

An Introduction to the Natural World

Student Handbook

The Mountaineers, 2020



Shooting Star
Photo by Gordie Swartzman

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Welcome

Thank you for signing up for this course that will introduce you to many flowers, trees, shrubs, birds, and ferns found in Western and Central Washington. Whether you are new to the Mountaineers or a long-time member, we think that what you learn will add enjoyment to your time outdoors. In the spring, you will greet the first glacier lilies as old friends and you will recognize the song of the Pacific Wren. In the fall, you will look for hay piles left by pikas and hear the eerie call of marmots preparing for the long winter ahead. You will learn a lot and have fun in the process.

Links

Course Page:

<https://www.mountaineers.org/locations-lodges/seattle-branch/committees/seattle-naturalists-committee/course-templates/introduction-to-the-natural-world-course/introduction-to-the-natural-world-course-seattle-2020>

Course Materials Page:

<https://www.mountaineers.org/locations-lodges/seattle-branch/committees/seattle-naturalists-committee/course-templates/introduction-to-the-natural-world-course/inw-course-materials>

Note: this link sometimes doesn't work from Internet Explorer, but it will work from other browsers

Course Objectives

You will learn how to identify common plants and animals with the aid of smart phones apps, identification charts, and field guides. With practice, you will be able to identify many common species from family recognition and anticipate finding them based on when and where you are traveling. You will gain an appreciation of the natural world's diversity and interactions.

Textbook & Reading Assignments

We offer an optional text book: Natural History of the Pacific Northwest Mountains by Daniel Matthews. Other field guides, singularly better for specific groups of plants and animals, are recommended in the "Other Resources and References" section of the Online Course Materials.

For every lecture, you will have reading and viewing assignments to be done before the lecture. These are listed under Leader Notes for each lecture. Here is the link to Lecture #1: <https://www.mountaineers.org/locations-lodges/seattle-branch/committees/seattle-naturalists-committee/course-templates/introduction-to-the-natural-world-course/activities/lecture-1-seattle-naturalists-intro-natural-world-course-mountaineers-seattle-program-center-3> You will be able to find the other reading assignments by clicking on the other lectures.

A Word about Your Instructors

You should expect your instructors to have:

- Enthusiasm about nature and the outdoors.
- A genuine desire to help you learn about the natural world.
- A good knowledge of natural history.
- A willingness to answer your questions.

You should not expect your instructors to:

- Have answers to every possible question
- Consistently use the same names for the same species of plants as other instructors do
- Keep you warm and dry if it rains (come prepared).

Email Communications

We will use email and the on-line community to send reminders and last-minute details to you about presentations and field trips. If you change your email address, be sure to update it in your profile on the Mountaineers website so you stay connected.

Contacts:

Questions about the **course**: Danielle Graham

Questions about **field trips**: Thomas Bancroft

Thomas Bancroft: gtbancroft@gmail.com

Danielle Graham: pedergraham@gmail.com

SCHEDULE 2020

The course consists of four presentations, each followed by field trips where you can apply what you learn in the presentations. The presentations are held from 7-9 pm in the Mountaineers Seattle Program Center at 7700 Sand Point Way NE, Seattle 98115.

PRESENTATIONS

Presentation 1: April 9, 2020 (Thursday)

Presentation 2: May 7, 2020 (Thursday)

Presentation 3: June 4, 2020 (Thursday)

Presentation 4: July 9, 2020 (Thursday)

FIELD TRIPS

Field Trip 1 Various dates between April 10-April 30.

For field trip specifics see * below.**

Seattle area parks; may include Carkeek, Discovery, Redmond Watershed
Focus will be on **plants** in the Puget Sound area. **Half Day or Evening.**

Field Trip 2 Various dates between May 8- May 30

For field trip specifics see * below.**

Seattle area parks; may include Union Bay Natural Area, Magnuson Park, as well as Nisqually National Wildlife Refuge
Focus will be on **birds** and plants in the Puget Sound area. **Half Day or Evening.**

Field Trip 3 North Fork Teanaway River Road and Blewett Pass, June 5-30

For field trip specifics see * below. NW Forest Pass required.**

Possible Trips:

Bean Creek Basin: 6.5 mi RT, 2600' gain

DeRoux Creek: up to 5 mi RT, up to 400' gain

Iron Peak 7 mi RT, 2700' gain

Esmeralda Basin 2-4 mi RT, up to 1000' gain

Swauk Forest Discovery Trail 3 mi loop, mild elevation gain

Allow 2.5 hours from Issaquah. These trips will be more strenuous than the first and second round, taking **all day**, and requiring a fair drive.

Temperatures are warmer in the Teanaway, often reaching the 90s. There is no cell phone service in this area. The Teanaway is reached via a dirt forest road. Blewett Pass field trips are directly off Highway 97 or could require some forest road driving. Some students stay at hotels in Cle Elum or camp out at Beverly Creek or Blewett Pass campgrounds with instructors.

Field Trip 4 Mt. Rainier National Park, late July or early August
For field trip specifics, see * below. Full Day**

Possible trips:

Naches Peak Loop (Chinook Pass area), 4.5 mi loop, 700' gain, up&down
Sheep Lake (Chinook Pass area), 4-6 mi RT, 1300' gain
Berkeley Park (Sunrise area), up to 7.8 mi RT, up to 1600 'gain
Summerland, 9 mi RT, 2200' gain, on road to Sunrise

***** For field trip specifics** including dates, times, places, hike descriptions, passes and logistics, go to the **Course Page**:

<https://www.mountaineers.org/locations-lodges/seattle-branch/committees/seattle-naturalists-committee/course-templates/introduction-to-the-natural-world-course/introduction-to-the-natural-world-course-seattle-2020>

Course Requirements are on the blue bar half way down the page and you will see a list of field trips. Open a field trip for specifics. We will post field trips in batches, as we get to know the spring and summer blooming times. We will offer enough field trips for all.

Field Trip Sign-up Procedure

We will offer a set of field trips after each of the four presentations which will include a range of locations and times. **You must sign up for a specific trip on the Mountaineers website** as there are limitations on numbers of participants for learning purposes, and due to land use requirements and Mountaineers rules. Check the **Course Page** frequently to see if additional field trips have been added. **Please only sign up for one field trip from each round.** If your name is on more than one roster, course leaders will remove you.

How do you sign up for a field trip? Sign in and go to the Course Page. Here's how:

- Login to Mountaineers.org.>
- Click on your name in the upper right hand corner of the login screen>
- Click on "my courses and programs"
- Click on "2020 Introduction to the Natural World. This takes you to the **Course Page**, where you can see field trip dates by clicking the blue bar halfway down the page where it says **Course Requirements...** Click an individual field trip to get more information about it.
- On the **Course Page** click **Manage Registration**. Choose your field trip. Wait until the page accepts your choice. Be patient – this may take a while.
- On the blue bar you will also notice **Roster** which lists your classmates and instructors. The other section, **Course Materials**, has a link to all course materials.

It is necessary to sign up for field trips.

Carpooling for Field Trips, especially 3 and 4

The Mountaineers office no longer arranges carpools. We will distribute a list of, email addresses (if available) to help you arrange your own carpools. It is helpful if you list your carpool preference (ride or drive) on your Profile page. It is often convenient for groups to meet at Park and Ride lots along the way to either the Teanaway (Preston P&R Exit 22 I-90) or Mt. Rainier field trips (So Renton P&R, 205 S 7th St, S Grady Way & Shattuck Ave S) so passengers and drivers can connect. If your profile on the Mountaineers website is listed as Private, trip leaders are not allowed to share your email address with other participants.

Recommended Equipment for Field Trips and Naturalist Hikes

Come prepared for a hike in the Northwest. That means carrying the ten essentials and clothing that will keep you warm and dry in case summer takes a day off. Dressing in layers works best. Here is a list of recommended equipment for a summer day hike. Instructors be able to offer equipment advice at the Pre-Lecture on April 9.

- Day Pack
- Clothes suitable for the weather
- Hiking Boots
- Water (2 quarts)
- Lunch and extra food
- Sunglasses
- Sunscreen and lip balm with sunscreen
- Hat for sun protection
- Warm clothes: jacket, pants, hat, and gloves
- Rain gear
- Matches and firestarter (candles or lighters are popular. Drier lint also works)
- Knife
- Flashlight
- First Aid Kit
- Map and Compass
- Toilet Paper and hand sanitizer
- Insect Repellent

Additional items:

- Field Guide, and hand lens if you have one
- Tablet or smart phone with apps
- Binoculars
- Notebook and pencil
- Species list

Low Impact Backcountry Travel

We practice “Leave no trace” principles when we are outdoors. Here are some do’s and don’ts for the trail:

- Don’t pick the flowers or feed the animals (that includes Gray Jays).
- Stay on the trail if one exists.
- Stay on the established tread, even if it is muddy.
- Do not cut switchbacks.
- Select resilient areas for rest breaks.
- Pack out what you carry in (and litter left behind by others).
- Allow other hikers to pass by, stepping aside at a durable spot. For safety, step to the hill side, not the cliff side.
- Travel quietly.
- Off-trail, walk on durable surfaces such as bare ground, game trails, or rocks. Avoid trampling delicate plant life including heather.
- Use established toilets where they are provided.
- When there are no established toilets, go at least 200 feet from watercourses, trails, and campsites. Pee on rocks or bare ground and poop in a “cat hole” of your own construction (pack out your toilet paper – better yet, pack out everything in a double bag).

It is important to know that **dogs** are not allowed on our class field trips.

Mountaineers’ policy is that dogs are allowed only on hikes listed as “dog friendly”.

Graduation Requirements

To graduate from the course and receive a certificate:

- Turn in your homework from each class. Final assignments can be emailed to Danielle Graham at pedergraham@gmail.com or submitted by mail by August 15th to Danielle Graham, c/o The Mountaineers Naturalist Committee, 7700 Sand Point Way NE, Seattle, WA 98115
- You must complete the Low Impact Recreation course online.

Reunion and Graduation Potluck: Thursday, Sept 24, 7:00-9:00 pm, Mountaineers Seattle Program Center

By this time you will have had a great summer and greatly increased your knowledge of the Natural World. In September we will get together again to celebrate all we learned, to share photos of our adventures, and to present certificates to graduates. This is a great chance to catch up with friends you made in the course and hear about the places they have visited.

Help us make this a great event by taking the following steps:

- Sign up at the Mountaineers website to help us plan for food. The Naturalists Committee will provide a main dish item, beverages and utensils.
- Bring a dish to share starting at 7:00 pm.
- Select up to 20 of your photos of plants, animals, scenery and naturalists in action, sized to 1024 x 768 pixels or less. Bring them on a jump drive or send them to Tom at gtbancroft@gmail.com. Be prepared to share the identities and locations of your photos.

What's next for graduates?

Join the Study Group: Graduates of the Introduction to the Natural World course or those with some knowledge and experience who are approved by the Study Group director and want to continue to learn and share with others are invited to join The Naturalist Study Group. A one-time registration fee of \$50 (\$75 for non Mountaineers) gives you lifetime membership.

Study Group activities include:

- Presentations by local plant and wildlife experts,
- Opportunities to take advanced courses,
- Waived fees for talks in the lecture series,
- An invitation to sit in on the yearly Introductory course for free, and
- Special Study Group Naturalist outings.

Study Group members are encouraged to become field trip instructors and trip leaders as they gain more experience. You will learn that by sharing your knowledge with others, you gain and solidify your own knowledge into a rewarding experience!

Graduates of the Natural World Course automatically have leader's permission to sign up for the Study Group. Others with sufficient knowledge may also qualify for the Study Group and should contact Study Group Leader Stewart Hougen to discuss this at sehougen@comcast.net

Hike with the Naturalists: Naturalist hikes are offered year-round to observe, study, and enjoy the plants, animals, and geology of our area. A trip may focus on a certain feature of the destination, such as its flowers, or it may take in all there is to see. Leaders often rely on the pooled knowledge of the group, offering participants a chance to learn from each other. Trips may be in town, in the high country, or anywhere in between. They offer an excellent way for you to continue learning about our natural world.

To find Naturalists hikes:

1. Log in to the Mountaineers website at www.mountaineers.org.
 2. Explore>Find Activities
 3. Check Exploring Nature in the green box on the left
- A list of current hikes will appear.

To find Naturalists Courses, Clinics and Seminars:

1. Log in to the Mountaineers website at www.mountaineers.org
2. Learn>Find Clinics Courses and Seminars
3. Check Exploring Nature in the blue box on the left

Become a Naturalist Leader: Like all Mountaineer activities, the success of the Naturalists program depends on attracting and nurturing leaders. With your new knowledge, perhaps you might be interested in leading Naturalists activities. You don't have to know everything about what you see; the key to a good trip is to encourage participants to share their knowledge so all learn and have a good time.

We encourage you to become a Naturalist Leader. The requirements are to:

1. Attend several Naturalist hikes and exhibit an interest in the program.
2. Give evidence of leadership traits as observed by other Naturalist leaders.
3. Demonstrate competence in the outdoors by taking the Leaders Seminar offered by the Hiking Committee, the Naturalists Committee, or other qualified training.
4. Be willing to follow Mountaineers procedures as outlined in the "Mountaineers Hiking Leaders Guide."
5. Working with a mentor from the Naturalists leadership, lead two hikes.

For more information, or to get started as a leader, contact Danielle Graham at pedergraham@gmail.com.

2020 Introduction to the Natural World Course Co-leaders
Thomas Bancroft
Danielle Graham
Stewart Hougen

Homework Assignments

After Lecture 1:

Name: _____

- Take a walk in your neighborhood park and identify 5 trees, 2 ferns, and 10 flowers. Write them in the table below. (Feel free to expand it and add more if you are inspired.) Print the page and turn it in at lecture 2.

Flowers	Ferns	Trees
1.	1.	1.
2.	2.	2.
3.		3.
4.		4.
5.		5.
6.		
7.		
8.		
9.		
10.		

- What was your favorite of the items you identified on your field trip?
- What did you like most about the field trip?
- Please share any feedback about the first lecture or first field trip. You can do that here or anonymously through the Mountaineers website.

After Lecture 2:

Name: _____

- Identify 8 birds in your own neighborhood. Please print this page and turn it in at lecture 3. Feel free to identify more than required if you are inspired!

Birds	1.	2.	3.	4.
5.	6.	7.	8.	

- Take a walk in your neighborhood park and identify 5 trees, 2 ferns, and 20 flowers

Flowers	Flowers, cont.	Ferns	Trees
1.	11.	1.	1.
2.	12.	2.	2.
3.	13.		3.
4.	14.		4.
5.	15.		5.
6.	16.		
7.	17.		
8.	18.		
9.	19.		
10.	20		

- What was your favorite of the items you identified on your field trip?
- What did you like most about the field trip?

Please share any feedback about the second lecture or second field trip. You can do that here or anonymously through the Mountaineers website.

After Lecture 3:

Name: _____

- Attend a field trip

OR

- Fill out the following form. The presentation from class will assist with this, and we will make it available after the lecture.

1. Name two flowers that grow in the Teanaway that we do not see in the Seattle area.

What family is each in? Name 2 characteristics of that family.

2. Name two trees that grow in the Teanaway that we do not see in the Seattle area.

What are two ways that you could identify each of those trees?

3. Name two ferns that grow in the Teanaway that we do not see in the Seattle area.

Tell us a little about the environment we might find those ferns growing in.

4. Name two birds that we might find in the Teanaway.

Describe the habitat and/or food source the birds prefer.

5. Bonus question: If you could see one mammal in the Teanaway, what would you like to see? (It should be a mammal that actually lives in the Teanaway!)

If you went on a field trip in this round, what was your favorite part?

After Lecture 4:

Name: _____

- Attend a course field trip at Mount Rainier
OR
- Using the video that was part of the homework (<https://www.nps.gov/media/video/view.htm?id=A9311365-978F-7210-D8DE11C1B70BC9CA>), identify 1 tree, 3 animals, 5 flowers, 1 glacial feature or named glacier, and 1 Leave No Trace effort used by the couple in the video. Refer to the videos for lecture 4 to refresh on Mount Rainier’s glaciers.

Tree	1.				
Animals	1.	2.	3.		
Flowers	1.	2.	3.	4.	5.
Glacier/glacial feature	1.				
LNT effort	1.				

Email this assignment to Danielle at pedergraham@gmail.com