

An Introduction to the Natural World

Student Handbook



The Mountaineers, 2015

Shooting Star
Photo by Gordie Swartzman

An Introduction to the Natural World

Student Handbook

The Mountaineers, 2016

Shooting Star

Photo by Gordie Swartzman

Table of Contents

Welcome, Course Objectives, Textbook, and Instructors	3
E-Mail Communications and Contacts	4
Schedule of Presentations with Recommended Readings	5,6
Schedule of Field Trips and Stewardship Activity	7,8
Field Trip Sign-up Procedures	8,9
Carpooling	10
Recommended Equipment for Field Trips	10
Low Impact Backcountry Travel	11
Graduation Requirements, Reunion and Graduation Potluck	11,12
What's Next for Graduates – Study Group,	13
Naturalist Hikes, Become a Naturalist Leader	13,14
Appendix A: Species List	Online Course Materials
Appendix B: Additional Resources and References	Online Course Materials
Lecture Handouts	Online Course Materials

Online Course Materials:

Login to mountaineers.org (new password required for new website as of 5 May 2014)

Name>My Courses>Introduction to the Natural World Course- Seattle 2016>

Course Materials

Welcome

Thank you for signing up for this course that will introduce you to many plants and animals 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!

Course Objectives

You will learn how to identify common plants and animals with the aid of a field guide. With practice, you will be able to identify many common species from memory 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

Our textbook is *Field Guide to the Cascades and Olympics*, Second Edition, by Stephen Whitney & Rob Sandelin, published in 2003 by Mountaineers Books. Illustrated and easy to use, it is "more than a dozen field guides rolled into one." It is small enough to carry in your pack yet still comprehensive enough to suit most amateur naturalists. Other field guides, singularly better for specific groups of plants and animals, are recommended in Appendix B (see online Course Materials).

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).

E-Mail Communications

We will use e-mail 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

For questions about the course or Naturalists activities, please contact:

Jeff Nystuen, Course Leader (206) 909-3913 jeff.nystuen@gmail.com

Gordie Swartzman, Nat. Committee Chair (206) 432-0246 g.swartzman@gmail.com

For questions about the field trips or Study Group please contact:

Bruce Barcklow, bbarcklow@gmail.com

SCHEDULE 2016

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

PRESENTATIONS

Presentation 1: April 13, 2016 (Wednesday)

Recommended reading:

Pages 35-41 Geology
Pages 18-34 Communities
Pages 181-195 Trees
Page 157-179 Shrubs
Pages 244-277 Birds

Topic

Speaker

Welcome	Jeff Nystuen, course director
Geology – How the NW was formed	Bruce Barcklow
Life Zones of the Pacific NW	Peg Swartzman
Conifers	Dave Shema
Introduction to Birding	Jeff Nystuen

Presentation 2: May 17, 2016 (Tuesday)

Recommended reading:

Pages 78-86 Flowering Plants
Pages 64-77 Ferns
Pages 244-277 Birds

Topic

Speaker

Flower Identification	Stewart Hougen
Bird Identification	Jeff Nystuen
Life in Tide Pools	Kay English

Presentation 3: June 8, 2016 (Wednesday)

Recommended reading:

Pages 211-221 Butterflies
Pages 198-199 Insects
Pages 279-295 Mammals

Topic

Butterflies
Insects
The Teanaway Ecosystem
Mammals and their Tracks

Speaker

Maureen Traxler
Will Peterman
Cindy Luksus
Bill Deters

Presentation 4: July 13, 2016 (Wednesday)

Recommended reading:

Pages 230-243 Amphibians, Reptiles
Pages 78-86 Flowering Plants
Pages 223-229 Salmon, Trout

Topic

Amphibians and Reptiles
Mt. Rainier Ecosystem
Using apps for bird and plant ID

Speaker

Bruce Barcklow
Stewart Hougen and Gordie Swartzman
Gordie Swartzman

Readings are from the course textbook: Field Guide to the Cascades & Olympics: Stephen Whitney & Rob Sandelin.

Lecture materials will be posted at:

Mountaineers.org>

Login>

Your name>

My Courses>

Introduction to the Natural World Course-Seattle-2016> (**Course Page**)

Course materials are found on the blue bar halfway down the page

FIELD TRIPS AND STEWARDSHIP ACTIVITY

Field Trip 1 Various dates between April 16-April 24.

For field trip specifics see * below.**

Seattle area parks which may include Carkeek, Discovery, Seward
Focus will be on **plants** and birds in the Puget Sound area

Stewardship Activity Saturday May 7th, 1-4 pm or Sunday May 15th, 9-12 am or 1-4 PM in the Seattle Program Center Native Plant Garden. The garden is on the road below the main clubhouse entrance and is near the climbing wall. Education on native plants, history of the development of the garden, and opportunities to improve the garden with planting, weeding, cleaning, etc. Watch YOUR plant grow.

Field Trip 2 Various dates between May 21-May 29.

For field trip specifics see * below..**

Seattle area parks which may include Montlake Fill (Union Bay Natural area) Magnuson Park, Nisqually National Wildlife Refuge
Focus will be on **birds** and plants in the Puget Sound area.

Field Trip 3 North Fork Teanaway River Road, Sat or Sun, June 25&26 Interior Fir Zone

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

Meeting time and place: Meet at 9 am ready to go at the semi-circle pullout ¼ mi past Beverly Creek Campground. Allow 2.5 hours from Issaquah. The I-90 Exit 22 at Preston P&R is a convenient meeting place with reliable parking for carpooling.

Directions: I-90 to Cle Elum exit 85. Cross over the freeway to Hwy 970 and turn right. In 6.5 miles turn north (left) on Teanaway River Road

Pavement ends at milepost 13 at 29 Pines Campground and the road splits. Take Road 9737 another 4 miles to Beverly Creek Campground. A restroom is available at the campground. Stop here if needed before going to staging area.

Camping is available at the Beverly Creek and DeRoux campgrounds (fee). There is no potable water but there are creeks.

**Field Trip 4 Mt. Rainier National Park, Sat or Sun, Aug 6 or 7
Silver Fir and Subalpine Zones
For field trip specifics, see *** below.**

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
Burroughs Mountain (Sunrise area)
Summerland 9 mi RT, 2200' gain On road to Sunrise near White River
Campground

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

Course Page/Course Requirements/Field Trips online: Here's how:

Go to mountaineers.org

Login

Your name>

My courses>

Introduction to the Natural World Course-Seattle-2015 (**Course Page**)

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

NOTE: Dates for Field Trips 3 and 4 are tentative and may change depending on snow-pack conditions along the hikes

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(s) on the Mountaineers website** as there are limitations on numbers of participants for learning purposes, and due to land use requirements and Mountaineer rules. Check the **Course Page** frequently to see if additional field trips have been added. If you have not yet used the new website, you will need a new password. Click **Login** on the home screen to be guided through the process. This should be done as soon as possible so you have access to course materials and field trip signup.

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

≡ Login to Mountaineers.org.>

≡ Your name in the upper right hand corner of the login screen>

- ≡ My Courses>Introduction to the Natural World Course-Seattle-2015> 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 the course handbook, Appendix A Species List, Appendix B References and Resources, lecture handouts, and eventually will hold the powerpoint presentations from the class.

If **is not** necessary to sign up for lectures.

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 names, addresses, email addresses and phone numbers (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. People sharing a carpool on Field Trip 3 to the Teanaway, and on those Field Trip 4 that start at Chinook Pass (Naches, Sheep Lake) or Sunrise (Burroughs Mountain, Berkeley Park) can be on different hikes because we'll meet at one location before the hikes start.

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 and fellow students will be able to offer equipment advice if you don't have everything already.

- ≡ 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
- ≡ Insect Repellent

Additional items:

- ≡ Field Guide, and hand lens if you have one
- ≡ Binoculars
- ≡ Notebook and pencil
- ≡ Species list

Low Impact Backcountry Travel

We practice “Leave no trace” principles when we are outdoors. This is especially important since we will have over 30 people each day on our field trips. We will do our best to minimize our visual impact by carpooling and maintaining some separation between our study groups of 8-12 people. 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.
- ≡ 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

Are you a goal-oriented person? In **Appendix A** you will find our course species list of species you might find this year. This includes 200+ plants and animals from the 12 main species categories in our textbook. There are additional species listed from other categories (not covered in the textbook) for more identification ideas and possibilities and space for you to add additional species you see.

While you are not required to attend every presentation and field trip to graduate, we believe you will find them valuable, enjoyable and informative.

To graduate from the course and receive a certificate:

- ≡ Identify 100 plants and animals you see on field trips and your own outings
- ≡ Write down when and where you saw them, and e-mail them to Jeff Nystuen at jeff.nystuen@gmail.com
- ≡ Submit a copy of your list by September 8th to or send by US mail to Jeff Nystuen, c/o The Mountaineers Naturalist Committee, 7700 Sand Point Way NE, Seattle, WA 98115

Many of you won't stop at 100. Some of you will be trying to find them all! And you may add species you find that are not on the list. Keep a list and review it from time to time. This will help you remember the species the next time you see them.

Reunion and Graduation Potluck: Tuesday, Sept 20, 630-930 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 6:30 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 Gordie at g.swartzman@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 \$40 (\$65 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. They should contact the leader, Bruce Barcklow, bbarcklow@gmail.com, Others with sufficient knowledge may also qualify for the Study Group and should also contact Bruce Barcklow to discuss this.

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 Gordie Swartzman at g.swartzman@gmail.com, Kay English at kenglish43@gmail.com, or Bruce Barcklow at bbarcklow@gmail.com.

Gordie Swartzman, Seattle Naturalists Chair