The Beef Simulation Report: Writing Scientific Reports

Fernando Sánchez and Ellery Sills ANSC 311 Fall 2014

Outline for Today's Presentation

- General definition of reports
- Some guidelines for report writing
- Breakdown of the parts of the report

Some Key Guidelines for Report Writing: Part One

- Do not use first person pronouns
 - "I found"
 - "The graph shows how we..."
- Use study and data as subject
 - "This study" + verb
 - "The data show" (data is plural)
- Introduce all abbreviations in the abstract
 - Example: Expected Progeny Difference (EPD)
- Contextualize graphs and tables
 - Integrate them into the text or...
 - Include them in appendices and direct your reader to those appendices

Parts of the Report: Title Page

Running Head: BEEF SIMULATION

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Beef Simulation Report

Elizabeth Angeli

Animal Science 311: Animal Breeding

October 20, 2010

Parts of the Report: Abstract

- In up to 250 words,
 - Provide some context for your study
 - Discuss the purpose of the study
 - Briefly overview your methods
 - Describe the results (e.g., The results show an increase in yearling weight of 40.02kg.)
- Think about your search for an academic article.

Parts of the Report: Abstract

BEEF SIMULATION

2

Abstract

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Donec venenatis pharetra luctus. Donec aliquet nulla nec mauris pellentesque quis porta diam ullamcorper. Sed massa nunc, elementum id eleifend sit amet, varius vitae nibh. Vestibulum viverra pharetra tortor vel suscipit. Etiam dictum, libero nec fringilla gravida, quam ligula bibendum urna, sit amet sollicitudin est ipsum at augue. Duis a cursus turpis. In vitae neque orci, ut elementum diam. In hac habitasse platea dictumst. Sed dictum ante sit amet enim venenatis eleifend. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Nunc dignissim massa at sem dignissim vel laoreet purus auctor. Etiam a felis eu dolor consequat molestie ac a metus. Aenean eget lacus tortor. Aliquam sed lacus enim, sed imperdiet massa. Aenean sem risus, sodales at laoreet vel, aliquet eget tellus. Etiam neque odio, commodo ac consectetur ut, molestie vehicula metus. Nam sit amet nisl non ligula pretium ultricies. Suspendisse a nisi ipsum. Cras a turpis ac nisl lacinia interdum id a libero.

Parts of the Report: Introduction

- In one or two paragraphs:
 - Discuss the purpose of the study
 - Provide some context for your study
 - Provide a preview of what the rest of your report will entail (i.e., outline your report)
- Remember, the abstract is separate from the introduction. You may need to repeat some information.

Parts of the Report: Methods

- In a few paragraphs:
 - Report the steps with enough detail that your study could be replicated (e.g., describe when the program requires you to make a choice and what choice you made)
- Describe your selection strategy
 - Justify your approach
 - Include equations and formulas
- Integrity through transparency

Parts of the Report: Results and Discussion

- This is the bulk of your report.
 - Report the outcomes through text and graphs
 - Be sure to explain each graph
 - See the assignment guidelines for which graphs to include
 - Integrate your graphs into your text by including them in your report or as appendices
 - Mention the appendices in your results section
 - (see Appendix 1)

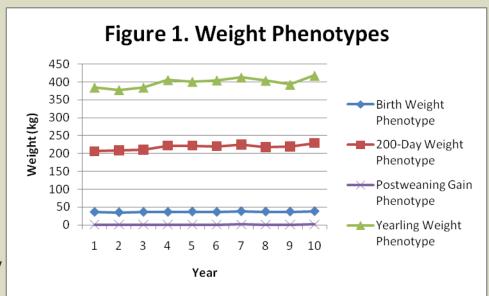
Parts of the Report: Results and Discussion (continued)

- Interpret your results and their significance.
 - "As Figure 3 illustrates, the biggest increase is shown between crop 6 and 7 where yearling weight increased from 16.24 to 31.22. The reason for this increase appears to be..."
 - "The biggest increase is shown between crop 6 and 7 where yearling weight increased from 16.24 to 31.22. (See Figure 3.) The reason for this increase appears to be..."
- Remember, the graphs are there to illustrate your text, not vice versa.

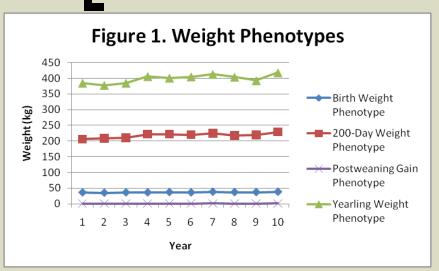
What's wrong here?

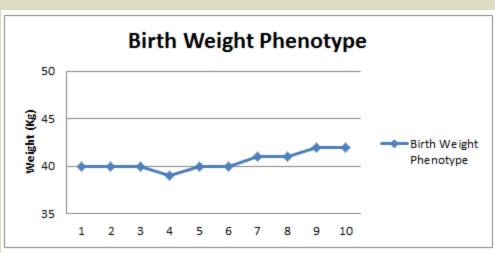
In trying to increase yearling weight, birth weight remained relatively the same between year one and year ten it only increased by two kg total (Figure 1). Two hundred day weight did increase from ### kg to ### kg between years one and ten.

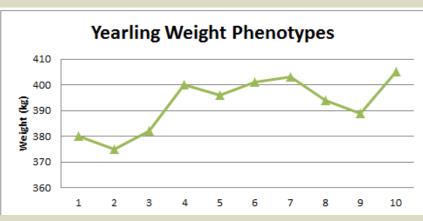
[P]ost-weaning gain did not have any change that occurred. The overall yearling weight did increase from ### to ### kg over the ten years. In comparing birth weight, ###-day weight, post-weaning gain, and yearling weight, the only measurable increase would be in the yearling weight itself.

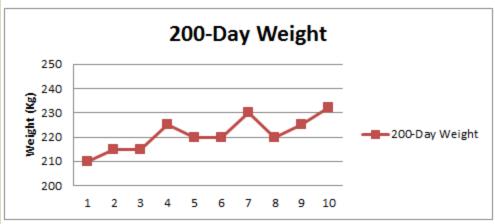


Better ways

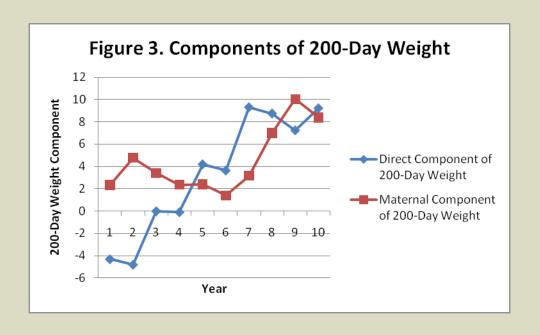








Not everything has to get its own graph



Parts of the Report: Conclusion

- In a paragraph:
 - Address whether your selection and mating schemes were successful
 - Discuss how you would change your approach if you had the opportunity

Report Submission

Last Names A-K:
 Fernando (<u>fsanchez@purdue.edu</u>)

Last Names L-Z:Ellery (<u>esills@purdue.edu</u>)

Due Friday, November 14, 2014

For Assistance

- OWL resources on report writing & APA style
- Meet with Fernando (<u>fsanchez@purdue.edu</u>)
- Meet with Ellery (<u>esills@purdue.edu</u>)
- Final WAC night (HEAV 226)
 - Monday, November 10th at either 6pm or 7pm
- Visit the Writing Lab (HEAV 226)

Collect WAC Night Sign Ups

- Mon. Nov. 10th @ 6pm
- Mon. Nov. 10th @ 7pm