



2015 Eagle Hill Fall Weekend Workshops . . .  
. . . on the coast of eastern Maine

# INTRODUCTION TO MOSSES & THEIR ALLIES

October 9–11, 2015

**T**his introductory workshop is designed for anyone who appreciates the outdoors and has ever been excited or curious about these attractive and often overlooked plants. The workshop will also provide a solid foundation for those contemplating more advanced study. Lectures will focus on the distinguishing features of major groups of mosses and related plants, their life histories, and the unique adaptations that allow them to continue to be successful in the wide variety of habitats in which they are found. Field trips to a variety of habitats will introduce these plants in their natural settings where students will learn to recognize common genera, recognize their macro- and micro-habitat preferences, and learn basic collection techniques. Follow-up labs will give students an opportunity to learn basic moss structure while learning to identify specimens collected in the field using a taxonomic key. The goal of the workshop is to provide participants with the confidence, basic knowledge, and skill to pursue further study of mosses and their close relatives on their own. No prior experience in identifying these plants is needed. (Lab fee: \$36 including lab kit and identification book)



## about the instructor

**Dr. Fred Olday** (folday@gmail.com) has taught botany, chemistry, and soils at University of Massachusetts Lowell and at College of the Atlantic in Bar Harbor, Maine. Following his retirement from the Maine wild blueberry industry, he has returned to College of the Atlantic where he presently teaches courses in bryophyte and lichen biology. He spends as much time in the outdoors as possible where he divides his time between hiking, trail clearing, and becoming more familiar with the local bryophytes and lichens.

For more information about the 2015 Eagle Hill Fall Weekend Workshops and to register, visit <http://eaglehill.us/fall-workshops> or contact Marilyn at: [marilyn@eaglehill.us](mailto:marilyn@eaglehill.us) / 207-546-2821 ext 1.

## **Introduction to Mosses & Their Allies**

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Class limit - 14 students

Seminar Location – Steuben, Maine

Daily meeting times – Saturday from 8:30AM to 12:30PM (lunch is at 12:30PM), and 1:30 to 5:30PM (dinner is at 6:00PM). From 7:00PM onwards, Saturday evening study is optional, though participants might like to spend a few hours in the classroom after dinner working on their collections. The same schedule will be adhered to on Sunday, except the afternoon class will meet from 1:30 to 4:30PM to allow participants sufficient daylight travel time to return home.

Activities during the weekend generally combine intensive field studies and follow-up work in the lab accompanied by lectures, discussions, and individual help by the instructor. Carpooling in student vehicles will be necessary for field excursions where vehicle use is required.

### **Schedule for the Weekend.**

#### **Friday, October 9**

Afternoon to early evening arrival, Dinner at 6 PM)

Evening orientation – Introductions; participants' interests, experience, and expectations for the workshop.

#### **Saturday, October 10**

Morning – 8:30AM to 12:30PM (lunch is at 12:30PM)

Lecture: Mosses and their close relatives—mosses, liverworts, hornworts—known collectively as “bryophytes”. The bryophyte life cycle. Bryophyte “look alike”. Vegetative and reproductive features of bryophytes.

Lab: Getting organized; resources—literature, websites; instructor demonstration of microscope technique; use of dichotomous keys; begin group keying of mosses.

Field Trip (Eagle Hill & vicinity): Use of hand lens; macroscopic features of bryophytes; ecology and substrate specificity.

Afternoon – 1:30 to 5:30PM (dinner is at 6:00PM)

Field Trip (Tunk Mt. & vicinity): Introduction to collecting techniques and field notes. Collecting will focus on bryophytes from a variety of forest ecosystems, including a northern white cedar swamp, hemlock-northern hardwoods, and upland spruce-fir forests.

Special Lab: Vegetative and reproductive features of *Sphagnum*; group keying of *Sphagnum*.

Evening – Lab: Optional - begin keying of personal moss collections.

## **Sunday, October 11**

Morning –

Lecture: Vegetative and reproductive features of liverworts. Liverwort life cycle.

Lab: Group keying of liverworts. Begin keying of personal liverwort collections and continue with moss collections.

Afternoon – Lab: Continue keying personal moss and liverwort collections. Review field notes, packet, and label specimens from the weekend’s workshop. Wrap-up and prepare for late afternoon departure (4:30 to allow participants sufficient daylight travel time to return home).

### **What to Bring:**

Items to purchase in advance and bring with you, if you do not already have them:

A Bausch & Lomb 10X Hastings Triplet hand lens, or equivalent. Available from Kooter’s Geology Tools (<http://www.kooters.com>), or order by phone (888-383-5219).

Other supplies and equipment to bring: a spray bottle (as sold for misting plants), sturdy sheath knife, cotton pillow case, stiff 1-1/2-inch putty knife (“Hyde” #02150 is ideal), ultra-fine point “Sharpie” permanent marking pen, rain gear, umbrella, hiking boots, hat with visor or broad brim, daypack, water bottle, notebook, pencils, shoebox to store your collections in, and any bryophyte references you may have and are likely to be working with after the course. A laptop computer is also helpful if you have one.

**To be Provided:** Bryophyte laboratory manual with keys to species commonly encountered in the northeastern US and Maritime Canada and extra fine-tip forceps, and 2 dissecting needles.

**Lab Fee: \$36** Covers the cost of the laboratory manual (\$15) as well as extra fine-tip forceps, and 2 dissecting needles which participants may take home with them following the workshop.