

Topics in Farm Animal Environmental Physiology, Behavior, Stress, and Animal Welfare

an on-line, multi-year collaborative series

Class Syllabus

Fall, 2004

The topic for this semester is farm Animal Rights and Animal Welfare. Students will read 8 books, write an abstract for each book, participate in an on-line discussion and they will write a final exam. Abstracts are due 7 days before the class meets on that book's topic.

Grading will be performed by the faculty member at each institution. Grades will be based on the following distribution:

- 40% Participation in the discussion
- 40% Abstract quality
- 20% Final exam

The class will discuss the books on line at 7 pm on Wednesday evening (until 8 or 9 pm). The following dates will apply to each book's discussion:

1. September 29th. The Jungle. Upton Sinclair
2. October 6th. Animal Liberation. Peter Singer
3. October 13th. The case for animal rights. Tom Regan
4. October 20th. Ethics into action. Peter Singer
5. October 27th. Dominion. Matthew Scully
6. November 3rd. Slaughterhouse. Gail Eisnitz
7. November 10th. The well-being of farm animals. Benson and Rollin.
8. November 17th. General discussion

**Topics in Farm Animal Environmental Physiology, Behavior,
Stress, and Animal Welfare**

Fall 2004

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Background

The field of environmental physiology including studies of animal behavior, stress physiology and animal welfare is a diverse topic area. To work in this area requires a multi-disciplinary education and research program. Graduate students typically work in fields including, at least, animal behavior, neuroscience, immunology, endocrinology, psychology, philosophy, and statistics. Most students work in at least 2 of these fields, but to work in this area some knowledge of all areas is required.

Universities around the USA (and the world) have a few students at selected institutions that study this diverse field. Having a critical mass of students at one institution is not likely. However, a critical mass of students is found when one considers multiple institutions.

Students and faculty would benefit from interactions among the diverse fields and institutions. In addition, the burden on individual institutions to have a full program is lifted. Rather, expertise can be developed at different institutions and then the whole field can be studied by each institution's students without the limitation of local expertise. Our new virtual world associated with the internet and distance education will make this concept easy to implement.

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About the course

Initial Collaborating Institutions

Initial collaborating universities include:

- Texas Tech University

While other institutions can be added, an attempt will be made to limit the participation to less than 30 students. Getting this on-line experience too large will have a significant disadvantage towards didactic learning. If the class size gets too large, multiple sections can be added.

Course Format

The course will have a combined topics/seminar/readings format. The instructors will select a reading list that may include but are not limited to books, review articles or original research papers. The readings will include both classic literature in a given field in conjunction with current materials.

Students will meet on line on a regular basis. The meeting time may vary with semester, but it will generally be two hours per week when the class is in session. Students will be on line during this 2-hour session and they will participate in the topic to be discussed that week.

Students will write a summary of each reading assignment. They will build this summary list over time. Students will also have a mid term and final exam to write. The emphasis on the exams is on critical thinking and integration of materials.

Students will register at their home institution. They can register at one of the other collaborating institutions if they wish, but this is expected to be uncommon.

Instructor Participation

Each course will have a primary, secondary and tertiary instructor for a given semester. All instructors will participate at all levels. The primary instructor takes the lead on developing the reading list and leads the class on-line discussion. The secondary instructor writes the exams that all students take and fills in if the primary instructor is not available (ex., due to traveling schedules). The tertiary instructor participates in the discussion and fills in on line if both the primary and secondary instructors are not available. Each instructor grades their own student's exams. However, when students submit their exams, they send it to all instructors so a more complete comparison can be made among students at each institution. Primary, secondary and tertiary instructors rotate over semesters.

Each instructor assigns grades for their own students registered at their institution. Instructors will communicate about student performance.

Major Topics

The course will have major, recurring semester topics and then topics that arise out of the interests of the instructors. Major topics will include:

- Animal rights philosophy and current animal welfare perspectives

- Neuroendocrine stress mechanisms
- Environmental stressors (heat, cold, air quality, space, transportation, social stress)
- Measuring animal behavior and welfare
- Stress and immunity
- Behavioral assessments (dominance orders, anxiety, learning)

The annotated reading list for the first course is attached. The reader can see some history of the topic and they can see where we are today (as a first approximation).

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Reading List for Fall 2004

This reading list is intended to bring the reader up to speed on the history, philosophy and current politics of the animal rights movement in the USA. The books are listed in a suggested order of reading, but this order is not required. Upon completing this list of readings, you will see the breadth of criticisms leveled on animal production and processing.

One of the most interesting considerations after reading all of the below books is that people can find ways to criticize the animal industries from within their sphere of comfort. If you are a utilitarian or rights-based philosopher, or if you are politically inclined to the left or right wing, you will find people who argue that the animal industries have problems from within your philosophical or political comfort zone.

1. The Jungle. Upton Sinclair. 1906. Several publishers including Barnes & Noble Classics and Bantam Books.

This book is a classic and you may have read it in school years ago. It is well worth reading again. It outlines the state of the meat packing industry at the turn of the last century. It appeals to human emotion when animals are killed.

The story's main character is Jergis Rudkus, an Lithuanian immigrant. He gets a series of jobs in Chicago's Packingtown. You see prejudice, horrible working conditions, inhumane treatment of animals, and unsanitary conditions. Today's plants are much improved in sanitation. The working conditions are better in many ways. The manner in which animals are

stunned and bled is similar today although today's plants are much more efficient.

This book is best read shortly before you tour a modern meat packing plant. You will see some similarities and some differences between what Sinclair describes and what you will see today.

2. Animal Liberation. Peter Singer. 2002 (earlier versions in 1975 and 1990). HarperCollins Publishers, Inc. New York.

This book has a quote on the cover of the latest version that I believe is correct among activists. "A most important book that will change the way many of us look at animals - and, ultimately at ourselves." - Chicago Tribune. This will be a very important book for today and in the near future.

Singer is a modern-day philosopher who for many years was at Murdoch University in Melbourne, Australia. He moved to a faculty position at Princeton (NJ) where he remains an activist and philosopher.

Singer outlines his utilitarian view of animal 'rights' that he has made famous. His view is most famous for making his case (in one example) as follows. Say a retarded human is less intelligent than a normal chimp. On which species would you rather conduct research? Singer argues from a moral point of view that the normal chimp has more 'value' than the retarded human and thus you should chose the retarded human. If you chose the retarded human and this seems wrong to you, then of course you would not use the chimp. And the chimp is like a pig and a dog and a rat and so on. Therefore, you should not do research on any animal, especially vertebrates.

Singer takes on farm animals and other animal uses. He advocates being an ethical vegetarian and he uses pictures that are meant to inspire vegetarianism. His views are not totally agreed-upon by philosophers, but they are widely held by activists.

This book will get you started with some history, philosophy and apparent logic. It will set the framework for other readings.

3. The Case for Animal Rights. Tom Regan. 1983. University of California Press. Berkeley, CA.

This book was written as a philosophical argument with a lay-person's writing style. The most interesting aspect of this book is that Regan strongly disagrees with Singer's logic. He argues

not only is Singer wrong, but his method of analysis gives animals rights in a more definitive way.

Regan argues that animals have interests and moral claims and that they should be considered persons. If animals are not different from humans in meaningful ways, then he argues, animals should be given many of the rights we give humans, most notably the right to life. This would mean that animals could not be used for research or for food.

Regan's 'rights' view is different than Singer's 'utilitarian' view. Singer would say: do the most good. Regan would say that is fine, but you have to respect the rights of individuals along the way.

PETA adopted the Regan view of animal rights through the 1980s and 1990s. Today they use both views because Peter Singer is now on faculty at Princeton (NJ) and Regan is retired from the faculty at NC State University.

4. Ethics into Action: Henry Spira and the Animal Rights Movement. Peter Singer. 1998. Rowman & Littlefield Publishers, Inc.

This book is required reading for understanding of the modern-day history of the animal rights activist movement. It chronicles the life of Henry Spira as he moves from being a merchant marine to a union activist to meeting Singer in NYC and to his beginning in the animal rights movement. It also gives a history of Henry's interactions with companies like McDonald's. It outlines the effective strategy used by Henry to force change by pressuring the retail industry. The objective of the book is to offer a formula for other activists to be as successful as Henry was (and he certainly was successful). Henry believed that the most suffering in the world was among the billions of farmed animals (more so than research or testing).

Some things that are not spelled out in the book are the relationship between Henry Spira and PETA and Henry's failures to impact agriculture directly. Henry set up a group called Animal Rights International. This group developed strategies, raised money and conducted (and conducts) campaigns. They were not working with PETA (in my view) because Henry did not like PETA's acceptance of violence by the Animal Liberation Front. Thus, Henry suppressed PETA. When Henry died in 1998, it freed PETA to be more active and indeed to use his techniques.

Henry made some attempts to impact animal agriculture directly. He pressured agribusiness, had some minor successes, but generally did not cause change. His strategy was to move to the retail end of the production chain where he would be more effective.

5. Dominion. 2002. Matthew Scully. St. Marin's Press. NY.

Just in case you thought animal rights was a liberal left issue, Scully writes an animal welfare/rights perspective from the far right. He was an active member of the Bush Administration as a senior speech writer for President George W. Bush.

Scully takes a predominantly Biblical view of how animals should be treated. He suggests animal suffer in a number of human-dominated situations including on commercial farms. He suggests there is something 'horribly wrong' with human dominion over animals. He is particularly hard on the commercial swine industry. He reports conversations with a NC corporate hog farm (now owned by Smithfield) in an unflattering light.

This book made a moderately big splash when it was first released. It has not gotten much legs lately. However, it represents a very different point of view but with the same conclusions as Singer and Regan. Scully's web page has links to groups like Farm Sanctuary which works closely with PETA on farm animal issues.

6. Slaughterhouse: The shocking story of greed, neglect, and inhumane treatment inside the U.S. Meat Industry 1997. Gail Eisnitz. Prometheus Books. Amerherst, NY.

This book is written as an investigative reporter look at the modern-day meat packing industry. It emulated 'The Jungle' but with a modern and journalistic approach. It has not had the impact of 'The Jungle'.

This book is full of exaggerations, sensationalism and sideline issues such as food safety and environmental pollution. It paints an entirely negative image of situations that are described. The sub-title is an abstract of the book's contents.

Eisnitz's book has been touted as required reading by animal rights organizations. It is often quoted in documents and campaigns to inhibit or regulate the meat packing industries.

7. The Well-Being of Farm Animals. 2004. G. John Benson and B. E. Rollin. Blackwell Publishing. Oxford, UK.

This book is a compilation of chapters by leading authors. It is organized in two sections: Theoretical Framework and Practical Applications.

In the theoretical framework section, the chapters represent some of the views held by

authors in the field. Important questions are addressed in a partisan way including human-animal interactions, pain, the concept of welfare based on feelings, and animal handling/transportation principles. It is important for the reader to understand that these are not the only views on the topics, but these certainly are very common views in this part of the scientific community.

The major farm animal species each have a chapter that gives issues thought to be important by each chapter's author. Granted each chapter's author is an authority in the field. But most chapters are not intended to be a complete literature review on the topics at hand - and they vary greatly. The beef and poultry chapters are much more heavily referenced than the swine or sheep chapters, for example. However, there is an obvious lack of attention to some scientific literature in some chapters and so the 'practical applications' section should be viewed more as highlights of areas of concern by these scientists.

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