Wolves and Northwoods Carnivores: Predator Ecology Jan 2-16, 2022

2022 January Interim Course at Osprey Wilds Environmental Learning Center

We look forward to meeting you in January and sharing this month of winter, wolves and other large predators with each one of you. No season creates as much stress on the ecology of wildlife as winter. In the summer, there is always enough to eat when the plants are green and abundant, but what food is to be found when three feet of snow covers the ground? There is always shade in the heat of summer, but is there always a warm place to be found in winter? What are some of the physical and behavioral adaptations of organisms to the cold, dry winter environment?

During this season we will attempt to understand winter through interpretation of wolf and predator ecology, research and practical experience. We will be tracking wolves to locate territorial packs and observing the environmental impacts of deer on their habitat. We will assist lynx researchers with tracking data. We will also spend a week divided between Superior National Forest and the North Shore of Lake Superior to survey the wolf population on the Jonvick Deer Yard, a special ecological zone which concentrates over 100 deer/sq. mi., and at one time the largest wolf pack in Minnesota. We will prepare for our experiences with lectures on wolves, lynx and the other predators of Minnesota, as well as their interactions with prey species, and will practice data gathering techniques and do tracking surveys which will benefit wolf and lynx researchers and managers.

We will furnish snowshoes for the research, and will work with you on first aid and winter survival skills. There will be some time for cross country skiing on your own and some of our routes are better run on skis.

Since we are living in unprecedented times, Osprey Wilds has put into place many safety procedures in regards to COVID-19. Included in this packet are our current procedures. Please note these might change prior to your arrival; if so, we will send out an updated version. We require all Participants to be vaccinated, and to submit a copy of their vaccination certificate with the completed forms, by December 13, 2021.

Transportation during the course will be provided by Osprey Wilds' 15- and 7-passenger vans.

Required Texts:

Track Pack: Animals in Full Life Size by Ed Gray Animal Tracks of Minnesota and Wisconsin by Ian Sheldon and Tamara Eder

Recommended Reading:

Wolves: Behavior, Ecology, and Conservation by L. David Mech and Luigi Boitani
Recovery of Gray Wolves in the Great Lakes Region of the United States by Adrian P. Wydeven,
Timothy R. Deelen and Edward Heske
The Company of Wolves by Peter Steinhart
Tracking and the Art of Seeing by Paul Rezendes

Driving directions to

Osprey Wilds Environmental Learning Center

54165 Audubon Dr., Sandstone, MN 55072 320-245-2648

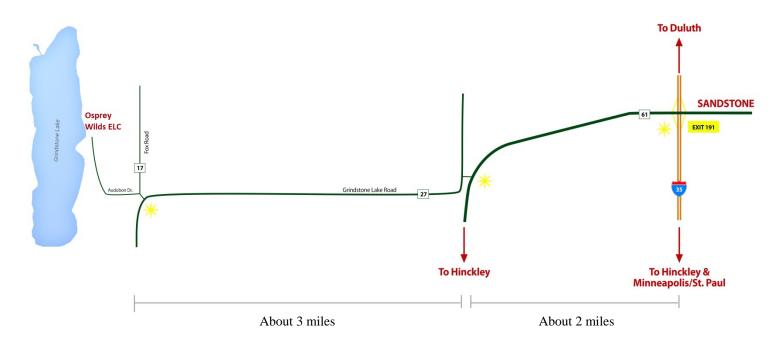
If searching for our location online, use maps.google.com

Osprey Wilds GPS coordinates

(46.117186384284004, -92.99793720245361)

Driving directions to Osprey Wilds From the Twin Cities and Duluth:

- 1. From Interstate 35, exit on the Sandstone Exit 191.
- 2. Go west on Hwy 61 just over two miles.
- 3. Take a right on County Road 27, cross the Munger bike trail, turn left at the 'T' (Grindstone Lake Road) and go just over three miles.
- 4. Take a right on County Road 17 (Fox Road) and go about 100 feet.
- 5. Turn left between the stone pillars (Audubon Drive our driveway).
- 6. **PROCEED directly to main office/dining hall for check-in** just follow our mile-long driveway all the way until it ends at the parking lot and the office.





COVID-19 Preparedness Plan for On-Site Events:

All participants will be asked to comply with these protocols throughout the duration of their program. These procedures could change at any time; Osprey Wilds will keep you updated with any changes.

Pre-visit:

All participants will be asked to monitor their symptoms for 2 weeks prior to arrival, including:

- o Fever
 - participants are asked to do daily temperature checks and must have a temperature less than 100.4 degrees to attend
- Cough
- Shortness of breath or difficulty breathing
- Chills
- Repeated shaking with chills
- Muscle pain/Headache
- Sore throat
- New loss of taste or smell

If any participant exhibits any of the above symptoms, they will not be permitted to attend the in-person event. They must contact our staff to cancel.

Meals:

- All tables will be wiped down with a bleach-based sanitizer before and after each meal
- Masks will be worn inside the dining hall except by those who are sitting and eating
- Participants will be encouraged to minimize time in the dining hall
- Meals may be eaten outside if weather permits

Instruction:

- Instructors and participants will wear masks at all times in common areas and classrooms indoors, and will wear masks during outdoor learning if social distancing is not possible.
- Instruction will occur outdoors when appropriate; please dress and pack accordingly!
- Indoor instruction will be socially distanced with reduced numbers

Handwashing/Hygiene:

- Participants will be reminded to wash their hands at each scheduled break and before meals
- Hand sanitizer will be provided during instructional time--participants are encouraged to bring their own small supply of sanitizer

Indoor Areas:

• For better air purification, Osprey Wilds has upgraded all of our air filters to the highest filtering efficiency level available for our system (MERV 1300)

Transportation:

If transportation is offered by Osprey Wilds for you or your participant, masks will be required while inside the
vehicle

2022 January Interim_Tentative Schedule (subject to change)

1/2 – Plan to arrive at Osprey Wilds between 2 p.m. and 4 p.m. (*Please try to arrive no earlier than 2 p.m.* – *lodging facilities may not be ready until after 2*) Introduction to Osprey Wilds

Dinner

Overview of month

Expectations

Journals and Grading

1/3 – Wolves

Cross Country Skiing

Winter First Aid and Safety

1/4 – Coyotes & Foxes

Lynx & Bobcats

Predator/Prey Class

1/5 - Orienteering

Predator/Prey

Bears & Mustelids

- 1/6 Tracking Presentation and Outside Tracking
- 1/7 Visit to University of MN, Wildlife Science Center
- 1/8 Depart for Ely. Visit Int'l Wolf Center

Radio Telemetry Flights

Dinner in Town

1/9 – International Wolf Center

Radio Telemetry Flights

Listening Point and tracking

1/10 - Tracking in Superior Nat. Forest

Dinner in Town

Visit North American Bear Center

1/11 - Hike in BWCA Wilderness

Travel to Lake Superior and Solbakken Resort

Dinner Out

1/12 – Tracking through transect hikes and skiing

Browse Surveys

Readings

Night Hike

1/13 – Tracking through transect hikes and skiing

Browse Surveys.

1/14 – Depart

Visit Gooseberry Falls State Park

Visit Duluth's Canal Park

Return to Osprey Wilds

- 1/15 Study and homework a.m. Final test p.m. Evening fun. Drive home if local.
- **1/16** Leave by Noon.

Travel Information

Travel by car:

Plan to arrive between 2 p.m. and 4 p.m. on Sunday, January 2.

You may leave on Saturday, January 15 after the final test, or if you have a long way to drive, you can stay the night and leave by Noon on Sunday, January 16.

Travel by plane:

Osprey Wilds will provide an airport pickup/dropoff for \$35 each way

Fly into MSP (Minneapolis/St Paul Intl) Airport TERMINAL 1. Arrive by Noon on Sunday, January 2, to allow for any flight delays. The van departs for Osprey Wilds from Terminal 1 at Baggage Claim Door 4 at 2 p.m.

Flight departure must be after Noon on Sunday, January 16. We will have you at the airport by 10:30 a.m.

Travel by bus:

Groome Transportation shuttle service travels between the Twin Cities and Duluth. It also picks up and drops off at the Airports. Go to www.groometransportation.com (tel. 218.724.4676) for the schedule. The nearest stop to Osprey Wilds is the Victory Gas Station in Sandstone – we can pick you up and/or drop you off there

Lodging Information

While at Osprey Wilds you will stay in Lowry or Schwyzer Student Lodges. There are 4-6 bunks per room and men's and women's bathrooms and showers. While at Osprey Wilds, you will have bunks in rooms designated male or female. You will need to bring a sleeping bag and pillow, as well as towels and washcloths. You will have daily housekeeping responsibilities.

While in Ely you will be staying at Silver Rapids Lodge, and while on the North Shore of Lake Superior, you will be staying at Solkbakken Resort near Lutsen, Minnesota. Since there are limited beds, and in order to keep costs reasonable, it will be necessary for participants to share double- or queen-sized beds with roommates. Rooms will be designated male or female, depending on the number of registrants of each gender.

Call or email Osprey Wilds if you have any questions:

PO Box 530, Sandstone, MN 55072 Tel. 320-245-2648 Email frontdesk@ospreywilds.org

Additional Course Information:

Meals: Served buffet style in the main lodge while at Osprey Wilds. Many lunches will be packed to eat in the field. On the North Shore we will cook our own meals. Special diets can be accommodated. We can prepare vegetarian, vegan, and gluten-free options. You will be responsible for three restaurant meals during the course.

Training: This is a physically demanding program. Walk a lot ahead of time. We recommend getting up to 4 miles or more, 3-4 days every week, at a brisk pace with a daypack and water – see **Clothing and Equipment Notes** for information on what you might carry in your pack on a typical day. If you are physically prepared for the program, your experience will be much more enjoyable and safe.

Tests: There will be various short quizzes. Research skills and background are important and we need to have some idea of where you're at. Some of you will need grades for school credits. These tests will help assess your grades. We will also ask you to research some aspect of wolf ecology or behavior to present to the class.

Grades: Course requirements are outlined in the Syllabus. **Please let us know in advance if a** grade is required, and the name, address, phone number, and email of the advisor we should send grades to.

Drug & Alcohol Policy: Alcoholic beverages and recreational drugs are not allowed at Osprey Wilds during this program. Smoking and vaping are not allowed in any of the buildings or vehicles. Smokers/vapers will be asked to move away from the group when smoking in the field. Smoking at the center is restricted to one outside area. Chewing tobacco is not allowed in any of the buildings or vehicles.

Mail: Use Osprey Wilds' street address for all mail and deliveries (*your name*, Osprey Wilds ELC, 54165 Audubon Dr., Sandstone, MN 55072). UPS and FedEx deliver directly to us Monday through Friday – the best option for any packages, since USPS mail has to be picked up from town, and sometimes there is a delay with USPS mail packages. Mail arriving in advance of the course can be held for you.

Phones: There is a phone in each of the Lodges and the dining hall for emergency use only. Osprey Wild's main phone (320.245.2648), which is located in the office, can accept voice messages after hours - those messages will be delivered to you the next morning.

Fire hazards: Candles and incense may not be burned inside any of the buildings.

Using Osprey Wilds gear: You are personally responsible for repair or replacement of any gear borrowed or rented by you from Osprey Wilds and will be charged for loss or damage if it is caused by personal negligence.

Clothing and Equipment Notes

January Interim Course at Osprey Wilds
Wolves and Northwoods Carnivores: A Look at Predator Ecology

Weather Conditions: January is our coldest month of the year, with a temperature range from above freezing to ⁻45°F. We are more concerned about the annual thaw and the wetness that accompanies it than with the cold weather. If you dress in layers and wear the proper fabrics, you should have no problems with the cold. We will discuss, in great detail, how to dress for and behave in cold conditions. Most temperatures will be in the ⁻10 to ⁺20°F range. A suggested packing list follows.

Cross Country Skiing: Osprey Wilds has cross country ski equipment which you can use. Our bindings are back country style which allows you to wear warm winter boots. Cross country skiing is an optional activity, however some of our wolf-tracking routes are best done on skis. Please let us know ahead of time if you plan to use any of our equipment.

Winter Clothing Concerns: Please refer to the Suggested Packing List.

Winter conditions demand far greater concern for proper clothing than any other season. The effects of cold, wind, and moisture are most severe at this time, so clothing should be chosen to serve adequately for safety and comfort.

Wool is one of the best materials since it has a high insulation value, and retains most of that value even when wet. Silk, polypropylene, pile, bunting, and a host of other materials are available, with specific uses and abilities, and they should also be considered, especially if layered with some wool. **Cotton should be avoided, because it holds moisture and loses all insulation value when wet**.

You should dress in multiple layers so you can take off or add layers to adjust your temperature, depending on weather conditions and your level of activity. If the snow is deep, you will be working hard and building up lots of heat. Layers should then be shed to reduce perspiration so you don't get your insulating layers wet. Wet clothing means quick conduction of heat away from your body.

At any time in the field on a cold day, you might be wearing the following (or an equivalent combination): wool hat, long underwear, turtle neck top, wool sweater, windbreaker or some other windproof layer, long underwear bottoms, wool pants, 2 pairs of wool socks, insulated boots, ski gloves or wool mittens with leather choppers. In your daypack might be a warmer jacket and/or down vest and/or additional wool sweater. (Do not go out and buy a parka just for this course. As long as you can bundle up in lots of layers, almost any winter overcoat will do.)

Each evening you will have to work towards drying clothes so that they can be used again.

Daypack: Day trips and research days will typically require us to be outdoors all day. Your daypack should be large enough to carry extra clothing, field guides, a clipboard, water bottles - 2 quarts, a flashlight, and lunch.

Suggested Packing List

(NOTE: You do not need all items to attend - READ CAREFULLY!)

Sleeping bag or bedroll and pillow to put on bed in lodge - make sure they are warm!

Wool or fleece hat or balaclava

Neck gaiter/scarf – wool or fleece is the best Wool or other heavy duty mittens - at least 2 pairs Leather or nylon overmitts - to keep wool ones dry

Wool or fleece sweaters – 2

Long sleeved wool or polypropylene shirts Wool or polypropylene long underwear - TOPS

AND BOTTOMS - 2 sets recommended Wool socks - at least 4 pairs

Liner socks - lightweight wool, polypropylene, silk*

Down, fleece or polarguard vest Winter jacket, parka or shell

Gaiters - a must to keep snow out of boots and socks

Good winter boots with removable wool/felt liner - this is a must have item! SOREL boots are the best, but there are many less expensive copies which work well too. These are boots with rubber bottoms and leather uppers.

Extra pair of wool/felt liners for boots*

Good raingear - jacket and pants - good for wind protection; should be durable in the cold.

Handkerchiefs

Sunglasses or ski/snow goggles
Bathing suit for the sauna and hot tub at

Solbakken

Wool pants - 2 pairs - one heavy and one light OR one pair of wool and one pair of ski/snow pants. Wool pants are available at Army/Navy surplus stores at very reasonable prices (looks may not be the greatest, but warmth is terrific!)

Down or Polarguard booties*(optional for lodge use)

Large daypack - a must for carrying gear and extra clothing on day trips

Camera/film (optional) pocketknife

Small flashlight/bulbs/batteries – a headlamp works well – good for late work since it gets dark around 4:30 p.m. in the winter

Binoculars*

Notebook/pens/pencils (pencils work best in winter conditions)

Compass - or orienteering style with 2 degree increments Silva Polaris

GPS unit (highly encouraged)

Laptop computer (highly recommended for

homework and class emails)

2 heavy duty large garbage bags to line your daypack

Large freezer Ziploc bags to cover notebooks and field guides

Quart size steel thermos* - so your water doesn't freeze

2 quart-size water bottles

Cross country skis/boots/poles/waxes – optional, but do bring your own if you have them Snowshoes - optional - we have some for you to use

Watch or portable alarm clock – important Personal toiletries and medical items (prescription meds, lotion, lipbalm, toothpaste/brush, soap, bandaids, moleskin, aspirin, coughdrops, tampons, GoGirl, etc)

Washcloth and towels

Ace bandages/braces - if you need to use any. We will be in rugged country, so be prepared for knee/ankle problems if you know these are weak areas

Laundry soap

* Optional, yet highly recommended items. Call us for more information if you have any further questions.

Be sure to bring sufficient comfortable clothing for the evenings and inside. Include slippers/moccasins, robe, underwear, pajamas, jeans, etc. The above packing list relates to the outdoor activities.

Syllabus

Course Title: *Wolves and Northwoods Carnivores: Predator Ecology* **Number of Credits:** 3 semester credits – recommended by instructor

Semester Offered: January Interim, January 2-16, 2022

Instructor's Name: Bryan Wood Contact Phone: 320-245-2648 Email: wood@ospreywilds.org

Catalog Description:

This course covers a broad range of topics related to wildlife. The focus will be the gray wolf, lynx, the white-tailed deer, and other MN predators and prey, but all animals directly or indirectly associated with or affected by these predators or prey may be included. The course is field-oriented and includes opportunities for backcountry travel, wildlife observation and tracking, as well as an introduction to habitats, how wildlife respond to natural and artificial disturbance, and human factors. Additional topics include wildlife research techniques, data acquisition and analysis, as well as management practices.

Learning Outcomes: Upon completion of this course, the student will be able to:

- 1. Describe animal adaptations to a winter environment.
- 2. Identify and describe various wolf behaviors.
- 3. Identify and describe wolf field sign.
- 4. Identify habitat types and individual woody browse plants important to ungulates in the Border lakes region.
- 5. Describe wildlife research techniques and their application.
- 6. Demonstrate the ability to use a map and compass for backcountry navigation.
- 7. Describe and demonstrate safe field techniques.
- 8. Identify and describe ecological factors related to lynx research.
- 9. Identify and describe lynx field sign.
- 10. Describe Minnesota predators and their habitat, prey, and lifestyle.

Student Assessment Methods:

Field Journal

Research Paper

Oral and written quizzes Discussion of assigned readings

Instructor assessment of student participation and competency

Instructor assessment of practical skill demonstration and competency

Reflection Paper

Final exam

Outline of Major Course Content:

Wolf Ecology

Northern Predator Species

Northern Prey Species

Predator-Prey Relationships

Predator and Endangered Species Issues and Management

Backcountry Navigation

Wildlife Habitats

Wildlife Research Techniques

Winter Field Techniques and Safety

Attendance Policy:

Students must participate in all class activities unless prearranged with class instructor, in which case make-up assignments may be arranged.

Grading Policies and Evaluation Procedures:

Participation 35% of total grade
Journal 30% of total grade
Research Project 15% of total grade
Final Exam 15% of total grade
Reflection Paper 5% of total grade

Final Grade is based upon % of Total Points:

90-100% = A, 80-89% = B, 70-79% = C, 60-69% = D, Below 60% = F

Course Accommodations:

If you have special needs, a learning disability, or other kind of disability, please discuss your special needs with the instructor.

Course Location: The first half of the course will be based out of Osprey Wilds and the 2nd half will be split between Ely and the North Shore of Lake Superior.

Academic Integrity Statement: Students are expected to abide by academic integrity standards in this class. Student unethical practices, such as cheating on examinations or misrepresenting authorship on class assignments, will not be tolerated.

TRAVEL INFORMATION AND ATTENDANCE VERIFICATION

2022 January Interim Course at Osprey Wilds

Wolves and Northwoods Carnivores: Predator Ecology 1/2-1/16/22

Please mail or email this form, along with the balance of your fee, to Osprey Wilds ELC, PO Box 530, Sandstone, MN 55072 or frontdesk@ospreywilds.org so that it reaches us by **December 13, 2021**.

NAME		AGE	MALE	FEM	IALE
HOME ADDRESS					
CITY	STATE	ZIP			
COLLEGE ADDRESS					
CITY	STATE	ZIP			
PHONE NUMBER: COLLEC	E or CELL ()	H	IOME ()_		
EMAIL					
☐ I will be receiving college o	•			d of credi	ts?
☐ An evaluation of my experi His/Her name/address	ence/performance should is (include address, phone,				
NOTE: PLEASE BRING/S	END A COPY OF YOUR SC	HOOL'S EVA	LUATION FO	RM if we	are to use it.
I will eat ☐ red meat ☐ pou	ltry 🗌 fish 🔲 vegetabl	es 🗌 dairy p	products		
I will need the following equip	ment from Osprey Wilds:				
Cross country skis I am	feetinches tal	l Cross	country ski p	oles	Snowshoes
	TRAVEL P	LANS			
Others traveling with me are					
Others traveling with me are					
ARRIVAL INFORMA	TION				
☐ I will arrive by car ar	d will be at Osprey Wilds a	nt	on Su	nday, Janı	uary 2 nd 2022
·	\$35) to Osprey Wilds from			•	•
	ht info is: Airline				
☐ Groome Transport w	ill drop me at the Victory (Gas Station at	t	on Sunc	lay, January 2 nd 2022
DEPARTURE INFOR	MATION				
\square I will leave Osprey W	'ilds by car at	on			_
	\$35) from Osprey Wilds to My flight info is: Airline	•	-	-	
•	Groome Transport at the		•		•



Health/Medical Form

Please send completed and signed form to: Osprey Wilds Environmental Learning Center PO Box 530, Sandstone, MN 55072

Phone: 320.245.2648

Email: frontdesk@ospreywilds.org

This form must be completed and returned by **December 13, 2021**

Guest's Name				
Mailing Address				
City, State Zip				
Cell or Home Phone E-mail Address				
Date of Birth				
Emergency Contact	Primary Physician (s)	Insurance Information		
Name	Name	Carrier		
Relationship	Phone	Policy #		
Daytime Phone	Name	Group #		
Evening Phone	Phone	Insurance Phone		
1 Do you have any of the followin	g conditions?			
 Do you have any of the following conditions? □ Epilepsy/seizures □ □ Bleeding/clotting disorder □ Heart 		☐ Asthma/emphysema		
High blood pressure	Diabetes OTHER: _			
	ns (e.g., vegetarian, vegan, gluten-free, etc.). Note tions at each meal. If you have severe food restrictions of food policy for detailed information.			
4. List any medications taken on a daily basis (or attach separate sheet):				
5. Do any medications require refrig	geration?			
, , ,	ondition of which the Center should be aware? (c	describe below)		
7. Will you have any special Medical	I requirements during this event?	Yes 🗆 No		
I hereby release the above in	formation for use of Osprey Wilds Environme	ental Learning Center and/or any other		
Medical personnel who might	t need to provide care to me during this even	nt.		
In the event of an emergency	, I authorize treatment by emergency medica	al personnel.		
Signature	D	Date		



J-Term2022

Liability Release Form

Please send completed and signed form to: Osprey Wilds Environmental Learning Center PO Box 530, Sandstone, MN 55072 Email: frontdesk@ospreywilds.org

This form must be completed and returned by December 13, 2021

	Assumption of Risk & Liability Release and	Consent to Publish		
Participant Name		Birthdate		
am aware that this program involv physical injury, emotional injury, pa trails; canoeing; cross country skiin	es certain inherent risks which I expressly accept and a aralysis, permanent disability, illness, death or propert g; snowshoeing; rock-climbing; and belaying on an ind er people's actions. I understand that even if the parti	(A Minnesota nonprofit corporation). I acknowledge and assume. These risks may include (but are not limited to) y damage due to inclement weather; walking on uneven loor climbing wall; a high ropes course activity; field trips cipant travels outside of the state of Minnesota, any		
the Health Form submitted). In the	tion, I have determined that my health is adequate to event of an emergency, I authorize treatment by eme te the use of safety equipment, without jeopardizing t			
has enacted preventive measures i become infected. I acknowledge the				
participants, and all other persons with respect to injury, sickness, dis whether arising from ordinary neg or entity seeks compensation for t	ease, loss or damage. This release applies to any and a ligence or otherwise, and whether involving fees and e	rticipant, from any and all claims and liabilities in any way all liabilities to me or my estate of any description, expenses of any kind. In the event that some other person and hold harmless Osprey Wilds for all sums incurred in		
found by a court of law to have wa have had enough time to read this	ived my right to maintain a lawsuit against the parties	maged during my participation in this activity, I may be being released on the basis of any claim for negligence. I do so. I understand that this activity may not be made his document and I agree to be bound by its terms.		
taken during the visit in pr	-	se and publish any images, audio, video, and recordings at that I will receive no payment. and voluntarily waive any naterial by Osprey Wilds ELC.		
Participating Adult Signature		Date		
Signer Name	Mailing Address	Mailing Address		
City	State	Zip		
Email:		Phone		

Please note: Failure to sign this form will prohibit you from participating in all Osprey Wilds activities. You are invited to request more information about our programs, facilities, and policies at any time.