

Report Writing

Introduction

- Answers...
 - What are you doing?
 - Why are you doing it?
 - Briefly, how will you do it?
- Summarizes layout of what comes next in the report

Methods & Materials

- What material you are using to accomplish your goal (previously stated in intro.)
- What methods you will use to accomplish your goal
- Why you are using those methods

Analysis & Results

- Provides a statement of directly what was learned from the analyses you did
- Does not go into detail about the implications of results
- Generally cites tables (e.g., a frequency distribution & another summarizing stats)

Analysis & Results, cont'd

- Tables
 - Each gets its own title that is cited in the text, such as “Table 1”
 - Each table has an appropriate title above it
 - Use these judiciously, not too many tables, but enough to communicate the points you make

A “table”

Antero-posterior length and medio-lateral width (mm) of 21 upper second molars (M^2) and eighteen lower third molars (M_3) comprised the Missouri late Holocene sample from both caves (Table 3). This sample was compared graphically and statistically to a sample from the southern Midwest (predominately Arkansas, but also Kansas, Oklahoma, and Missouri) and Southeast (Alabama) of specimens from the Smithsonian Institution, Illinois State Museum, and University of Missouri reference collections (Table 3). Skeletal remains of black bears from the Midwest, particularly from Missouri, are uncommonly represented in museum and university collections because bears were extirpated in the region by 1900 AD (Parmalee and Jacobsen 1959, Schwartz and Schwartz 2001). Thus, remains from these Missouri cave faunas are an important supplement to existing collections.

Ursus 19(2):177–184 (2008)

Table 3. Descriptive and inferential statistics for black bear tooth measurements from samples collected from American black bear remains in Jerry Long and Lawson caves, Missouri.

Source Sample	<i>n</i>	Median (mm)	Mean (mm)	SD (mm)	CV (%)
Natural trap					
M^2 length	21	28.20	27.75	1.54	5.6
M^2 width	21	16.00	15.99	0.95	5.9
M_3 length	18	16.20	16.09	1.09	6.8
M_3 width	18	12.80	12.82	0.83	6.5
Modern					
M^2 length	30 ^a	26.42	26.41	1.86	7.0
M^2 width	30 ^a	15.88	15.95	1.35	8.5
M_3 length	22	15.34	15.23	1.43	9.4
M_3 width	22	12.61	12.38	1.46	11.8
Modern males					
M^2 length	14	27.86	27.83	1.18	4.2
M^2 width	14	17.51	17.02	0.91	5.4
M_3 length	11	16.06	15.89	0.92	5.8
M_3 width	11	13.19	13.21	1.11	8.4
Modern females					
M^2 length	14 ^a	25.68	25.42	1.27	5.0
M^2 width	14 ^a	15.31	15.20	0.88	5.8
M_3 length	11 ^a	14.22	14.56	1.58	10.8
M_3 width	11 ^a	11.81	11.55	1.30	11.3

^aIncludes bears of unknown sex.

Tables should be made in MS Word

Discussion

- This is where you discuss the implications of your results
- Summarize what the results mean
- Discuss why the results are important related to the project goal from introduction
- Cite “figures,” which are charts

Discussion, con'd

- Figures
 - Charts/graphs (not tables)
 - Have a figure caption below them that states what the graph conveys
 - Labeled “Figure 1” and so forth
 - Figures are maps, graphs, photos...

A “figure”

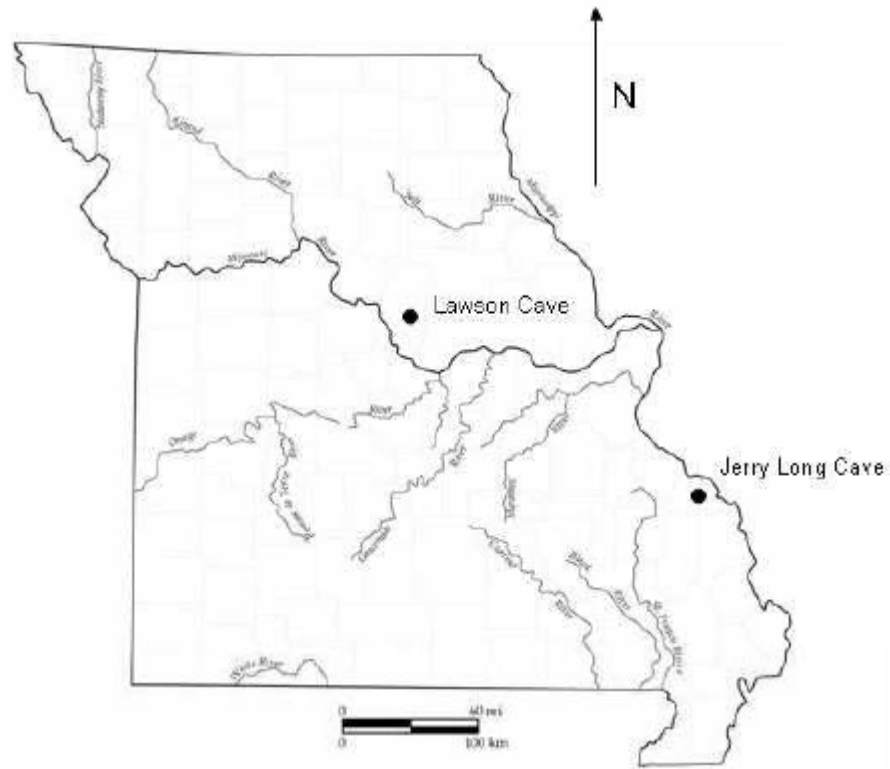


Fig. 1. Lawson Cave and Jerry Long Cave, in Missouri.

Another “figure”

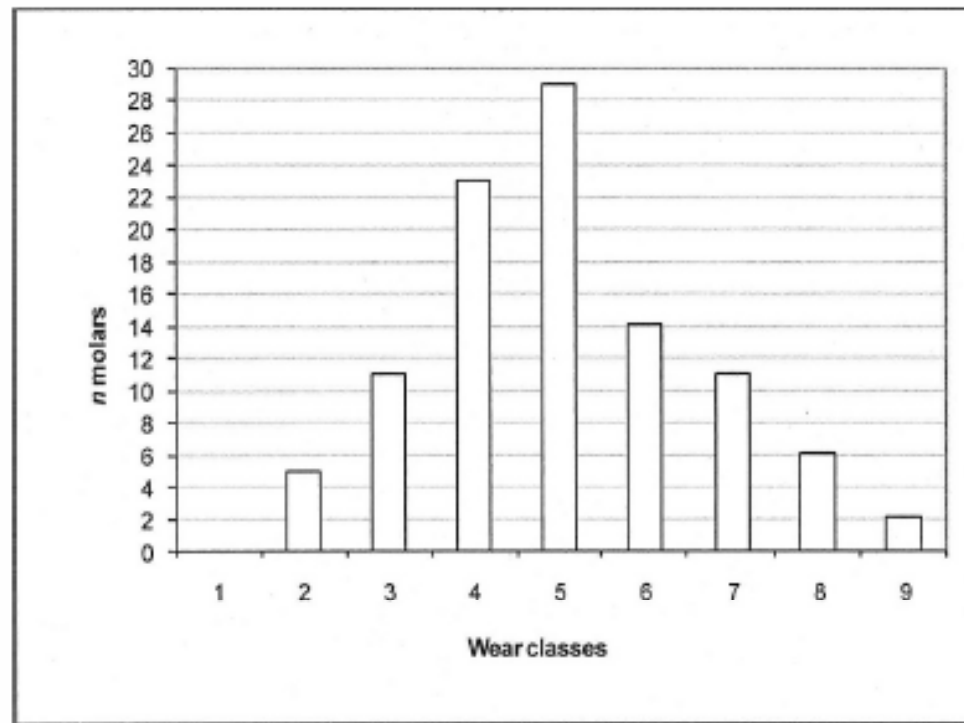


Fig. 2. Frequencies of molars in each wear class for teeth from American black bears excavated from Jerry Long and Lawson natural trap caves in Missouri. Fully erupted, unworn permanent teeth occur at the beginning of class 4.

One more “figure”

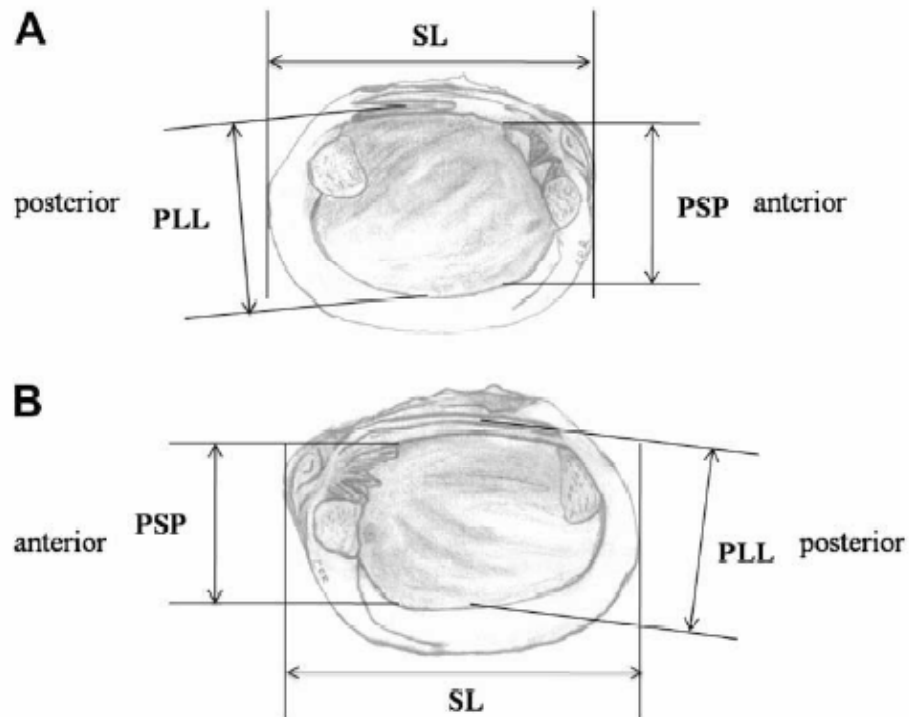


Fig. 5. (A) Left valve PLL (pallial line-to-lateral teeth length), PSP (pseudocardinal teeth-to-pallial line length), and SL (shell length) measurements for *A. plicata*, (B) right valve PLL (pallial line-to-lateral teeth length), PSP (pseudocardinal teeth-to-pallial line length) and SL (shell length) measurements for *A. plicata*.

Shell length for *P. ohiensis* and the 10 other north Texas freshwater mussel species from the Elm Fork Heritage Museum collection was measured as the greatest length between the anterior and posterior end of each articulated mussel (Fig. 5). PLL measurements were taken by determining the distance between the center of the two left lateral teeth and the pallial line. The line measured should be perpendicular to the lateral teeth, extending at an angle to the pallial line (Fig. 5A). For right valves, measurements were taken as the perpendicular line between the center of the lateral tooth and measured to the pallial line (Fig. 5B). Right and left valves from the same species were aggregated for the Lake Nocona and the archaeological case studies. Recorded measurements were then analyzed to determine if PLL is an accurate proxy for shell length.

References

- Cite any outside references that you use to support your work.

In text citation

To assess whether or not astragali of bucks or does dominate a sample, Pearson's skewness is calculated:

$$\text{Pearson's skewness} = 3(\bar{x} - \text{Median}) / s$$

Pearson's skewness varies between -3 and 3, and skewness of 0 is perfectly symmetrical (McGrew & Monroe 2000). Skewness of greater than |0.6| is sub-

References cited

- McGrew, JC & Monroe, CB 2000. *An Introduction to Statistical Problem Solving in Geography*, second edition. Boston: McGraw Hill.
- McMillan, RB & Klippel, WE 1981. Post-glacial environment change and hunter-gatherer societies of the southern prairie peninsula. *Journal of Archaeological Science* 8(3):215–245.
- McShea, WJ, Underwood, HB, & Rappole, JH (eds) 1997. *The Science of Overabundance: Deer Ecology and Population Management*. Washington, DC: Smithsonian Books.

Format

- Use one column of text
- Double spaced
- Times New Roman 11 point font
- 1 inch margins
- No title page
 - Do not use half of the first page for the title to make your report “longer”
- Use *Journal of Archaeological Science* formatting for paper, tables, figures & refs
 - **Do not** use two columns, just one

Organization

- Body of paper
 - Introduction, methods & materials, analysis & results, discussion
- References follow the body
- Tables after references: 1 table per page
- Figures follow the tables: 1 figure per page

Grading

- Follow the example paper handed out in class for organization & formatting
- Points will be deducted for
 - Unnecessary tables (unneeded extras)
 - Unnecessary figures (unneeded extras)
 - Disorganization
 - Poor citation style and format
 - Poor formatting
 - Wrong answers