

ROCKY MOUNTAIN RIPARIAN PLANT ECOLOGY, IDENTIFICATION, AND PHYSIOLOGY

JULY 11, 2020

COURSE LEVEL: III COURSE #: S3014
FEE: \$80 PER ADULT AGES 16 AND OLDER



Rocky
Mountain
Conservancy

FIELD INSTITUTE

INSTRUCTOR: ISABEL SCHROETER

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LOCATION: Rocky Mountain Conservancy – Field Institute & Conference Center
1895 Fall River Road, Estes Park, Colorado

TIME: 8:00 AM – 3:30 PM

COURSE DESCRIPTION:

Riparian (streamside) ecosystems are hotspots for biodiversity and human recreational activities. In addition to these functions, riparian ecosystems provide a unique opportunity to better our scientific understanding about the intersection of plant ecology, hydrology, and ecological restoration. This interplay has become increasingly relevant to Rocky Mountain National Park due to management interests in restoring tall, dense willow-dominated plant communities following intense elk and moose browsing and beaver decline. This course will focus on teaching students about the identification of common riparian plants (e.g., willows, alders, birches, sedges) in addition to teaching students about physiological approaches used in the plant sciences to assess plant responses to environmental factors. The activities in this course will be contextualized in National Park Service riparian management and restoration efforts by showcasing these scientific approaches at multiple study sites of varying ecological condition.

COURSE LEVEL: III

Moderate hiking of multiple miles with gains not to exceed 1,000 feet in wet muddy areas.

BRIEF INSTRUCTOR BIOGRAPHY (additional information available at www.RMConservancy.org):

Isabel grew up in Agoura Hills, California. She received her bachelor of science degree in Conservation and Resource Studies from the University of California Berkeley. She then worked as a research technician working on several projects aimed at assessing oak physiological responses to drought and modeling carbon sequestration in the context of land conservation. She continued to the University of Colorado Boulder, where she is now pursuing her PhD in Ecology. Her research on riparian plant communities in Rocky Mountain National Park was funded by the Rocky Mountain Conservancy's Bailey Fellowship in the summer of 2019.

EXPECTATIONS: Professional conduct will be expected from participants at all times. Individual ideas will be respected. Except during course breaks, cellular phones, pagers, and personal entertainment devices are strictly prohibited in the classroom and during field sessions.

CAR-POOLING: Rocky Mountain Conservancy - Field Institute courses utilize car-pooling to limit vehicles traveling into the park. Car-pooling makes it easier to keep the group together, reduces transit time, and allows courses greater access because fewer parking spaces are required at destinations. In addition, it provides an opportunity for participants to discuss course material in small groups during transit. Typically, a few participants from each course volunteer the use of their vehicles for car-pooling to course locations.

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TENTATIVE COURSE SCHEDULE:

8:00 AM – Welcome/introductions
8:30 AM – Lecture on riparian ecosystems and plant identification
9:00 AM – Herbarium specimen viewing and plant key practice
9:45 AM – Lecture on plant physiology
10:15 AM – Break
10:30 AM – Travel to field location/begin hike to site
11:00 AM – Arrive at site and sample
12:30 PM – Lunch break in the field
1:00 PM – Finish sampling
2:00 PM – Travel to second field location
2:30 PM – Discussion at second field location
3:00 PM – Travel back to Field Institute/wrap-up
3:30 PM – Depart

WHAT TO BRING:

Water, lunch, food, **rubber boots**, hiking gear for any weather

REMEMBER TO BRING THE 10 ESSENTIALS:

Rocky Mountain National Park recommends that hikers always carry the 10 essentials in their daypacks.

- Rain gear
- Map and compass
- Flashlight or headlamp
- Sunglasses and sunscreen (applied often during the day); sun hat
- Candles
- Matches or other fire starter
- Pocketknife
- First-aid kit
- Extra layers of clothing – including warm layer, jacket, long pants, mittens, and warm hat
- Sack lunch, snacks, water

Note: Rocky Mountain Conservancy - Field Institute recommends that participants for all courses dress in layers and wear comfortable, sturdy hiking boots/shoes. Participants should be prepared for sudden changes in temperature and weather conditions.

REFUND POLICY:

Cancellations received at least 14 days prior to the start of a class will qualify for a refund minus a cancellation fee of \$25 per participant for a one-day class, \$50 for a multi-day class, \$5 per kid's class and \$15 per half-day class or bus tour seat. Registration money transferred to another class will be subject to a \$10 switch fee. Cancellations received less than 14 days prior to the start of a class or bus tour will not generate a refund. If the Field Institute cancels a class, every effort will be made to place the participant in another class; otherwise, a full refund will be given.

TEACHER RECERTIFICATION CREDIT:

Most courses are eligible for teacher recertification credit through the Centennial Board of Cooperative Education Services (BOCES). The fee is \$25 per class (.5 unit) or \$25 per series of threaded courses (1.0 - 3.0 units). A list of threaded courses can be found online at www.RMConservancy.org. Participants must enroll in all courses of a threaded series in order to qualify for the \$25 multi-unit fee. Please be prepared to pay for this credit with a check, made payable to BOCES, on the first day of a class or on the final day of a threaded series of courses.