Capstone Data Analysis Project – Preliminary Data Analysis
Biostatistics

Name: Andrew Bazuro Score = 21.5 /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	0	None
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 is the effect of different habitat types on Mg, Na, Fe and K?

Workflow checklist

☑ 1. Plot data

☑ 2. Guess relationships

☑ 3. Create model: 2-way ANOVA

☑ Correct model?

☑ 4. Check model assumptions, if needed

☑ 5. Interpret model

☑ Interpretation is correct

☑ 6. Replot

☑ 7. Clear results statement

☑ In prose

☑ Outside of code chunk

Statistical analysis 2:

Question: Is there a signficiant relationship b/w dissolved oxygen and element concentration in the water?

Workflow checklist

- [x] 1. Plot data
- [ ] 2. Guess relationships
- [x] 3. Create model: linear regression (should really be ANCOVA or focus on single element)
  - [ ] Correct model?
- [x] 4. Check model assumptions, if needed
- [x] 5. Interpret model
  - [x] Interpretation is correct
- [x] 6. Replot
- [x] 7. Clear results statement
  - [x] In prose
  - [x] Outside of code chunk

Statistical analysis 3:

Question: _____

Workflow checklist

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

Additional feedback

You're on the right track. There are quite a few issues to contend with, but this was a thorough first effort!