

ELLEN D. FURNESS

- **ESRI ArcGIS suite:** ArcCatalog/Map, Spatial Analyst
- **University of Denver, Full-Stack Web Development**
 - **Projects:** Bike station App using JavaScript Web API, <https://github.com/bward3/spokes-people>
 - **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

■ 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 Spatial Analysis, Map Building, Modeling

UNIVERSITY OF COLORADO, CONTINUING EDUCATION

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

■ 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

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

HOBBY/INTEREST

Snowshoeing and cycling

Hiking with my dog

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