

STEENS MOUNTAIN BACKPACK PROGRAM DESCRIPTION

Surrounded by a "sea" of sagebrush, the Malheur National Wildlife Refuge is one of the most important sites in the intermountain west for migratory birds who rest and feed here while traveling between their breeding ground farther north and wintering grounds to the south. Malheur is widely recognized as one of the top 10 sites in North America for observing avian diversity.

Ascending to the east is the fault-block mountain known as Steens Mountain. Gradually sloping for more than a mile in vertical height, the Steens has numerous life-zones of different ecologic habitats. Our goal is to investigate as many of these isolated regions as possible, culminating in a four day, three-night backpack into the rugged canyons along the flanks of Steens Mountain.

We'll take time to scan the upper slopes for signs of isolated bighorn sheep herds and we'll scan the skies for golden eagles. Many other forms of wildlife, big and small, on the air and under ground, also call the Steens home.

Course Syllabus

OBJECTIVES: Academic and outdoor training goals

- ◆ To understand the natural history of Steens Mountain and Malheur basin
- ◆ To recognize several key wildlife indicator species
- ◆ To understand the distinctive differences between ecology based on elevation
- ◆ To learn and practice responsible backcountry ethics

ACTIVITIES: Hands on learning in the field

- ◆ Practice Leave-No-Trace camping techniques
- ◆ Learn how to use a map and a compass
- ◆ Recognize mammal habitats and mammal adaptations
- ◆ Recognize and identify raptors and shorebirds in the field

SCIENTIFIC CONCEPTS: Scientific Principles to be introduced

- ◆ Cycles: rock, water, nutrients
- ◆ Diversity, populations, change, interactions
- ◆ Volcanic geology: cause & effect, matter, dynamic earth
- ◆ Differences in habitats (e.g. conifer forest vs. arid-lands vs. riparian)
- ◆ Astronomy: constellations, legends

STEENS MOUNTAIN BACKPACK EQUIPMENT LIST AND PACKING TIPS

We have included a list of items that each person should bring, along with an explanation for why certain items are necessary. To help minimize weight and eliminate redundant items on the trip, we have found that it is advantageous for a pair (or more) of students to share a tent. Before we set off on the trail, we will take an inventory of everything we have with us and organize groups to share gear. Any extra stuff we do not take with us can be picked up at the end of the trip. *All campers will be sharing a tent with at least one other person.* If you have any questions about the trip please contact the OMSI outdoor Science Education manager at 971.269.9929.

Packing For The Trip

The basic idea when packing for a backcountry trip is to stay warm and dry. One of the most problematic fabrics to wear in the backcountry is cotton. This is because when cotton gets wet it does not keep you warm (in fact it draws heat away from your body) and it takes a long time to dry. Cotton sweatshirts are heavy, bulky, in addition to being a poor insulator. Cotton socks will keep your feet cold, but also tend to cause blisters when they get sweaty and wet. Minimal cotton clothes (such as jeans), are okay for in camp, but not while hiking, and you must make sure you keep them dry. Synthetic or wool materials are great things to have in the backcountry; these materials will keep you warm when wet, dry faster, and generally breathe better than cotton.

Bringing one set of clothes to wear on trail, and one set of clothes to wear in camp, is a good way to think about what to pack. In the case of bad weather, you will have a dry set of clothes to put on when you get to camp. Also bring clothes that you can layer, so you can add or subtract a layer depending on the conditions. Adding extra socks (especially liners) will help your feet stay dry which will help prevent blisters. Extra underwear and an extra t-shirt may also be a good idea as it can make you more comfortable. As you pack, try to include items that will can be used for multiple purposes. **REMEMBER: EVERYTHING YOU PACK YOU WILL CARRY!** *More gear and clothes means more weight.*

This list is the minimum you should bring; please make sure all these items are brought along.

SLEEPING GEAR

- sleeping bag
- insulating foam pad (for comfort, and to prevent significant conductive heat loss)
- tent (to be shared; not necessary to purchase if you do not have one)

CLOTHING AND FOOTWEAR

- 1 pair of shorts (optional, can double as swim wear)
- 2-3 t-shirts (one for hiking, one in camp, one extra)
- 1-2 pair long pants (1 pair for hiking in, one for in camp)
- 2-3 warm top layers (different weights for versatility, i.e. fleece, jacket, long-sleeved shirt)
- 1-2 pair synthetic (i.e. polypropylene, capilene, etc.) long underwear top and bottoms
- rain gear (jacket and pants)
- warm hat
- light gloves
- hiking socks and liners (2-4 pairs of each)
- underwear (3-5 pairs)
- swim suit
- sun hat (with brim/bill)
- sneakers or sports sandals (light footwear for low impact use in camp)
- Well fitting, broken-in hiking boots.** The more broken-in the better to prevent blisters. (See the tips section for more info on boots.)

CLOTHES FOR VAN

- ___ a set of clean clothes to wear home in the van (pack in separate bag)

PERSONAL GEAR

- ___ toothbrush and toothpaste
- ___ small towel (optional, can use bandanna)
- ___ biodegradable soap and container
- ___ sunglasses
- ___ sunscreen (15 SPF or higher)
- ___ mosquito repellent
- ___ lip balm with sun screen
- ___ bandanna

EQUIPMENT

- ___ external or internal frame backpack
- ___ backpack rain cover and large garbage bags for waterproofing
- ___ webbing or compression straps to tie extra gear to pack (if you have them)
- ___ small stuff sacks to organize gear (optional)
- ___ Minimum 2 water bottles (or bladder), must be able to carry *at least* 2 liters
- ___ flashlight with extra batteries, headlamp preferred
- ___ bowl, cup/thermal mug, spoon
- ___ pocket knife (optional)
- ___ *small* personal first-aid/survival kit (moleskin, Band-Aids, compass, whistle)
- ___ *small* repair kit (for backpack/tent/outerwear)
- ___ sack lunch for van ride on first day

OPTIONAL

- ___ gaiters (invaluable in wet weather, snow or dust to keep boots and socks dry or clean)
- ___ camera
- ___ field guide, binoculars (these are heavy...consider this carefully if you *really* want them)
- ___ hiking poles
- ___ book, deck of cards,
- ___ mosquito head net (the mountains can be very buggy)
- ___ day pack or fanny pack
- ___ 30' of lightweight rope or cord
- ___ zip lock baggies

REMEMBER: YOU will be carrying everything you pack, so ONLY pack what you need.

ALL CLOTHES AND EQUIPMENT SHOULD BE MARKED WITH THE PARTICIPANT'S FULL NAME. OMSI IS NOT RESPONSIBLE FOR LOST ITEMS.

NO ELECTRICAL EQUIPMENT SHOULD BE BROUGHT (CELL PHONES, MP3 PLAYERS, COMPUTER GAMES, ETC.)