Large carnivore conservation In Wisconsin and around the world

Lectures M 9-1130 a.m. in Room 110 Science Hall

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#### Course description

This course will provide an interdisciplinary and international look at coexistence between humans and large carnivores, such as bears, big cats, and wild canids. You will learn how to mitigate conflicts and balance wildlife needs with those of people. Our case study throughout the course will be the recovery of gray wolves in our state and the nation. Wolf recovery has been the most contentious and acclaimed conservation success in US history. The wolf is symbolic for many people but depending on your value orientation, the species may be vilified or revered. Its recovery from near extinction in the USA has been associated with a complex interplay of stakeholder groups including a revival of controversy over federal and state powers. At an individual level, wolf recovery has been characterized by conflicting views of the role of humans in nature. For scientists, wolf recovery has been an important test of the integration of applied research into the policy process. Nowhere has this been more clear than in Wisconsin. In this course, we review the past 30 years of wolf recovery in our state as (i) a laboratory for understanding democratic participation in decision-making about natural resources, (ii) a lens to examine the role of research in public debate and policy formulation, and (iii) am experiment in biodiversity conservation in the face of fears for human safety, economy and property. The course will include participation in a stakeholder meeting about future wolf policy in our region, which will require a mandatory weekday excursion. Registration requires enrollment in the Environmental Studies Certificate Program or consent of instructor.

## Readings

The required text Wydeven, van Deelen, Haske (2009) <u>Recovery of Gray Wolves in the Great Lakes Region of the United States: an Endangered Species Success Story</u>. Springer: NY. In addition, outside readings will be posted on Learn@UW. If you have trouble accessing these, contact the instructor before the assigned reading is due. Instructor will lend you the required text on condition of returning it undamaged at the end of the semester. If you choose to purchase the book it will cost \$40. If you do not return it or return a copy so damaged that a future student cannot use it, the instructor will withhold your final grade until you pay the purchase price of \$40.

#### Class

Attendance and readings are mandatory. Classes will mix lectures, student oral presentation, or student-led discussion. If you face serious challenges in public speaking, please notify the instructor immediately.

# Schedule

Jan 23: Introduction to the course

- 1. Lecture on carnivore conservation globally
- 2. For next week read Chapter 6 (Wydeven) and Treves (2008)

Jan 30: Carnivore monitoring

- 1. Lecture on carnivore monitoring
- 2. Instructor-led discussion of readings
- 3. For next week read Chapter 10 (Del Giudice) and Chapter 14 (Kohn)

Feb 6: Carnivore behavior and ecology

- 1. Student-led discussion of readings
- 2. Lecture on wolf life history and the role of top predators in ecosystems
- 3. For next week read Chapter 13 (Rooney) and Chapter 3 (Vucetich)

Feb 13: Predators' roles in ecosystems

- 1. Student-led discussion of readings
- 2. Lecture on modeling
- 3. For next week read Chapter 8 (Mladenoff) and Chapter 9 (van Deelen)

Feb 20: Modeling carnivore population ecology

- 1. Student-led discussion of readings
- 2. Lecture on attitudes
- For next week read Chapter 17 (David) AND one of the two following: Chapter 16 (Schanning) OR Browne-Nunez (2011)

Feb 27: Attitudes to carnivores

- 1. Student-led discussion of readings
- 2. Lecture on carnivore threats to life & livelihood
- 3. For next week read Chapter 18 (Ruid) and Loe & Roskaft (2004)

Mar 5: Carnivore threats to life & livelihood

- 1. Student-led discussion of readings
- 2. Lecture on Interventions to mitigate humanwildlife conflict
- For next week, read BOTH: Treves et al. (2009), Barlow et al. (2010)

Mar 12: Intervention Planning Part I

- 1. Video: Bears of Sequoia
- Introduction to intervention planning exercise: dog depredations
- For next week read Heberlein (2000) AND one of the two following: Backeryd (2007) OR Olson (submitted)

Mar 19: Intervention Planning Part II

- In-class exercise: Mitigating bear-dog depredations
- Mar 26: Midterm
  - 1. For next week read Treves (2009), Loveridge et al. (2007), Mech (2010)
- Apr 2 Spring Break

Apr 9: Hunting for conservation

- 1. Lecture on hunting carnivores
- 2. Student-led discussion of hunting
- 3. Introduction to role-playing exercise: Designing a public wolf-hunting season
- 4. Intro to the Wolf Hunt Sim
- 5. For next week read Chapter 21 (Wydeven) AND one of the two following: Treves & Bruskotter (2011) OR Bruskotter et al. 2011

Other assignment: As teams, Run Wolf Hunt Sim from the perspective of your interest group. Then write one page (font size 12, 1" margins, single spaced lines) explaining each decision your team made (quota, bag limit, tag fee, lottery fee, which packs you selected) justifying your decisions as would your interest group. Please email me that document to <u>atreves@wisc.edu</u> by April 30th, 9 a.m.

- Apr 16: Future of wolves in the USA
  - 1. Student-led discussion of readings
  - 2. Early release for Earth Day Conference
- Other assignment: Run Wolf Hunt Sim as individuals (i.e., learning how it works, practicing variations). Due date for individual best run: 9 a.m. April 30<sup>th</sup> by email to atreves@wisc.edu

Apr 23: Role-playing exercise: Designing a regulated, public wolf-hunting season

April 30: Team oral presentations (GLIFWC. WBHA)

- 1. Deadline to submit your individual assignment for the Wolf Hunt Sim 9 a.m.
- 2. Deadline to submit your team assignment for the Wolf Hunt Sim 9 a.m.

May 7: Team oral presentations (HSUS, WBC)

NO FINAL EXAM

# Grading

The course will be graded over 400 points, as follows:

- <u>115 points for Participation</u>
  - + 42 for attendance
  - + 40 for leading discussion effectively, thoughtfully and in an organized fashion (leaders have responsibility for summarizing the reading, emphasizing its most important points, highlighting unanswered questions and facilitating civil debate)
  - + 33 for contributions to discussions and class exercises
- 100 points for the Mid-term exam
- 185 points for team projects
  - + 40 from team-mate evaluations of your contribution of time and effort, creative thought, design and performance on *both* team projects
  - + 40 from other class-mates' evaluations of your team's final oral presentation (logical organization, clarity of presentation, persuasiveness)
  - + 35 from instructor evaluation of your participation in the role-playing exercise (how convincing were you in your role, how well did you integrate stakeholder values into your comments and proposals)
  - + 35 from instructor evaluation of the final oral presentation (logical organization, clarity of presentation, thoroughness of research, fact-checking)
  - + 35 from instructor evaluation of your team's output of the Wolf Hunt Simulation

The highest score in the class will receive an A. Scores between this and 50% will be determined on a curve at the instructor's discretion. A score below 50% will fail.

# Rules for Discussion

Readings and discussions are mandatory. Because participation is graded, everyone will be given a chance to contribute at least once. Do so thoughtfully and clearly so your reading effort can be given proper credit. All opinions will be heard without interruption or disrespect. Discussion leaders or the instructor may moderate discussions that become heated or too lengthy for class-time constraints. Discussion leaders should be prepared to summarize the main points of the reading in <10 minutes. You are not required to use visual aids. After summarizing, leave time for questions. Then identify 3 other topics for discussion. These could be (a) important questions that remained unresolved by the reading, (b) aspects you did not understand; or (c) criticisms of the reading. Solicit discussion about those (you may call on classmates who have not contributed if the discussion is slow). Of course you may also organize other sorts of class activities to help us all understand the readings. *Please record your date for leading discussion in your calendar.* 

# Instructor's expectations

I expect all students will complete assignments by class time on the day listed in the syllabus. I expect students will arrive on time for class or will notify me beforehand of upcoming tardiness or absence. Assignments must be based on your own original, creative thinking. I expect students to notify me ahead of time if a planned absence will result in a late assignment. Without such, assignments will lose 25% of their value immediately and 25% for each day late. Appropriate reasons for late assignments include: medical emergency for self or immediate family, or professional travel engagement (this requires formal letter of introduction or agenda showing student's name delivered to the instructor). Contact me via email asap if you have flulike symptoms (atreves@wisc.edu). Absences without explanation will lower your participation grade. More than one excused absence will require make-up work.

## Student expectations

You can expect that I make available all readings one week or more before they are due. You can expect that I deliver graded assignments no more than two weeks after submission. You can expect that I arrive on time for lectures unless I have given prior notice 24 hours beforehand. You can request a clear and explicit report explaining why you lost credit on any quiz, exam, discussion leadership or presentation. You can expect that your peer's grading of your own assignments will be documented in some fashion.

# WARNING

Plagiarism and fair credit to other authors

Plagiarism is the copying of someone else's work--whether it is your classmate or another author. Plagiarism can be avoided by combining ALL of the following steps in your work and particularly in your independent or team research:

- integrating information from multiple sources,
- crediting the authors appropriately, and
- writing in your own words so the output is original and does not directly copy any other person's work.
- You may use another author's exact words if you fairly credit them. The format for doing so follows: "So, how many wildebeest do you need? How many elephants is enough? And what do you need them for? These are not trivial questions, for they focus attention on the need for some hard decisions." (Norton-Griffiths 2007, p. 41)

Fair quotations are complete and not taken out of context. Fair credit to other authors refers to finding several of the most recent and relevant sources of information on a given topic, citing them accurately in your text, quoting them fairly if you use their exact words (as above) and listing the source properly in your bibliography and in your text. The proper format for each follows *Conservation Biology* (available on-line for Endnote):

- Agrawal, A., and E. Ostrom. 2006. Political science and conservation biology: a dialog of the deaf. Conservation Biology 20:681-682.
- (Agrawal and Ostrom 2006)

Google<sup>™</sup> is not an appropriate source of information although it may lead you to appropriate references, which should be read in the original.

Assignments with evidence of plagiarism will receive zero credit regardless of whether the work is correct. Two incidents will result in communication of the case to the Dean of Students. Assignments with incorrect or inadequate credit to other authors will lose half.