Perspectives:
Interrelationships of People and Animals in Society Today

[ UC 4301, CVM 6050, SACS 3050]
Spring Semester 2004

Tuesdays 6:30 – 8:15 pm
AnSci/VetMed Bldg 125, St. Paul Campus

Course Coordinators:

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Course Objectives:

This course explores various aspects of the interrelationships of people and animals in society today, including the ecological, environmental, cultural, economic, social, psychological, and health/medical dimensions of these interrelationships. Multidisciplinary knowledge of how and why these factors interact is considered to be essential to a better understanding of what is often called the human-animal bond.

The course is concerned with the ethical/moral dimension of human-animal interrelationships. Students will be introduced to different philosophical perspectives and moral positions on specific human-animal relationships and familiarized with certain processes of ethical decision-making. In this way, the course should prepare students to arrive at their own moral/ethical decisions with respect to people-animal relationships in their personal, professional or public life.
Thus, this course aims

1. To develop understanding of the issues involved in relationships between people and animals.
2. To engage in critical considerations of differing philosophical views regarding these issues.

Expectations and grading:

I. Writing Assignment
   This assignment involves choosing a topic which must be approved, researching the topic, and writing a paper of approximately 10 pages.

   - Choose a topic dealing with some aspect of the interrelationship between animals and man which interests you. The topic should have some controversy with multiple perspectives. Sample ideas for topics will be given. Submit your topic choice with a list briefly explaining some of the multiple perspectives. This list need not be exhaustive, and can be modified (you might wish to combine some or separate others, or even add more after you finish the research for your paper). A sample of this part of the assignment will also be given so you will have an idea of what is expected (about one page, typed, with 3-5 perspectives listed). Cassia will notify you within 7 days if your topic has been accepted. **Deadline for submission of your topic is February 17, 2004 at 8:15 pm.**
   - Submit an 8 – 10 page paper following the specific instructions given. This paper will require research and thought, and you will also be asked to write about your own opinion of the topic as part of the assignment. Grading guidelines will be given so that you know how your paper will be evaluated. **Deadline for submission of your paper is April 13, 2004 at 8:15 pm.**
   - This assignment will be worth 70 points toward the final grade.

IV. Feral Cat Exercises
   This assignment involves researching the topic of feral cats (articles and a list of websites and references will be distributed) so that you will be prepared for the three class exercises on feral cats (Feb 10, March 9 and May 4). The group exercises will be described in detail prior to the class so that you will know what to expect. The first exercise will involve research and discussion on an assigned issue. The second exercise will involve research and discussion on an assigned proposed solution to feral cats issues. The third exercise will involve research and discussion on a multidisciplinary approach to a community feral cat problem.
• This assignment will be worth 30 points (10 points each for Feb 10, March 9 and May 4) toward the final grade. Each student will hand in a one page paper for each of the three exercises which will determine the points for these exercises.

II. Attend class
Class attendance will be a factor in assigning the final grade for this course. The presentations and discussions in this course are unique and convey considerable information. Making part of the grade dependent on attendance gives you some additional motivation to gain the full benefit of the course. **Each night the student has the responsibility to turn in the provided speaker evaluation form with a tear-off signature page to obtain credit for attending class.** For each missed class, 5 points will be deducted from the final grade. Any student missing more than 2 classes should discuss with the course coordinators options for alternative grades such as an incomplete.

Excuses for one or two absences will be accepted only at the discretion of the course coordinators, and, if accepted, will require additional work to gain back the point deduction for the missed class(es). The additional work will be to complete a written questionnaire on a selected video within a week’s time following your return to class. List of the six available videos chosen from the Veterinary College Library and the questions are available from Cassia.

Final Grade

The final course grade will be based on the total points accrued by the above assignments including the deductions for missed classes. Although final grade cutoffs will be at the discretion of the course coordinators based upon the distribution of total points across all the students in the class, it is anticipated that most likely the categories will be 90-100 for A; 80 - 89 for B; 70-79 for C; 60 – 69 for D. Those students taking the course S/N will be expected to obtain a minimum of 70 points (C) for earning an S grade. Students taking this course for graduate credit will be held to a higher standard for the written assignment.

Note: Every course syllabus shall include the grading standards set forth in the Uniform Grading Policy adopted by the University of Minnesota:

There are five permanent grades given for a single course, for which credit shall be awarded, which will be entered on a student's official transcript. A-B-C-D-F grades include pluses and minuses, as follows, and carry the indicated grade points. The S grade shall not carry grade points, but the credits shall count toward the student's degree program if allowed by the college, campus, or program. These definitions apply to grades awarded to students who are not enrolled in graduate programs, but the grade points are the same no matter the level or course of enrollment.

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Instructors are permitted to hold graduate and undergraduate students who are in the same class to different standards of academic performance and accomplishment. The syllabus must make clear what the different standards will be for the different groups of students who may be enrolled in the class.

A 4.00 Represents achievement that is outstanding relative to the level necessary to meet course requirements.
A- 3.67
B+ 3.33
B 3.00 Represents achievement that is significantly above the level necessary to meet course requirements.
B- 2.67
C+ 2.33
C 2.00 Represents achievement that meets the course requirements in every respect.
C- 1.67
D+ 1.33
D 1.00 Represents achievement that is worthy of credit even though it fails to meet fully the course requirements.

S Represents achievement that is satisfactory, which is equivalent to a C- or better.

Credits and workload expectations: For undergraduate courses, one credit is defined as equivalent to an average of three hours of learning effort per week (over a full semester) necessary for an average student to achieve an average grade in the course. For example, a student taking a three credit course that meets for three hours a week should expect to spend an additional six hours a week on coursework outside the classroom.
## Schedule of Perspectives Class

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<td>Pam Hand, DVM</td>
<td>Will Hueston, DVM PhD</td>
<td>Course introduction</td>
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<td>CVM</td>
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<td>Dr. Marilyn Bennett</td>
<td>College of St. Catherine</td>
<td>Ethics</td>
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<td></td>
<td>Ann Fitzpatrick, DVM</td>
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<td>Feb 4</td>
<td>Bennett, Fitzpatrick</td>
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<td>Feb 11</td>
<td>Hand</td>
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<td>Feb 18</td>
<td>Becky Schultz, Animal Humane Society</td>
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<td>March 11</td>
<td>John Fetrow, VMD, MBA</td>
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<td>March 25</td>
<td>Julie Wilson, DVM</td>
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<td>April 1</td>
<td>Peggy Callahan, Wildlife Science Center</td>
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<td>April 8</td>
<td>Jane Armstrong, DVM, MS, MBA</td>
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<td>Alternative medicine in pets</td>
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<td>April 15</td>
<td>Marshall Tanick, (lawyer in Twin Cities)</td>
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<td>[1 hr] dog law issues</td>
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<td>30 minutes prep for FC#3</td>
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<td>April 22</td>
<td>Hueston</td>
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<td>Food animal issue</td>
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<td>April 29</td>
<td>Pat Redig, UMN Raptor Center</td>
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<td>May 6</td>
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VIDEO LIST FOR EXCUSED ABSENCE

To earn back the 5 points deducted for an excused absence (can be used a maximum of twice) select one of the following videos, view it, and turn in written answers to the attached questions.

Available from Veterinary College Library (usually 3 day loan):

• BBC, Monty Roberts - the real horse whisperer

• The Latham Foundation, Living with HIV and Pets

• Nature: The Elephant Men

• Scientific American Frontiers with Alan Alda - Chimps R Us, with Jane Goodall - does contain some disturbing photos of the bush meat trade in Africa

• Dolphins with Robin Williams

• Reason for Hope (about Jane Goodall)
Nature: The Elephant Men

- Elephants are worshipped as a living reincarnation of a Hindu god, so they cannot be killed by Hindus
- The human population, which has quadrupled in the last century, has encroached on and limited forest land for elephant habitat, so elephants come out into rice paddies to eat
- Elephants kill about 300 people a year in India

Answer the following questions.

1) What is the central conflict described in this video?

2) Briefly describe the 'solution' to the elephant problem detailed in this video.

3) What is your opinion of this 'solution'?

4) Describe any evidence of the intelligence of elephants depicted in this video.

5) Do you think the training methods for the captured wild elephants are justified by the end result?

6) What surprised you in this video? Or alternatively, what will you remember most about this video?
The Latham Foundation, Living with HIV and Pets

This video describes a volunteer program that helps AIDS patients keep pets with them in their living quarters. Interrelationships between the AIDS patients and their pets, and between the volunteers and the pets are depicted.

Answer the following questions:

1) What are some of the problems/issues with AIDS patients keeping pets, with or without assistance from such a volunteer program?

2) What are the benefits to the AIDS patients of this program?

3) What are the welfare issues of the pets?

4) What benefits do the volunteers enjoy from this program?

5) What surprised you in this video? Or alternatively, what will you remember most about this video?
Monty Roberts, A Real Horse Whisperer

Monty shows that his method of training horses works also on a wild mustang loose on the range. He also describes his childhood, his father's traditional forced-based method of training horses, and the foster children he raised.

Answer the following questions:

1) Briefly describe what Monty did to show that his training methods work on a wild mustang.

2) Could there be any ethical questions raised about this procedure?

3) Do you see any connection between violence toward animals and violence toward children or women?

4) How does Monty use his horse training methods with foster children?

5) Why do some women faint at Monty's horse training demonstrations?
6) **Reason for Hope - Jane Goodall**

This video tells of the life of Jane Goodall, and her current work in conservation.

Answer the following questions:

1) What interrelations with animals throughout her life helped Jane become the person she is today?

2) "Where once was a sharp line between human and ape, now that line has become blurred." What does Jane mean by this statement?

3) "If chimps are violent, then is human violence inevitable?" Jane grapples with this question - describe the evolution of her ideas on this issue.

4) The Roots and Shoots program encourages young people to make the world a better place for people and humans. How does this program work?

5) "I just hope we have time." What does Jane mean by this wish?
6)

**Alan Alda, Chimp R Us (Scientific American Frontiers)**

Alan Alda interviews Jane Goodall and discusses chimp intelligence and behavior. The African bush meat trade is also depicted and discussed.

Answer the following questions:

1) "Jane saw things as they really were instead of through established stereotypes." After all, she had not been to a university until after she had been in the field observing chimps in the wild. What things did she see?

2) What examples of chimp 'culture' does she describe?

3) What is the bush meat trade and what are its consequences in Africa?

4) What new 'facts' did you learn from this video? Why were you willing to accept them as 'facts'?

5) Did any of your beliefs change after having watched this video?
6)

Dolphins with Robin Williams

Robin visits people around the world who work with and observe dolphins.

Answer the following questions:

1) What evidence for the intelligence of dolphins is presented in this video?

2) Do you eat tuna? Do you feel differently about eating tuna after watching this video?

3) Did you notice any 'poetic license' in this video? That is, any times where you felt you might have been misled for the sake of a 'good story'?

4) What surprised you in this video? Or alternatively, what will you remember most about this video?
Written Assignment

Most issues dealing with the interaction between humans and animals are complicated and deserve careful scrutiny before you form your own opinion. The purpose of this written assignment is to give you the opportunity to look more closely at a topic that interests you. Writing such a paper will require both research and thought, and obviously in this course you will not be able to do the in-depth analysis that most issues demand. To limit the time you spend on this assignment, you will be given very specific and hopefully helpful instructions defining the expectations for your paper. Samples of parts of the assignment are given, as well as the grading guidelines. If at any time you have questions or need help, please don't hesitate to ask either of the course coordinators.

Choose a topic which interests you, or about which you are passionate, concerning some aspect of the interrelationship between animals and man. Some ideas for topics follow, but this is by no means meant to be an exhaustive list. The topic should have some controversy with multiple issues. Don't choose a topic covered by any of the speakers (consult the class schedule) such as reptiles as pets; and don't choose feral cats, which we will discuss throughout the semester. You can consult the American Veterinary Medical Association annual directory, which prints the resolutions and positions the AVMA has taken on various animal issues, for more ideas.

- Submit your topic choice with a list briefly explaining some of the issues (minimum of 3, maximum of 5). This list need not be exhaustive, and can be modified (you might wish to combine some or separate others, or even use different ones) when you write the paper. This part of the assignment is limited to one page, and a sample follows. Cassia will notify you within 7 days if your topic has been accepted.

- Deadline for submission of your topic is February 17, 2004 at 8:15 pm.
Sample Topics

- Are live-in and/or visiting pets safe for residents in health care facilities, and is the welfare of the pets also ensured?
- Animals in the K-12 classroom setting.
- Hoarding of animals: an under-recognized public health problem in a difficult-to-study population. Experts estimate that there are at least 700 new cases of animal hoarding every year in the US.
- Induced molting of chickens as a way of increasing egg production.
- Currently we transplant 60,000 pig heart valves into humans. Promising medical advances may eventually lead to the raising of pigs for organ donors. What is the science and ethics of xenotransplantation?
- The African Conservation Act of 1988 banned ivory imports into the US and initiating a worldwide ban. The act was the result of the previous decade's slaughter of 700,000 elephants by poachers with AK-47's. President Bush is considering a plan to allow a permanent resumption of legal but limited ivory sales.
- Florida had a statewide vote in Nov 2002 to decide whether an amendment should be added to the state constitution outlawing the use of individual sow gestation stalls. Individual gestation stalls are about 2'x7' and are used by some pork producers to house pregnant sows throughout most of their 114 day pregnancy, twice yearly. The amendment was put on the ballot after animal rights groups gathered 690,000 signatures - 200,000 more than the minimum required (the amendment passed).
- England and a number of other European countries have banned tail docking and ear cropping in dogs solely for cosmetic reasons. The AKC opposes such a ban.
- Rodeos? Circuses? Zoos?
- The New Labor members of Parliament are proposing to make the country sport of fox hunting a criminal offense, spurring a protest march of 400,000 Brits through the streets of London in Sept 2002.
- Germany has become the first country in the European Union to give animals constitutional protection (May 2002), a move heralded by animal rights activists and met with concern by animal researchers.
- Pigs, created by genetic scientists in Ontario, produce low phosphorus feces, resulting in less pollution, lower feed and clean-up costs, and less odor. Is the meat safe to eat and will consumers eat it even if regulators deem it to be safe? Will there be unexpected environmental problems?
- It is estimated that 100,000 birds are smuggled into the US illegally each year. What effect does this have on our own agriculture? What effect does this have on the wild populations?
- To be, or not to be, a vegetarian?
• Eagles, feathers and the Native American people.
• A federal judge (Nov 2002) has temporarily blocked the Navy from deploying a new sonar system amid concern it could endanger whales and other marine animals.
• Tyrone Hays, a researcher studying frogs exposed to very low levels of atrazine, a common weedkiller used on farm crops, reported in Nature magazine that sexual abnormalities result. Atrazine was the top-selling herbicide in MN in 1998.
• Autistic children and the 'swim with the dolphins' therapy.
• Emergent papillomaviruses in manatees may provide important clues to prevention and curing papillomavirus infections in humans and other animals. Human papillomaviruses produce papillomas that become cervical cancer in women. The Harbor Branch Oceanographic Institution in FL is planning to build a $20 million facility which will include a 600,000 gallon rehabilitation facility to house the studied manatees.
• Vaccines for dogs and cats such as distemper and parvovirus traditionally have been given annually. New research indicates that immunity for some diseases in some animals persists long beyond one year. Critics claim that it is greed which causes veterinarians to continue to recommend annual vaccinations. Veterinarians contend that without the 'necessity' of annual vaccinations, pet owners are less inclined to bring animals in for regular physical examinations, which are important in catching health problems early.
• Arkansas voters have just rejected an amendment that would have upgraded some forms of animal cruelty from a misdemeanor to a felony. Opponents of the measure said the law was too vague and could have subjected farmers, hunters, or scientists to undue prosecution.
• In 2002 Oklahoma voters approved a ban on cockfighting (56% supported the ban and 44% voted to keep cockfighting legal in the state). Louisiana and parts of New Mexico still allow the practice of cockfighting.
• The US Fish & Wildlife Service cautions that feeding waterfowl such as Canada geese may be harmful because it can cause dependency on people for food, conflicts with people and spread disease. Their brochure says 'if you care for waterfowl.... Purchase a Federal Duck Stamp ... [which is used to] purchase wetland habitats that become a part of the National Wildlife Refuge System.'
• States and local government are passing controversial bills covering dangerous dogs and breed specific bans. Such bills are often a response to isolated but tragic incidents involving dog bites/attacks.
• The St. Paul based non-profit organization called Responsible Owners of Mannerly pets (ROMP) is expanding its focus from off-leash dog parks to include certification of dog owners for the purpose of increasing the likelihood of those owners being allowed to obtain
apartment leases. Training on responsible pet ownership is provided and the certification earned could be presented to rental properties to convince landlords to allow those pets.

- According to the Insurance Institute for Highway Safety, more than 150 people and 1.5 million deer will be killed in car accidents involving deer. Such collisions cause an estimated $1 Billion in property damage. Yet urban/suburban deer control measures are hotly debated in most communities.
FARmed Salmon

Salmon consumption has increased roughly 20% each year for a decade, now becoming the third most popular seafood in the US behind tuna and shrimp. The development and growth of commercial salmon farming has made fresh fish available year round, and reduced the cost to the consumer. Most farmed salmon sold in American is imported from Canada, Norway, Chile and Britain. Salmon farms are prohibited in Alaska, but there are farms in other states such as Washington and Maine, and in British Columbia.

Most nutritionists claim that the increased consumption of salmon is good for the public health. Dr. Nicholas Perricone (author of Nutritional Facelift) even calls for 6-9 meals of salmon weekly, which he claims rids skin of wrinkles.

Critics contend that:

1) Salmon farms are bad for the environment: feces and uneaten fish food pollute the sea; epidemics from crowded farmed fish could spread to wild stock; farmed salmon could escape and interbreed with local populations. [Environmental issues]

2) Alaskan fishermen blame salmon farms for undercutting their price for the wild catch, endangering their livelihood. [Economic issues]

3) The health benefits of salmon (omega-3 fatty acids which are believed to protect against cardiovascular disease and cancer) seem to be well established. But there is a difference in the amount of fat, calories, and fatty acids in farmed vs. wild salmon. In addition, dye is added to the fish food to color the flesh of farmed salmon the same as that naturally occurring in wild salmon. And fish may contain some very unhealthy contaminants, particularly mercury. [Public health issues]

4) Farmed fish are raised in pens covering hundreds of acres containing millions of 10-pound fish. These (cramped?) conditions may be unnatural and inhumane, not unlike some intensive production methods for raising beef, chicken, and pork. [Animal welfare issues]
Information taken from Newsweek, October 28, 2002; article by Jerry Adler in the Health section entitled: The Great Salmon Debate.
The written assignment – deadline is April 13, 2004 at 8:15 pm
Submit your paper to Cassia either via a Word document attached to an email or as a printed copy. Your paper should be about 10 typed pages (single spaced in type size 10 – 12; if you choose to use double spacing, double the page number guidelines), divided into the parts described below, with each part clearly identified:

1) [Part 1, maximum number of pages: 1] Briefly describe the topic and the issues (minimum of 3, maximum of 5) related to your topic that you believe most relevant to forming your own opinion. This section will be similar to the page you submitted to get your topic approved. However, the issues you list may be slightly different since now the focus is on what you personally want/need to consider.

2) [Part 2, maximum number of pages: 1] Identify a broad range of moral questions this situation might raise. A sample of this part of the assignment follows. Limit this list to one page or less, so don't expect to be exhaustive.

3) [Part 3] Choose one of the issues (or a part of one of the issues) you have listed in Part 1 for analysis. This section should contain the major part of your research with references. It is essential that you use varied resources for your research, not just the internet. Also be aware that your source of information may be suspect due to underlying bias and therefore your information may be equally suspect. Feel free to comment on how skeptical you may or may not be about some of your 'factual' information. A sample of this part follows.

4) [Part 4a] Select one of the four ethical theories for discussion of your issue. Briefly define/explain the theory you have chosen.

5) [Part 4b] Select an ethical position on a question related to the issue you have researched in Part 3, and explain what the ethical arguments supporting this position would be. That is, defend the position you have chosen by explaining how the ethical arguments support it.

6) [Part 4c] In addition, write about what would be the most plausible argument against the position you have selected - that is, if people completely disagree with you, what would be their most plausible argument given in opposition? Feel free to comment on your own thoughts on this process. A sample of this part of the assignment follows.

[Maximum number of pages for Parts 3 and 4 combined: 7]
7) [Part 5, maximum number of pages: 1] Discuss if/how your opinion of this issue changed as a result of this research and analysis throughout the semester.
8) Sample of Part 2:

Some ethical issues raised by farming salmon and eating them:

1) Is it morally right to eat fish? If so, is it morally right to farm them? If yes, what moral considerations are relevant to these practices?

2) How would we weigh individual vs. public health if these conflict in the matter of eating farmed salmon? Is there a conflict and if so, what exactly is it?

3) In the absence of definitive/conclusive information on the safety of eating fish, how do we consider whether we should or shouldn't eat farmed salmon vs. wild salmon vs. possibly another source of omega-3 fatty acids?

4) How would we weigh the economic benefits of salmon farmers vs. the economic benefits or detriments to commercial fishermen? Sport fishermen? Are these important ethical considerations and if so, why?

5) What environmental ethics questions arise from salmon farming?
   a) Several species of smaller fish are heavily harvested to use in the fish food for farmed salmon. Is it morally right to harvest other species, especially with questions of population sustainability, in order to feed farmed salmon?
   b) Farmed salmon may escape and interbreed with wild salmon, which could have an effect on the survivability of wild salmon. Do we have a moral obligation to maintain wild populations free from this type of genetic variation?
   c) Contaminants from salmon farms might have an adverse effect on the environment, both locally and globally. Do we have a moral obligation to consider this? If yes, what moral considerations should govern these practices?
   d) Diseases from farmed salmon could spread to wild fish. Do we have a moral obligation to consider this? If yes, what moral considerations should govern these practices?
Sample of Part 3:

Since the personal and public health benefits of eating fish are often touted as a justification for eating fish, and potentially for farming salmon, I chose to research whether the health benefits of eating fish are actually clear and well-documented, and whether there is an alternative source of fatty acids which seem to provide that same benefit.

1. Eating fish is healthy, apparently from the omega-3 fatty acids, and there seems to be plenty of compelling scientific evidence.
   a) ‘Healthy women who reported eating fish at least five times a week had a 45% lower risk of dying of heart disease over the next 16 years than healthy women who ate fish less than once a month.’ (J. Am. Med. Assoc. 287:1815, 2002)
   b) ‘Men who had survived a heart attack and were randomly assigned to take fish oil supplements were 53% less likely to die of sudden death than survivors who were given a placebo’ (Circulation 105: 1897, 2002)
   c) ‘...research papers on stroke in American women, prostate cancer in Swedish men, Alzheimer’s disease in French seniors, and leptin levels in Tanzania...all came out swimmingly for the fish eaters.’ (Harvard Health Letter, 4, Jan 2003)

2. Fat content of fish varies, and fattier fish tend to have more omega-3’s (USDA nutrient database)
   a) Farmed salmon has 1.8 gms per serving vs. 0.8 gms in bluefish and 0.4 in halibut. (USDA Nutrient Database)
   b) Wild Coho salmon contains half the amount of omega-3’s as farmed Atlantic salmon. (USDA Nutrient Database)
   c) Fat content in farmed fish depends in part on the type of feed fed to the fish, which has usually been small fish like herring and menhaden which is rich in omega-3’s. But the industry has pressure to switch to plant-based sources due to supply and environmental issues, and plant-based sources reduce the omega-3’s in the meat. (Harvard Health Newsletter, 5, January 2003)

3. Is there a substitute for omega-3 in fish oil for humans, so people can get the health benefit but avoid supporting the farming of salmon?
   a) In some animal studies, plant oils prevent irregular heartbeats as well as fish oils do. (Circulation 99:2452, 1999). And some studies find that people who consume more plant oils like flaxseed and canola have a lower risk of heart disease than people who consume less. (Am J. Clin Nutr. 74: 612, 2001)
b) At least one expert on omega-3, Bruce Holub of the University of Guelph, says that the evidence for plant oils isn't as good as for fish oils. (Nutrition Action Health Letter, Center for Science in the Public Interest, Vol 29, No 6, p 6, 2002)

4. Concern has been raised about unhealthy contaminants in farmed fish.

a) 'Farmed salmon is the most contaminated food sold by British supermarkets according to a new analysis by government advisors...The latest pesticide survey by government scientist showed that only 25 of 105 samples of wild salmon contained DDT and by contrast 59 out of 60 samples of farmed salmon contained the pesticide.' (Rob Edwards in the Sunday Herald, Oct 20, 2002 @sundayherald.com/print28565) [I am always skeptical of newspaper articles]

b) Antibiotics are fed to farmed salmon and some residue could remain. Antibiotic usage in food animals, including fish, may contribute to the development of antibiotic resistant bacteria, which can be difficult or impossible to treat when they infect humans. However, according to the B.C. Salmon Farmers' Association: "antibiotics are less frequently used in salmon farming than in other livestock farming...There is a mandatory waiting period after treatment, to ensure that antibiotics are cleared from the animal’s system, before they can be harvested." (www.bcsalmonfarms.com)

c) Mercury has been found in many fish, and the FDA has advised pregnant women to limit consumption of all fish to two servings per week. Species rich in omega-3’s may tend to have higher mercury levels, although the FDA lists the mercury in salmon as 'not detectable.' (Harvard Health Letter, 5, January 2003)

5. What about the dye fed to farmed salmon to color the flesh pink?

a) Ecotrust claims that artificial dyes are added to fish food and implies adverse health effects to humans. (www.ecotrust.org) [Ecotrust, like Sierra Club and many others, is an interest group wanting to promote their position - so I need to be skeptical to some extent]

b) The B.C. Farmers' Association claims the pigments added to the fish food are the same antioxidants (astaxanthin) present in wild salmon, and therefore pose no health risks. (www.bcsalmonfarmers.com)

c) The two substances commonly added to fish food to color the flesh are canthaxanthin and astaxanthin. The FDA lists both as noncertifiable color additives, and requires that they be declared on food labels (for example, on Ocean Spray
pink grapefruit juice) even though they are generally recognized as safe. (Insight on the News, June 12, 2000 found at www.findarticles.com)

6. What is the bottom line?
   a) Is it possible to have zero risk in food, i.e., only good in it and absolutely no possible bad? I don't think so, so this does not seem like a reasonable goal to have.
   b) American Heart Association recommends that adults eat at least two servings of fish per week (www.aha.org)
    c) Many health professionals, as well as AHA, take the position that for adults the potential risk of eating fish is outweighed by the certain benefits. (Harvard Health Letter, 5, January 2003)
   d) In the presence of conflicting claims/evidence I have to choose whom I believe, and in this case I choose to believe the AHA and the Harvard doctors.

Sample of Parts 4a, 4b, 4c:

[4a] I will use the utilitarian theory to analyze this issue. A utilitarian would argue that when I am faced with a decision about what I ought to do, and there are multiple options about what I could do, then I should choose the alternative that has the best overall consequences. That is, choose the alternative that produces the greatest benefit to those who will be affected by my choice. So in order to come to a decision about what is the morally correct choice in this case, a utilitarian would do a cost-benefit analysis. While I will limit my analysis to just myself for the purpose of this paper, I realize that in order to do a complete analysis on the issue of salmon farming, I would have to consider ALL the parties affected by my choices. In other words, I would have to include in my complete cost-benefit analysis not only myself, but all other people and the animals and the environment which are potentially impacted by my choice. For example, how would a commercial salmon fisherman be affected by my choice to purchase farmed salmon twice weekly instead of wild salmon? Such an analysis seems impossibly daunting to me.

[4b] Because some of the moral issues related to farmed salmon hinge on the potential argument that eating farmed salmon is a health benefit to individuals and by extrapolation to the general public, the question I choose to analyze is, from a health aspect, should I personally eat farmed salmon? The three principle choices for my personal aspect of the issue of farmed salmon are: to eat farmed salmon; to eat wild salmon; or to find alternative sources, such as plants, to obtain the omega-3 fatty acids.
To do a cost benefit analysis, I devise a table to list the three options I have identified and I assign points or numbers to each choice. Then I find some way of totaling them. For this table, I am assuming + to have some benefit and ++ to have more benefit; - is a detriment and -- is more of a detriment; and 0 has no particular effect one way or the other. For the result, the option with the highest number should be my choice.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Eat farmed salmon</th>
<th>Eat wild salmon</th>
<th>Eat plant source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omega-3 content</td>
<td>+++</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Documented health effects</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Pesticide contamination</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Antibiotic contamination</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mercury contamination</td>
<td>-</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Dye added to fish food</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Economic cost to me to purchase, which influences the frequency of it in my diet</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>TOTAL</td>
<td>0</td>
<td>0</td>
<td>+1</td>
</tr>
</tbody>
</table>

I am surprised by this finding, for three reasons. Picking the 'values' to assign seems much more arbitrary now that I have been forced to do it. I find myself half-unconsciously wanting to skew the results by manipulating those values I assign. And I had been confident that eating farmed salmon would come out a clear winner, which in fact it did not! I have been eating more...
salmon, trying to do so once a week, in the last few years. I know the
decreased cost and year-round availability has encouraged me. Doing this
research has made me feel more informed about my decision.

[Part 4c] A plausible argument against this position would seem to come
from the rights-based approach. This approach contends that the rights of the
fish (to life and to be free from suffering) should be considered in the decision-
making. Just because a man is hungry and needs to eat to prevent starvation
does not justify that man killing another man for food. This could be the same
argument for a human not killing a fish, farmed or otherwise, for food. The fish
has certain inviolable rights that my rights as a human do not necessarily trump.

This conflict between my ‘right’ to eat food that is healthy and the ‘rights’
of fish not to be farmed and eaten seems to me to be quite a difficult one to
resolve. Currently our society in the United States accepts killing certain
animals for food. However, there is a growing cultural awareness and concern
that may someday change entirely the way we produce meat and all food for
that matter. It seems somewhat possible to me that in the future humans could
eat food manufactured from basic elements such as carbon, hydrogen, and
oxygen obtained from mining or harvesting of material from asteroids or ‘dead’
planets. Until that time humans will have to wrestle with this thorny issue of
what to eat and how to procure it, since it is a certainty that to live we all must
eat something. I eat meat occasionally, far less than I did as a child, for both
health reasons and for concern over the way meat is produced. I am pleased
with the efforts McDonald’s and other corporations have had on changes in
food animal production, but I know that such corporations only respond to the
whims of the consumer. Many more consumers have to be willing to change
their living, eating and spending habits to produce a more drastic and
comprehensive change.
Note:
Dr. Marilyn Bennett provided invaluable advice in developing this exercise, and I am deeply grateful to her for helping me learn more about ethics.
Feral Cats

Feral cats are free-roaming cats who are poorly socialized to humans or handling and therefore usually do not make good pets even after capture. Other types of free-roaming cats include stray cats (recently owned cats or lost cats who are usually well socialized but may eventually become feral) and abandoned cats (tame but no current owner), as well as many owned cats whose owners allow them outside some or all of the time. Animal control agencies receive many complaints and divergent demands relative to free-roaming cats, and this issue is quite complex. Historically the approach has been to capture and kill homeless cats; however, groups debating the ethical correctness of euthanizing healthy animals have questioned this. "The HSUS believes that communities must develop, implement, regularly evaluate, and update comprehensive laws, policies, and education programs about cats and cat care. These must be pragmatic approaches designed to reduce cats' suffering and also respond to cat-related conflicts, yet remain acceptable to people in the community. [HSUS website]" Programs to trap, neuter, and return (TNR) feral cats [or trap, test, vaccinate, neuter, release and monitor (TTVAR-M)] have been advocated and adopted in some communities.

While it does not appear that accurate estimates are possible, some data suggest that there may be as many as 30-100 million stray and feral cats in the US. "Feral cats are part of a larger pet overpopulation problem that leads to the euthanasia of millions of unwanted cats each year. Feral cats both contribute to overpopulation and are victims of it - because cat owners view cats as an abundant, cheap commodity. (HSUS, Community Approaches to Feral Cats, Margaret Slater)"

"Using a simple multiplication chart, and making the assumptions that a female cat can begin to breed at 6 months of age and produce 2 litters per year with a survival rate of 2.8 kittens per litter:

Year 1 = 12 cats
Year 2 = 66 cats
Year 3 = 2,2021 cats
Year 4 = 3,822 cats
Year 10 = 80,399,780 cats

(www.forgottenfelines.com/new/pages/faq.html, 9/02)"

Critics of the TNR programs contend that free-roaming cats kill many birds and other wildlife, and allowing this places the value of the cats above that of the wild animals hunted. Cats may pose an additional threat to already endangered wildlife populations, especially if humans intervene and provide food or shelter to free-roaming cats. Free-roaming cats can spread zoonotic diseases such as rabies, ringworm,
bartonellosis and toxoplasmosis; be involved in car accidents; be a
nuisance to property owners; and spread diseases such as FeLV and
FIV to owned cats.

A few resources:

- Humane Society of the US, Humane Society Press, Community
  Approaches to Feral Cats: Problems, Alternatives & Recommendations
  by Margaret Slater, 2002). You can read or download this material from
  the website: www.hsus.org. If you are not able to access this
  material, a few xeroxed copies are available from Cassia (@cost of
  copying and collating).

- Patronek, GJ. Free-roaming and feral cats: their impact on wildlife

- Scott, KC et al. Characteristics of free-roaming cats evaluated in a
  trap-neuter-return program. J. Am Vet Med Assoc, 221: 1136-1138,
  2002.

- Alley Cats Allies (www.alleycat.org) - the National Feral Cat
  Resource located in Washington DC.

- California Veterinary Medical Association, TNR Program sponsored
  by Maddie's Fund, which has neutered 140,000 cats since 1999.
  www.cvma.net

- www.feralcats.com (Oregon program)

- www.abcbirds.org (Cats Indoors! Program)

- www.audubon.org
FERAL CAT EXERCISES

All students will be assigned to a group for each of the three exercises on the first day of class. Your group numbers are:  
Ex #1  
Ex #2  
Ex #3

FIRST EXERCISE: to examine some of the issues/claims regarding feral cats and the available supporting evidence. This exercise does not focus on solutions/approaches (such as whether TNR programs work) to feral cat issues, but rather claims people might make to justify the need for “doing something” about feral cats. For example:

Environmental/ ecologic/ wildlife.  
- Feral cats have an adverse impact on songbirds.  
- Feral cats have no significant impact on wildlife except in locations of special importance.  
- Feral cats are a non-native species and therefore should not benefit from protective measures which show preference to them over native species.

Welfare  
Feral cats live miserable lives.  
Feral cats live a natural life.  
Feral cats need help/food from humans.  

Public health and safety  
Feral cats pose a health danger to humans because of (e.g., rabies, toxoplasmosis, Yersinia pestis, toxocariasis, etc)  
Feral cats pose no significant danger to humans.  
Feral cats bring joy to caretakers, improving their sense of wellbeing.  

Nuisance; animal control; pet ownership/attitudes  
Local governments are burdened by costs due to feral cats.  
Animal shelters struggle to deal with the huge numbers of cats discarded by irresponsible pet owners.  
Cat owners generally feel cats should be allowed to run free, contributing to the therefore unsolvable feral cat problem.

Choose at least 3 claims in your topic area which you can support with evidence gleaned from your research. This evidence should be sufficient to convince a skeptic that your claim is valid. Prepare a written summary (1 page maximum) of your chosen claims and the supporting evidence, which you will turn in to Cassia at the end of class on 2/10/04.
When your group meets in class, compare your claims and the evidence. Select the claims for which there is the best evidence, and you will be asked to present the claims and evidence to the group during the general discussion. You will have 60 minutes to work in your group, and 30 minutes for class discussion.

SECOND EXERCISE: You will be assigned one of the following possible ‘solutions’ to feral cat issues, which you will research prior to the second class exercise on 3/9/04.

- 2.1 Do nothing until the numbers get too high, then trap and euthanize all.

- 2.2 Trap, neuter and return.

- 2.3 Trap, adopt out tame cats and establish sanctuaries for unadoptable cats.

- 2.4 Aim to reduce the number of new cats entering the feral cat population from owned/abandoned cats via owner/public education, licensing and leash laws, required animal ID (like microchips); subsidized (low cost) spay/neuter clinics, etc.

Prepare a written summary (1 page maximum) of the 3 most compelling reasons to adopt this strategy and the 3 most significant problems with this strategy (i.e., the ‘pros and cons’) which you will turn in to Cassia at the end of class on 3/9/04.

You should look at programs which are presently involved in your strategy and find out how successful they are so that you are better able to argue your case.

During the second class exercise you will meet for 60 minutes with others sharing the same topic to discuss and summarize these ‘solutions.’ A general class discussion will be held the last 30 minutes so that each group can present their analysis.

THIRD EXERCISE: Students will be assigned to a group (group A, B, C, etc). Each student will be given a fictitious character to play in a committee meeting for the imaginary town of Meow, MN. Why assign fictitious roles? Diversity in each group will be assured; you will be taking a position with which you might disagree and by so doing, practice looking through someone else’s perspective; and you will be more ‘objective’ since you won’t have the same emotional stake you would if you were ‘yourself.’ You will be given your roles a few weeks before the third exercise on 5/4/04. You will prepare a short (1 page maximum) written synopsis of the wishes/statements/arguments your character would likely bring up in this meeting which you will turn in to Cassia after the discussion on 5/4/04. This synopsis will be the basis of your 2 minute presentation as listed in the Mayor’s instructions #3 below. The groups will have 60 minutes to discuss, followed by a 30 minute general class discussion.
THIRD FERAL CAT EXERCISE: MEOW, MN

Meow is a small college town in central MN. The mayor's office has been receiving many calls each month dealing with feral cats. The calls have been, as you might expect, quite varied: dead cats on the road; cats catching birds at backyard bird feeders; cats in the night yowling outside and disturbing residents; people concerned about the plight of homeless cats especially in winter; animal control being called out to investigate cats in the parks and around the community center and college campus; students at the college often posting notices on telephone poles advertising kittens for sale or lost cats; mothers concerned about their children's health after reading about toxoplasmosis in a pamphlet in the local pediatrician's office; etc. So the mayor is in the process of planning for some town meetings to explore the views of town folk about feral cats. These meetings will be to 1) see if there is a 'problem' with feral cats; and 2) see if there is any agreement about the scope of the problem and the alternative solutions.

Two weeks before the first scheduled town meeting, the mayor convenes a group of diverse friends for an informal meeting as a 'practice run.' She hopes to get ideas of the issues that may surface at the upcoming town meeting so that she is better prepared. Because she realizes that there are strong feelings on all sides about the feral cats in Meow, here is her specific assignment to the group:

1) Each member will wear a nametag.

2) Appoint two recorders who will equally record the discussion; one person who will be the timekeeper; and one person to act as moderator, who will ensure each person has repeated opportunities to contribute to the group.

3) Allow exactly 2 minutes for each member to talk about feral cats from their perspective. Each member can state whatever feelings, facts, ideas, goals, etc he/she feels is important relative to this issue. During this time, no one can interrupt or question. The timer will call 'TIME' at the end of each 2-minute period, so that each person has the same amount of time to speak.

4) The moderator will then allow a question and answer period. Members can respectfully ask for clarification or more details (e.g. "Tell us more about why you raised this concern" or "I'm confused about what you want for the cats, can you explain?").

5) The group shall then determine if there are any commonalities or areas of agreement. These areas can be in either definition of the problem or general goals for the 'solution' (whatever the solutions turn out to be). For example, if the issue discussed were public school access for 1st graders, the problem might be that there are not enough existing 1st
grade classrooms for the number of children presently enrolled in the kindergarten classes and the general goals might be that 1) all children should have equal access to a 1st grade education and 2) that the solution(s) should be within the budget of the school district.

6) If there are commonalities identified, can the group come up with some ways in which those goals can be achieved? Those alternatives can be first listed with no discussion (brainstorming), then discussed, and then voted on.

7) If the group discovers that there are no areas of agreement, try to identify the specific areas of conflict. Where are you having trouble, and how can that difficulty be approached? That is, how can you try to resolve at least one of those difficulties?

8) At the end of 60 minutes the Mayor would like the group to report to her.

Dr. Marilyn Bennett made important contributions to the development of these exercises - thanks!
Grading guidelines for written assignment

<table>
<thead>
<tr>
<th>P</th>
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<th>3</th>
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<td>P2)</td>
<td>Moral questions identified</td>
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<td>Analysis of one issue</td>
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<td>0</td>
</tr>
<tr>
<td></td>
<td>Citations of research material relevant to issue (number and quality)</td>
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<td>3</td>
<td>1</td>
<td>0</td>
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<tr>
<td>P4a)</td>
<td>Explanation of ethical approach chosen</td>
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<td>2</td>
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<td>P4b)</td>
<td>Ethical analysis of that one issue</td>
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<td>Discussion of opposition argument</td>
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<tr>
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<td>Discussion of how/why you changed if at all</td>
<td>10</td>
<td>6</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Quality of writing and editing (i.e., spelling and grammar) | 5 | 3 | 1 | 0 |

Comments: