Capstone Data Analysis Project – Preliminary Data Analysis
Biostatistics

Name: Aidan Fauth Score = 24 /25

Submitted on time? (●) Y ( ) N

GENERAL REQUIREMENTS (10 POINTS):

Element	Points	Score	Feedback
Effective git/GitHub	1	1	
Well-organized	1	1	
Strong commentary outside of code chunks	3	3	
Effective use of comments within code chunks	2	2	
Code provides correct values and reduces "human intervention"	2	2	
Link on Canvas	1	1	

STATISTICAL ANALYSES (15 POINTS):

☑ Took initiative to learn new methods as appropriate

☑ Generally followed the our workflow:

Plot -> Guess -> Create model -> Check assumptions -> Interpret -> Final plot

Statistical analysis 1:

Question: What variables best predict salamander abundance

Workflow checklist

☐ 1. Plot data

☐ 2. Guess relationships

☑ 3. Create model: poisson glm

☑ Correct model?

☑ 4. Check model assumptions, if needed

☐ 6. Replot

☑ 5. Interpret model

☑ Interpretation is correct

☑ 7. Clear results statement

☑ In prose

☑ Outside of code chunk

Statistical analysis 2:

Question: What vars are best predictors of salamander occupancy?

Workflow checklist

- [ ] 1. Plot data
- [ ] 2. Guess relationships
- [x] 3. Create model: logistic regression, stepwise and best subsets
  - [x] Correct model?
- [x] 4. Check model assumptions, if needed
- [ ] 6. Replot
- [x] 5. Interpret model
  - [ ] Interpretation is correct
- [x] 7. Clear results statement
  - [x] In prose
  - [x] Outside of code chunk

Statistical analysis 3:

Question: What does salamander community structure look like in the transitional and mature forest?

Workflow checklist

- [x] 1. Plot data
- [ ] 2. Guess relationships
- [ ] 3. Create model: _____
  - [ ] Correct model?
- [ ] 4. Check model assumptions, if needed
- [ ] 6. Replot
- [ ] 5. Interpret model
  - [ ] Interpretation is correct
- [ ] 7. Clear results statement
  - [ ] In prose
  - [ ] Outside of code chunk

Additional feedback

This is off to a great start and I appreciate how thorough you were with your multiple regressions. Take a look at some of my code for multiple and for logistic regression in the Cap-DAP-Examples project as you read through my comments.

Let me know if you need any help with the ordination.

I dinged you 1 point for not having some plots for visualizing likely relationships, but overall this is a great job!

see preliminary-data-analysis-feedback.qmd for more details.