

Course Title & Number: Conservation of Birds & Mammals
Credits: 3 semester
Class Time: Spring 2018, ASY
Instructors: Dr. Nate Bickford, office 319
Contact information: Dr. Bickford's office hours,
Phone 308 865 8883
email bickfordna@unk.edu

Email will be the best way to contact me, however feel free to call if you need to have longer conversation. I will respond to you emails within 24 hours and if I do not email me again please.

COURSE DESCRIPTION:

"Wildlife" is defined as wild birds and wild mammals. It does not include other vertebrates (fish, amphibians, or reptiles), nor does it include invertebrate animals. Birds and Mammals are often highly visible, economically important, and especially in the case of "charismatic megafauna" – the focus of public debate regarding the conservation and management of wildlife species. This class is designed as a course that applies elements of wildlife ecology, population dynamics, and conservation biology to the conservation and management of birds and mammals. While providing a review of the fundamentals, this course offers an in-depth investigation of the management, conservation, and ecology of various birds, ungulates, large carnivores, and selected small mammals. We will review, discuss, and debate current research and management issues with the help of online presentations, books, primary literature and other readings.

As part of this course you will need to discuss relevant topics with your peers, conceptualize answers to broad questions posed from chapters as well as a hands on conservation style project.

TECHNOLOGY REQUIREMENTS:

Creating a video using software of your choice.
Blackboard.

COURSE MATERIALS:

Text & Supplies:

Large Mammal Restoration: Ecological And Sociological Challenges In The 21st Century Paperback – October 1, 2001 by David S. Maehr (Editor), Reed F. Noss (Editor), Jeffery L. Larkin (Editor), & 1 more ISBN-13: 978-1559638173

Priorities for the Conservation of Mammalian Diversity: Has the Panda had its Day? (Conservation Biology) Paperback – by Abigail Entwistle (Editor), Nigel Dunstone (Editor) ISBN-13: 978-0521775366

Bird Ecology and Conservation: A Handbook of Techniques (Techniques in Ecology & Conservation) Paperback – by William J. Sutherland (Author), Ian Newton (Author), Rhys E. Green (Author)

COURSE OBJECTIVES:

By the end of this course, you should:

1. Understand the basic principles of wildlife conservation: how wildlife is a finite natural resource, how population sizes can be estimated, understand concepts of habitat and home range.
2. Understand how hunting affects game populations and wildlife in general.

3. Generally understand how sociology affects wildlife management.
4. Generally understand the politics of wildlife conservation, including preservation of endangered species.
5. Have a basic knowledge of the history of wildlife conservation in North America.
6. Be able to conduct a simple (not easy) research project and write it up in a scientific style.
7. Be able to write a summary of a scientific paper so that it is easily understood by a lay person.

Performance Assessment: Your grade will be determined based upon the total points earned on examinations, problem solving assignments, a laboratory notebook/reports and a paper. There is no provision for doing extra or outside work for improving your grade.

Read – Read - Read

Read the chapter that we are covering before class starts. That will usually consist of reading ~100 pages a week. If you do not read you will have trouble with the tests.

Exam: There will be one exam scheduled for the semester (see course schedule). Materials to be evaluated include: 1) the material discussed during classes and the indicated chapters from the text, and 2) the material from the scientific papers, lab manual and handouts. If you have to miss an exam for any reason, you will have to schedule a makeup time with the instructor and complete the makeup test within one week of the original exam date. **You will be allowed one makeup exam per semester.** The makeup exam may not be the same test as that taken by the rest of the class. Exam represent 100 points.

Final Project and Video: Pick a habitat near you (agricultural, wetland, urban, etc) and an animal species to develop a full conservation plan for the area you have chosen. For example go to a prairie dog village on a grazing area and develop a plan for black footed ferret.

You will need to visit the site and take stock of what is on the site for animals and vegetation. The area needs to stay in service to what it was before you make changes. What I mean is on my prairie dog village there still needs to be grazing but I can control when the grazing happens or add some habitat structure, etc.

You will need to write up you report that will include: why is it important, changes made, what are your expectations, maps, cost, who needs to be convinced, who is paying for it, etc.

You will also need to create a 5 minute video as public information video. This is for the public so it needs to be interesting and moving as well convince the viewer that we need to make the changes. Additional information will be provided later.

Short Research Papers: Two short ethic essays will be assigned on two different topics.

End of Chapter Questions: Do a few of questions assigned for each chapter. I will assign the questions at the beginning of each week.

Discussions: There will be weekly discussions that will require you to post and respond. You must post an answer and then respond to someone else's post. Make sure your replies are coherent, written in proper English using correct grammar and have at least one reference (to back up your point).

Exam (1)	100 pts
Research essays	200 pts
Final Project	200 pts
Final Video	100 pts
End of Chapter Q	200 pts
Discussions	200 pts

The grading scale used for this class is as follows:

A (93-100%), A- (90-92%), B+ (88-89%), B (83-87%), B- (80-82%), C+ (78-79%), C (73-77%), C- (70-72%), D+ (68-69%), D (63-67%), D- (60-62%), and F (below 60%).

In general, grades for the course will be assigned as:

A – Indicates that the work is markedly superior and is without major problems. It is an honors grade denoting that the goals for the.

B – Indicates that the work has met all of the requirements of the assignment or course at a level that is consistently above average.

C – Indicates satisfactory work that is consistently average and that meets the course goals at a sufficient level to pass.

D – Indicates the minimal achievement in order to earn credit, even though the work is below the standard required for good academic standing.

F – Indicates failure to complete an assignment or course, or work that does not fit into the requirements of the assignment or course.

Late assignments: Without a valid excuse, any assignment not turned in on time is a Late Assignment. Late assignments will be docked 10% of its total possible points per day, holidays and weekends excluded. So if a 40 pt Lab Report was due on Tuesday, you will receive 36 pts if you turn it in on Wednesday and 32 pts if you turn it in on Thursday. It does not matter if our next class will not meet until Thursday.

SUBJECT TO CHANGE *This syllabus and schedule are subject to change in the event of extenuating circumstances. If you are absent from class, it is your responsibility to check on announcements or assignments made while you were absent.*

STUDENTS WITH DISABILITIES

Students with Disabilities or Those Who are Pregnant

Students with disabilities or those who are pregnant are encouraged to contact me for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities or those who are pregnant. To receive accommodation services for a disability, students must be registered with UNK Disabilities

Services Coordinator, David Brandt, in the Academic Success Office, 163 Memorial Student Affairs Building, 308-865-8214 or by email brandtdl@unk.edu. For those needing accommodation due to pregnancy, you need to visit with Student Health. The following link provides information for students and faculty regarding pregnancy rights. <http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-faqs-college-and-graduate-students>

Attached is the link to the above statement for your convenience. http://unkcms.unk.edu/offices/disability_services/

We recently received notice that we need to include the statement below regarding Sexual Misconduct, please insert it in your syllabus as well.

Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

Local Domestic Violence, Sexual Assault Advocacy Agency 308-237-2599

Campus Police (or Security) 308-627-4811

Title IX Coordinator 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

If you have questions regarding the information in this email please contact Mary Chinnock Petroski, Human Resources Director (petroskimj@unk.edu or phone 8655).

If you have an accommodation plan please see me as soon as possible, so we can make any arrangements necessary for your learning. No accommodations can be provided until a Reasonable Accommodation Plan is in place. Please remember, plans are not retroactive and cannot be used for assignments prior to the date of my signature.

Schedule

Week 1

Large Mammal Restoration

Chapter 1 - 3

1st essay

Watch De Extinction videos and write three page opinion paper backed up with data and peer reviewed journal.

https://www.ted.com/talks/stewart_brand_the_dawn_of_de_extinction_are_you_ready

https://www.ted.com/talks/paul_root_wolpe_it_s_time_to_question_bio_engineering

https://www.ted.com/talks/hendrik_poinar_bring_back_the_woolly_mammoth

https://www.ted.com/talks/michael_archer_how_we_ll_resurrect_the_gastric_brooding_frog_the_tasmanian_tiger

Discussion question

What animal would you want to bring back and why? What would it do to the ecosystem it was once a part of?

Chapter 1 question

Chapter 2 question

Chapter 3 question

Week 2

Large Mammal Restoration

Chapters 4 – 6

Case Study 1

https://www.ted.com/talks/george_monbiot_for_more_wonder_rewild_the_world

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=video&cd=2&cad=rja&uact=8&ved=0CCMQtwIwAAQ&url=http%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D2JGA3lNOzJk&ei=s7xnVZHaOMX8oAS1o4DwDw&usg=AFQjCNFCXru2RoafjqVhJQamfl5z3jv-SQ&sig2=x_2YHFZpV6DS--5KZ-Q3MQ

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CCAQyCkwAA&url=http%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Dysa5OBhXz-Q&ei=NLInVbz8MpPgoASZ4YKYCw&usg=AFQjCNGYEchl6GZCXWmGvCdpHL5Xfndj0w&sig2=ZmbkaCoM3EsOZDJnPP_8Ig&bvm=bv.94455598,d.cGU

Discussion should we reintroduce predators?

Chapter 4 question

Chapter 5 question

Chapter 6 question

Week 3

Large Mammal Restoration

Chapters 7 – 8

Case Study 2

http://www.aphis.usda.gov/animal_health/animal_dis_spec/cattle/downloads/cattle-bison.pdf

<http://www.wcs.org/saving-wildlife/hoofted-mammals/bison.aspx>

look at other animals on this web site

Discussion should bison be moved to other public lands? Is there really a health concern?

Chapter 7 question

Chapter 8 question

Week 4

Large Mammal Restoration

Chapters 9 – 11

Case Study 3

https://www.ted.com/talks/stewart_brand_proclaims_4_environmental_herxies

https://www.ted.com/talks/bernie_krause_the_voice_of_the_natural_world

https://www.ted.com/talks/juliana_machado_ferreira

Discussion how do we get humans to get behind conservation?

Chapter 9 question

Chapter 10 question
Chapter 11 question

Week 5
Large Mammal Restoration
Chapters 12 – 14

https://www.ted.com/talks/e_o_wilson_on_saving_life_on_earth
https://www.ted.com/talks/nalini_nadkani_on_conserving_the_canopy

Discussion what would you work on first for conservation and why?

Chapter 12 question
Chapter 13 question
Chapter 14 question

Week 6
Large Mammal Restoration
Chapters 15 – 16
Case Study 4

<http://www.upworthy.com/9-out-of-10-americans-are-completely-wrong-about-this-mind-blowing-fact-2>

Discussion what does this video have to do conservation?

Chapter 15 question
Chapter 16 question

Week 7
Priorities for the Conservation of Mammalian Diversity
Chapters 1 – 4

https://www.ted.com/talks/corneille_ewango_is_a_hero_of_the_congo_forest
https://www.ted.com/talks/peter_ward_on_mass_extinctions

Discussion how do we justify spending lots of money for animals like polar bears?

Chapter 1 question
Chapter 2 question
Chapter 3 question
Chapter 4 question

Week 8
Priorities for the Conservation of Mammalian Diversity
Chapters 5 – 9

https://www.ted.com/talks/kartick_satyanarayan_how_we_rescued_the_dancing_bears

https://www.ted.com/talks/elizabeth_murchison
https://www.ted.com/talks/adam_savage_s_obsessions

Discussion are rare species worth saving, what if they are not warm fuzzies?

Chapter 5 question
Chapter 6 question
Chapter 7 question
Chapter 8 question
Chapter 9 question

Week 9
Priorities for the Conservation of Mammalian Diversity
Chapters 10 – 14

https://www.ted.com/talks/beverly_dereck_joubert_life_lessons_from_big_cats
https://www.ted.com/talks/karen_bass_unseen_footage_untamed_nature
https://www.ted.com/talks/jane_goodall_at_tedglobal_07

2nd essay Pick an animal in trouble we have not discussed in class and develop a novel way to conserve the population.

Discussion how do we really save the mammals?

Chapter 10 question
Chapter 11 question
Chapter 12 question
Chapter 13 question
Chapter 14 question

Final Project

Pick a habitat near you (agricultural, wetland, urban, etc) and an animal species to develop a full conservation plan for the area you have chosen. For example go to a prairie dog village on a grazing area and develop a plan for black footed ferret.

You will need to visit the site and take stock of what is on the site for animals and vegetation. The area needs to stay in service to what it was before you make changes. What I mean is on my prairie dog village still needs to be grazed but I can control when the grazing happens or add habitat.

You will need to write up you report that will include: why is it important, changes made, what are your expectations, maps, cost, who needs to be convinced, who is paying for it, etc.

You will also need to create a 5 minute video as public information video. This is for the public so it needs to be interesting and moving as well convince the viewer that we need to make the changes.

Week 10
Bird Ecology and Conservation
Chapters 1 – 3

<http://www.upworthy.com/i-honestly-didnt-think-a-video-about-birds-would-make-me-cry-i-was-wrong-2>

<https://www.google.com/url?q=http://www.upworthy.com/watch-this-is-one-time-lapse-big-oil-doesnt-want-you-to-see&sa=U&ei=mKpoVa7vE4-1sQS3zoPYAQ&ved=0CA4QFjADOAo&client=internal-uds-cse&usg=AFQjCNF7fTop5teQzXaZGMyZpOSKB0kO4Q>

<https://www.google.com/url?q=http://www.upworthy.com/watch-the-worlds-smallest-penguins-take-a-swim-in-their-new-us-habitat&sa=U&ei=KatoVYzREfCxsATG5YDwDQ&ved=0CAUQFjAA&client=internal-uds-cse&usg=AFQjCNHcR5EUrlrvtd8sazGw4RJXbU5j8w>

https://www.ted.com/talks/tim_birkhead_the_wisdom_of_birds

Discussion birds are awesome why?

Chapter 1 question

Chapter 2 question

Chapter 3 question

Week 11

Bird Ecology and Conservation

Chapters 4 – 7

https://www.ted.com/talks/munir_virani_why_i_love_vultures

https://www.ted.com/talks/dyan_denapoli_the_great_penguin_rescue

https://www.ted.com/talks/joshua_klein_on_the_intelligence_of_crows

Discussion why are birds so important to our environment?

Chapter 4 question

Chapter 5 question

Chapter 6 question

Chapter 7 question

Week 12

Bird Ecology and Conservation

Chapters 8 – 11

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=video&cd=1&cad=rja&uact=8&ved=0CB0QtwIwAA&url=http%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DIfNf1I7uiKo&ei=y65oVaT6OsWYyASSrIGoBA&usg=AFQjCNFnMWDVpJB7yFaGZXCRYyb18dCP0Q&sig2=FUsT5YfK5sjrWsMhkM4DTg>

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=video&cd=2&cad=rja&uact=8&ved=0CCMQtwIwAQ&url=http%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D18-IspNQBRg&ei=y65oVaT6OsWYyASSrIGoBA&usg=AFQjCNGSmSOqWdWnFlq6mCuG06_iiBMynQ&sig2=sAiWuyroEnTJpP0QN9bZ6A

Discussion what are the most important birds to conserve?

Chapter 8 question

Chapter 9 question
Chapter 10 question
Chapter 11 question

Week 13
Bird Ecology and Conservation
Chapters 12 – 14

https://www.ted.com/talks/james_b_glattfelder_who_controls_the_world

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=video&cd=13&cad=rja&uact=8&ved=0CCIQtwIwAjk&url=http%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DewW7XfD0EQU&ei=ULBoVfrHLIGYyATdmYD4Aw&usg=AFQjCNGgKFBqr3sXw43yOID1JW1ighNanQ&sig2=7zLwNCa9uW2ncLW-bsLUQ>

Discussion what do we do about the US's invasive birds?

Chapter 12 question
Chapter 13 question
Chapter 14 question

Week 14
Marine Mammal
Read

<http://researchonline.jcu.edu.au/10939/1/marsh1.pdf>
<http://marno.lecture.ub.ac.id/files/2012/06/Foundations-of-Environmental-Sustainability.pdf#page=223>
<http://www.cetus.ucsd.edu/SIO133/PDF/Read%20et%20al.%20Conservation%20Biology%202006.pdf>
<http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1317&context=usdeptcommercepub>
http://www.researchgate.net/profile/Yuri_Leite/publication/227523327_Mammal_Conservation_in_Brazil/links/00b7d51f64e36aca34000000.pdf

https://www.ted.com/talks/asha_de_vos_why_you_should_care_about_whale_poo
https://www.ted.com/talks/sylvia_earle_s_ted_prize_wish_to_protect_our_oceans

Discussion how in trouble are the oceans?

1 question
2 question
3 question
4 question
5 question

Week 15
Marine Mammal
Take Home Test

http://www.abdn.ac.uk/lighthouse/documents/pdf/Bailey_MEPS2009.pdf

http://www.researchgate.net/profile/William_Ellison2/publication/51900547_A_new_context-based_approach_to_assess_marine_mammal_behavioral_responses_to_anthropogenic_sounds/links/0f3175357c52c817ea000000.pdf
http://www.conservacionecologylab.com/uploads/1/9/7/6/19763887/moore_et_al_2008.pdf

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=video&cd=4&cad=rja&uact=8&ved=0CC8QtwIwAw&url=http%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D4SAkq6lsnoE&ei=btoVY6zJsP8yQS6_YCoDw&usg=AFQjCNFvp9bQgekdXwawFCqH-blFOZSNNQ&sig2=-MtvFYcBIfrGDjSc4CvCyw

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=video&cd=2&cad=rja&uact=8&ved=0CCMQtwIwAQ&url=http%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D2qCcJvmlPIs&ei=FLxoVZPQAsSxyATPooPIDw&usg=AFQjCNH1MUW6nR6WpAsnPYvcrDpZAZ1rqQ&sig2=6tAkjLzz8JlemKQCBBn4TA>

https://www.ted.com/talks/brian_skerry_reveals_ocean_s_glory_and_horror

Discussion do we make a difference or do human make decision based on their stomach or greed. Did whale wars work?

6 question

7 question

8 question