Created GIS maps, reports and documents.
- Assisted Chief Biologist in analysis of air pollution in National Parks

### ■ **Website Builder, 2009**

COLORADO COLLEGE

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

### ■ **GIS Technician, 2001**

US FOREST SERVICE, PIKES PEAK NATIONAL FOREST

- Combined the use of aerial photographs, Digital Ortho Quads, Orthoimagery to interpret major vegetation/forest types for the Turkey Creek watershed
- Use of GIS ArcInfo and ArcEdit Tools to digitize heterogeneous vegetation polygons onto DOQ's.
  - Set up ArcInfo watershed/riparian/vegetation coverages
- Verified final vegetation maps, conducting Region 2 CSE's

### ■ **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.
- As Project Leader and BAER Team Trainee, led technicians in conducting rehabilitation treatment plans that contributed to Final Burned Area Rehabilitation Reports.

## EDUCATION

### ■ **Full-stack Web Development, Bootcamp, 2022**

UNIVERSITY OF DENVER

2022-02

### ■ **ArcGIS modeling, spatial analyst, Graduate level**

UNIVERSITY OF COLORADO, CONTINUING EDUCATION, BOULDER

<https://www.colorado.edu/geography/>

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

UNIVERSITY OF DENVER

Graduate Teaching Assistantship. GIS graduate projects.

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

UNIVERSITY OF COLORADO, BOULDER

Graduate teaching assistantship.

Master's Thesis Paper

- ◦ Conservation of Psittacine Species in a Park System.

Independent research of Northern Red-shafted Flickers (*Colaptes auratus*).

- ◦ monitoring of nesting pairs for daily activity levels, foraging behavior and use of feeding sites.

Research Assistant, La Selva Research Station, Costa Rica

- ◦ Group project of individual versus group foraging for the *Paraponia* ant.

## ■ **Biology, B.A., 1989**

COLORADO COLLEGE

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

## SKILLS

- Training -- Associate Geospatial Analyst, Janus geography
- ArcGIS suite
- Full-Stack Web Development, VS Code, GitHub
- Biologist training

## HOBBY/INTEREST

Snowshoeing and cycling

Hiking with my dog

Advanced learning for GIS, Web and Python/JavaScript

## VOLUNTEERING

### ■ **Boulder Flood Relief**

OFFICE WORK

### ■ **Kamchatka Wildlife Documentary**

PRODUCTION ASSISTANT

### ■ **Conservation Treaty Support Fund**

DOCUMENTS

### ■ **Defenders of Wildlife, World Wildlife Fund, TRAFFIC**

RESEARCH ASSISTANT

## AWARDS

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

## CERTIFICATES

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

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