# 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*
  - **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
- o Conservation of Psittacine Species in a Park System.

Independent research of Northern Red-shafted Flickers (Colaptes auratus).
- o monitoring of nesting pairs for daily activity levels, foraging behavior and use of feeding sites.

Research Assistant, La Selva Research Station, Costa Rica
- o 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**