

Spring, 2015

ANSC 310

TERM PROJECT

("Doing Your Own Thing")

A major requirement of the course is the term project. It will be of your own design. You are to apply some of the "book learning" to some aspect of animal behavior and management that is of interest to you. THE REPORT MUST FOCUS ON ANIMAL BEHAVIOR and INVOLVE SOME METHOD OF MEASURING OR QUANTIFYING BEHAVIOR. We encourage you to do something requiring direct contact and/or observations of live animals (farm, companion (dogs, cats) or people). Group reports are not allowed; we want to make sure that you get evaluated for your effort and not the effort of one's partner.

LEARNING OBJECTIVES

The term project should be regarded as an opportunity to:

- (1) broaden your experience with species or aspects of behavior with which you are not familiar;
- (2) familiarize yourself with the scientific literature and **LEARN TO LOOK SOMETHING UP ON A COMPUTERIZED DATA BASE;**
- (3) develop observational skills and ability to quantify behavioral data.
- (4) develop an ability to effectively describe in oral and written form what was observed;
- (5) develop an ability to integrate information from books, **SCIENTIFIC JOURNAL ARTICLES (THAT YOU FIND)**, and your own observations;
- (6) gain experience in convincing an audience that your work has merit.
- (7) develop creative thinking in planning a project that achieves all the Learning Objectives that can also be done efficiently during the semester.

Projects will not be accepted if the project causes undue stress or otherwise compromises the welfare of the subject(s). Do not do your project on something you already experienced or did.

Each person will be required to turn in a Project Proposal during class on February 6th. Your Project Proposal must have been approved by us or we will not accept it at the end of the semester. If you want help with ideas for topics, etc., make an appointment with the instructors well in advance of the topic due date. This is a "proposal" so you can change the topic anytime during the semester by turning in another Project Proposal.

The finished report will be presented to your lab section as an informal oral presentation during lab on April 21 or 22. This lab will go over the assigned time so be prepared to stay a little late!! Your written report will be due by 5 pm TWO DAYS after your assigned lab section presented their term projects. The reports will be graded and returned to students in class on April 22nd so students have time to revise and re-submit their reports, if necessary.

Students will be given the opportunity to revise and submit their assignment for re-grading to improve their grade, however, in order to encourage students to do their maximum effort for their first draft, the additional points received on the regrading will be docked by 25%. Rewritten reports must be received by Dr. Friend no later than 5 pm, Tuesday, May 5th for re-grading.

FOLLOWING THESE DIRECTIONS IS A REQUIREMENT SO SAVE THIS GUIDE AND USE IT!!

GUIDELINES FOR THE REPORT

The oral presentation of your project will be made in the classroom during your regular laboratory period. Each student will make an approximately 7-minute presentation of their project to the rest of the students in the lab section. There will then be a 3-minute question period. Each presentation will be timed, so do not go over the time limit. **ALL PRESENTATIONS WILL USE POWERPOINT.** All students need to get familiar with setting up PowerPoint presentations. You may also use additional aids such as transparencies, slides and/or video tape. The presentations will be informal, but you should have it well thought out and organized before you start the presentation. All tables and drawings should be large enough for the group to see. You should also practice your presentation out loud several times to ensure it does not exceed the time limit. Your oral presentation should be organized similarly to your written report. All of the other students in a lab section will “peer evaluate” each presentation to provide suggestions on improving presentations skills and the written report. The quality of each peer evaluation will be graded.

You will also be required to turn in the typed written report one day after your oral presentation. There is no length requirement, but reports typically range from 6 to 10 pages. The written report should be double spaced. The written report, as well as your presentation, should contain at least the following sections, and use them as sub headings.

- 1) Introduction (Set the stage for what you did, which usually includes citing some related studies, and tell why you chose the topic.)
- 2) Procedure (Describe what you did, give lots of details.)
- 3) Results (Include tables or plots of your data and a written presentation of the results, be sure to refer to your table or plots as you present them in the written portion)
- 4) Discussion (This is where you also do most of your citing and discussion of other studies related to your project, limitations of your research, what you might change next time, etc. Give possible reasons for your results.)
- 5) Literature Cited (Anything you list must be cited in the text of your report.)

Correct English and following the required format is a requirement. If you are weak in English, have someone proof your presentation before it is due, contact the University Writing Center, or take advantage of the early evaluation option. See the example on the course web site.

Avoid vague terms and especially avoid assumptions about what an animal is thinking or feeling. Instead, describe behavior in a manner that will give people a visual image of what the animal looks like when performing that behavior, as you did for the “written description of behavior” assignment earlier in the semester.

Example: Don't say "the cow got mad". Instead, describe her behavior: "the cow lowered her head, stared at the observer, and began pawing vigorously."

All Discussions should relate your findings to what other people have observed. Although the actual number of references a person should discuss in the Discussion depends on the type of project, everyone should include at least two citations, or include documentation of the thorough literature search you conducted.

Literature must be cited in the text following the style used in the Journal of Animal Science – do not simply save your citations in a common format that is available to you electronically. Look at any article in the journal for an example of the format or you can get detailed instructions from the Journal of Animal Science website. <http://www.animal-science.org/site/misc/JAS-InstructionsToAuthors.pdf> Some examples follow:

Upon release from close confinement, 6 week old calves will typically show greatly increased motor behavior (Dellmeier et al., 1985). Brownlee (1954) described similar behavioral sequences in calves maintained in small box stalls. Such stereotyped behavior has been attributed to hypostimulation and the thwarting of drive motivated behaviors (Keiper and Smith, 1969; Lorenz, 1981; Wood-Gush, 1973). However, Homann (2014) disagreed citing situations when.....

Literature should be cited at the end of the presentation in alphabetical order following these examples. The term “et al.” means “and others”, and is used in the text when citing an article with more than two authors (Dellmeier example above). If an article has two authors, you list both of them in the text. List all authors in the Literature Cited.

Literature Cited

- Brownlee, A. 1954. Play in domestic cattle in Britain: An analysis of its nature. Brit. Vet. J. 110:48-52.
- Dellmeier, G. R., T. H. Friend and E. E. Gbur. 1985. Comparison of four methods of calf confinement. II. Behavior. J. Anim. Sci. 60:1102-1108.
- Homann, E. 2014. Personal communication. Manager of the Smithville, TX, National Hog Farmers Cooperative Farm. [this is an example of how to cite an interview]
- Keiper, R. R. and J. R. Smith. 1969. Causal factors of stereotypies in caged birds. Anim. Behav. 17:114-116.
- Lorenz, K. 1981. The Foundations of Ethology. Springer-Verlag, New York, N.Y. [this is an example of how to cite a book]

When citing electronic sources, use the following format. BUT if you are citing a journal article, be sure to keep the journal's name in the citation, and then the "doi" number.

FDA. 2001. Effect of the use of antimicrobials in food-producing animals on pathogen load: Systematic review of the published literature. <http://www.fda.gov/cvm/antimicrobial/PathRpt.PDF> Accessed Dec. 14, 2011.

Huntington, G. B., D. L. Harmon, N. B. Kristensen, K. C. Hanson, and J. W. Spears. 2006. Effects of a slow-release urea source on absorption of ammonia and endogenous production of urea by cattle. *Anim. Feed Sci. Technol.*
doi:10.1016/j.anifeedsci.2006.01.012

Le Neindre, P., C. Terlouw, X. Boivin, A. Boissy, and J. Lensink. 2001. Behavioral research and its application to livestock transport and policy: A European perspective. *J. Anim. Sci.* 79(E-Suppl.) <http://www.asas.org/jas/jas0905.pdf> Accessed Oct. 7, 2011.

Figures and Tables must be numbered and have a descriptive title that explains what is in the Figure or Table. The title is located above Tables, and located below Figures. Any Tables and Figures that you include in your report must be cited and discussed in your text. An example of the required format of a Table and a Figure follow.

Table 1. Mean percentage of horses active in each compartment during 90-min rest stops for Shipment One.

Stop	Front compartment	Center compartment	Rear compartment	Combined mean
1	37.8 ± 6.0	48.0 ± 4.8	30.7 ± 5.6	38.8 ± 3.3
2	14.7 ± 2.6	30.8 ± 3.0	19.7 ± 3.2	21.7 ± 1.9
3	30.3 ± 4.0	37.0 ± 3.7	20.5 ± 2.5	29.3 ± 2.2

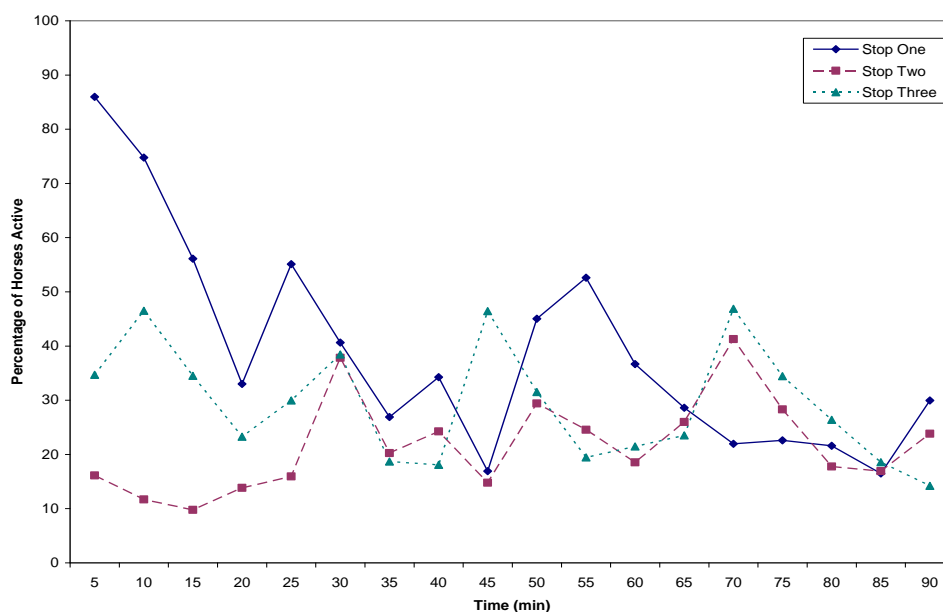


Figure 1. Activity (percentage of horses that were scored "active" in each compartment) at 5-min intervals during the 90-min rest stops for Shipment One.

An example of how to cite your Figures and Tables for the Results section in the text follows:

“The horses in the front compartment were the least active during the second rest stop (Table 1). There was a pronounced trend for the horses to be most active at the start of the first rest stop, but the horses were relatively consistent during the second and third rest stops (Figure 1).”

Again, the Discussion section is where you then give possible reasons for the results you obtained. For this example, you could explain that the horses were probably getting tired, so they spent most of the second and third rest stops actually resting. You then cite and explain the results of any other similar studies that relate to your study.

EARLY EVALUATION OPTION

You may submit your completed (or near completed) written summary to us early and we will go over it and make suggestions on how to improve your presentation/project. If you do submit it several days early, we will give it back to you with our comments in time for you to make changes and turn it in with the rest of the class. If you incorporate our suggestions, your final grade will obviously improve.

TO GET HELP WITH ENGLISH: CONTACT THE UNIVERSITY WRITING CENTER

The University Writing Center (UWC), located in Evans Library 1.214, offers help to writers at any stage of the writing process including brainstorming, researching, drafting, documenting, revising, and more; no writing concern is too large or too small. These consultations are highly recommended but are not required. While the UWC consultants will not proofread or edit your papers, they will help you improve your proofreading and editing skills. If you visit the UWC, take a copy of your writing assignment, a hard copy of your draft or any notes you may have, as well as any material you need help with. To find out more about UWC services or to schedule an appointment, call 458-1455, visit the web page at uwc.tamu.edu, or stop by in person.

SOME IDEAS ON TYPES OF PROJECTS

Half of the first laboratory of the semester will be spent showing students examples of written reports from prior semesters and discussing the general format of the report. Most of the second laboratory of the semester will be dedicated to touring University facilities that house animals, and discussing types of projects that could be appropriate. Students will also gain experience collecting behavioral data (both written descriptions and plots) from sheep, pigs and/or cattle.

Students may use sheep, pigs, fire ants, fish, horses, people, companion animals, or any other species. But remember, the 1st objective of this project is to gain experience with some aspect of animal behavior with which you have little experience. You should not, for example, do your project on the behavior of your dog during its daily trip to the dog park, the behavior of your horses when doing their routine feeding, or the grazing patterns of your own small herd of cattle.

Computer Literature Searches

The TAMU Library has a new web page that should make conducting literature searches from home or on campus much easier. If you live some distance from campus, you may have difficulty getting into the Library data bases. In that case, use a computer that is on campus.

Go to the A&M web page, click on libraries,(<http://library.tamu.edu/>) under Indexes and Databases, type in “Worldcat”, which allows you to use “edocs” for delivery of the document. You can also click on Indexes/Databases and find AGRICOLA or CAB and search those data bases. AGRICOLA is the National Agricultural Library holdings – the largest library in the world. CAB is the largest data base on animal and veterinary science, and goes back to 1917. PubMed is also a useful data base: <http://www.ncbi.nlm.nih.gov/entrez/> Other data bases can also work, but you will need scientific literature for this term project. Do not use web pages as your only references, published studies have been reviewed to make sure they are credible, web pages can be a total fabrication.

If you happened to have picked a topic on which you cannot find any useful literature or references, a lack of references will not lower your grade as long as you provide convincing proof that you conducted a thorough search. Printing the page that shows the key words you used and the name of the databases you searched is a good method of documenting your effort. Don't limit your key words to just one species or use too narrow a search. This is a link to a guide to our library resources prepared by a librarian just for this course: <http://guides.library.tamu.edu/aecontent.php?pid=260974>

In order to encourage students to use these systems and search the literature, a copy of the print-out of the search you ran on your project will be required to be turned in with your Project Proposal.

Other Requirements

Your term project should be in the past tense.

Do not be too casual in style when writing up your project. You should follow a “scientific” writing style, not “creative” writing.

During your final preparation of the written report, double space it, use 12 pt font, and just use a clip on the upper left hand corner to hold it together – provided by Dr. Friend. DO NOT insert each page into a plastic sleeve, or get it bound.

No projects will cause undue pain or suffering to the animal subjects, or the project will not be accepted and the student will receive a mandatory zero. If you are not sure about what constitutes undue suffering, discuss this with the instructor. For example, if your animals are going to be branded anyway, then hot-iron branding does not count as “undue” suffering. If you buy three mice to use in your project and then flush them down the toilet when you are finished, you will need to “no grade” this course because you will have a zero on the project.

** You are also required to attach all supporting data sheets to the back of your report !! Your original field notes, plots, descriptions, surveys, etc., need to be turned in with the report. **

**THIS FORM MUST BE SUBMITTED WITH TERM PROJECT FOR THE
WRITTEN PROJECT TO BE ACCEPTED!!
(as turned in on time)**

CHECK EACH LINE AND SIGN BOTTOM OF FORM

- _____ (1) This project fits the requirement of broadening my experience with species or aspects of behavior with which I was not familiar.
- _____ (2) I conducted a thorough search of the scientific literature. I know that simply Googling the subject does not count and I have asked for help if I had problems finding literature.
- _____ (3) I quantified my behavioral observations or data as required.
- _____ (4) I re-read and corrected my written report so my English is perfect.
- _____ (5) I compared what I found (or did not find) with information from books and SCIENTIFIC JOURNAL ARTICLES (THAT I FOUND).
- _____ (6) My project report consists of at least the following sections with titles for each section:
- 1) Introduction and justification (why you chose the topic and discuss and cite any related studies to set the stage for what you did)
 - 2) Procedure (what you did, give lots of details)
 - 3) Results (present your results, include a written description along with tables or plots of your data)
 - 4) Discussion (discuss your results, how your results compare with other studies, problems you encountered, possible improvements, etc.)
 - 5) Literature Cited (anything you list must be cited in the text of your report)
- _____ (7) My citations in the text and references in the literature cited are in the required Journal of Animal Science format.
- _____ (8) My project did not cause undue suffering for the animals that participated in the project.
- _____ (9) My written report is held together with a clip on the upper left corner.
- _____ (10) I attached all of my project's original field notes and data sheets with the report. Do not rewrite messy data sheets – we want your originals.

Signature: _____