

# ELLEN D. FURNESS

- **ESRI ArcGIS suite:** Arc Catalog/Map, Spatial Analyst
- **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.

## WORK HISTORY

### ■ Training -- Geospatial Analyst

CACI INTERNATIONAL, FORT COLLINS, CO

2023-03 - PRESENT

- Training in geospatial data and analysis.
- Janus geograpy

### ■ Biologist, Web Builder, 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

### ■ GIS, 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

- ArcGIS Suite, ArcGIS Pro
- Biological Research
- Web Development

## HOBBY/INTEREST

Snowshoeing and cycling

Hiking with my dog

## VOLUNTEERING

- - Boulder Flood Relief 2013-2014
  - Production Assistant for Kamchatka Wildlife Documentary
  - Defenders of Wildlife
  - Volunteer for Conservation Treaty Support Fund supporting
    - CITES, World Wildlife Fund, TRAFFIC

## AWARDS

- Above and Beyond, US Forest Service

## CERTIFICATES

- Full-stack Web Development, University of Denver
- Burned Area Emergency Rehabilitation, US Forest Service