

Carnivore Ecology

Wildlife 332



Carnivores vs Carnivorans

Carnivores eat meat whereas carnivorans are members of the mammalian Order Carnivora, most of which eat meat

This course will focus on the 16 families that make up the mammalian Order Carnivora. We will focus on those families found in Wisconsin but also touch on other interesting families like marine carnivores and hyenas. We will discuss the evolution, functional morphology, life history, ecology, and

1

CHRIS YAHNKE

TNR 346 Zoom Office
Hours by appointment
715-346-2455

2

LIVE ZOOM

Live Zoom Mondays
11:00-11:50, online
labs, field work

3

WINTER TRACKING

We will try out a
tracking activity to get
us outside



Form follows function

The teeth of this otter look different than weasels.



Bones and structures

The prominent sagittal crest on a wolverine



Dental Formula

We can infer dietary breadth from the dental formula and tooth shape.

conservation biology of each family, focusing on those species found in the state. Since we can't cover all 260 Carnivora species in depth, teams of students will give presentations on a species of their choosing within their assigned family.

Tentative Syllabus

Date Topic

1/25 Introduction

2/1 Phylogeny of Carnivores

2/8 Small Cats (Presentation 1)

2/15 Large Cats (Presentation 2)

2/22 Hyenas (Presentation 3)

3/1 Foxes and small dogs (Presentation 4)

3/8 Wolves and big dogs (Presentation 5)

3/15 Bears (Presentation 6)

3/22 Spring Break

3/29 Marine Carnivores

4/5 Skunks (Presentation 7)

4/12 Raccoons (Presentation 8)

4/19 Badgers (Presentation 9)

4/26 Fishers, Wolverines, and Martens (Presentation 10)

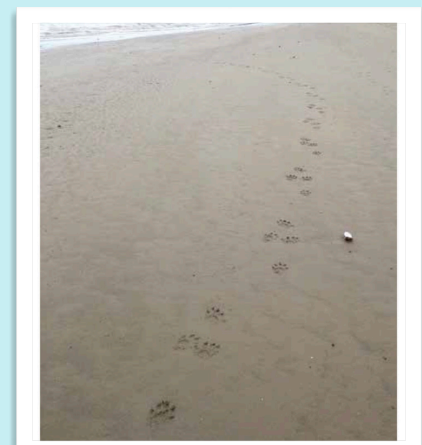
5/3 Weasels



Confirmed cougar captured on a Waupaca County trail camera.

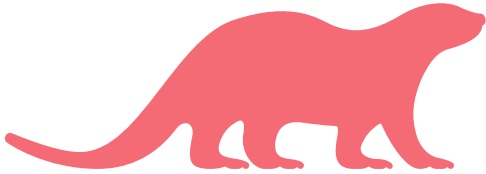
CARNIVORE TRACKING

Winter is one of the best times to look for animal tracks and this winter we will try and photograph and identify carnivore tracks. The best resource I know of is Mark Elbroch's Mammal Tracks and Sign (otter tracks on sand at right is from this book, now with a more affordable and updated edition (\$24 on Amazon). Since there are no required textbooks for this course and I didn't get a required book request in on time I can't require you to buy this book but can strongly recommend this as a professional reference book that would be perfect for a project like this. It's cheaper on Amazon than what the bookstore would have charged as well.

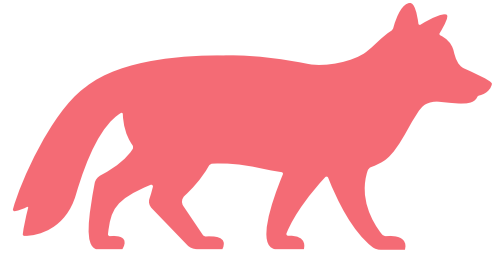


How will you be graded?

There will be both lecture and lab graded components. There will be two 50 point exams based on the lecture material and two 25 point lab exams based on the lab material. In addition, there will be a team presentation worth 50 points and 5 difficulty papers worth 10 points each. Finally, each student will compile a digital or analog tracking journal worth 50 points. Thus there are a total of 300 points in this class.



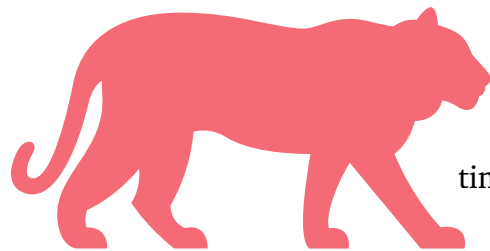
- A 93-100
- A- 90-92
- B+ 88-89
- B 83-87
- B- 80-82
- C+ 78-79
- C 73-77
- C- 70-72
- D+ 68-69
- D 60-67



F <59

What is the class format?

We find ourselves in an interesting time. Last semester there were 613 cases of Covid-19 in UWSP students and employees. By the end of the semester, the first vaccine had been approved, and now there are two that will be distributed around the country and the world. All that is to say we can make it through spring in a fully online format with real hope that things will continue to improve and we can resume in-person instruction. There will be live Zoom meetings each Monday to introduce the carnivore family of the week followed by online labs that will include quizzes and an oral presentation.



Finally, this is the first time I am teaching this course and

you can help mold it for the future. I designed it for in-person instruction knowing that this would also work well in an online format. It's up to all of us to make this a good course and a good semester.