



## Environmental Science Merit Badge at Riverbend Park

Welcome to the Environmental Science Merit Badge program at Riverbend Park. The program may be held at either the Riverbend Visitor Center located at 8700 Potomac Hills Street in Great Falls, or the Riverbend Nature Center located at 8814 Jeffery Road. Please review your confirmation email or call the park at 703-759-9018 for location.

### **Important general Merit Badge information for parents:**

Be sure that you are familiar with the requirements for the merit badge your scout has selected. Some badges may take considerable time and planning to complete and may not be appropriate for younger scouts. Blue cards must be signed by your Troop Leader prior to attending the merit badge class. Park staff will not sign off on any blue cards missing this signature.

Most merit badges are not designed to be completed in a single session with an instructor, so it is not always possible to walk away with a completed and signed blue card at the end of a program. Every badge requires some independent work by your scout.

FCPA-Riverbend Park will provide staff, meeting BSA Youth Protection guidelines for male and female scouts, and supervision ratios. Parent/guardian **MUST** sign-in, and sign-out each participant(s) from the class. If you provided your own transportation, you may sign-in and sign-out yourself from the class. There is no fee if adults wish to stay during the class.

### **Below is the recommended homework to be completed before the program:**

Please download the merit badge worksheets from [meritbadge.org](http://meritbadge.org) and bring these worksheets to class. These worksheets help scouts organize their homework and classwork. We will go over all of the merit badge requirements during class but it is helpful if the scout has reviewed the worksheet ahead of time.

1. Make a timeline of the history of environmental science in America. Identify the contribution made by the Boy Scouts of America to environmental science. Include dates, names of people or organizations, and important events.
2. Define the following terms: population, community, ecosystem, biosphere, symbiosis, niche, habitat, conservation, threatened species, endangered species, extinction, pollution prevention, brownfield, ozone, watershed, airshed, non-point source, hybrid vehicle, fuel cell.
- 3e1. Do research on one species that was endangered, threatened, or of special concern but that has now recovered. Find out how the organism recovered, and what its new status is. Write a 100-word report on the species and discuss it with your counselor.
- 3f. Do ONE of the following:

1. Look around your home and determine 10 ways your family can help reduce pollution. Practice at least two of these methods for seven days and discuss with your counselor what you have learned.
2. Determine 10 ways to conserve resources or use resources more efficiently in your home, at school, or at camp. Practice at least two of these methods for seven days and discuss with your counselor what you have learned.
3. Perform an experiment on packaging materials to find out which ones are biodegradable. Discuss your conclusions with your counselor.
6. Find out about three career opportunities in environmental science. Pick one and find out the education, training, and experience required for this profession. Discuss this with your counselor, and explain why this profession might interest you.

### **What to bring to the program:**

- Bring your completed homework. It is OK if you cannot complete the homework before class. You can bring completed homework in at a later date for sign-off.
- Come prepared to discuss and present your homework. As we move from one topic to the next during class, scouts will be asked to present homework elements completed.
- Bring your blue card. (Riverbend does not have blue cards.)
- Bring/wear weather appropriate clothing/outerwear. We will not go outdoors in heavy rain or thunderstorms. Boy Scout uniform not required.
- Bring a pencil and pen.
- Download the merit badge worksheets from [meritbadge.com](http://meritbadge.com) and bring these worksheets to class.
- Bring a snack and drink. Bring more substantial food if your program is longer than four hours.

### **Work completed after the program:**

During the program, the merit badge counselor will do a demonstration or explain the process for completing the final merit badge requirements. Your scout must provide evidence of completion in order to obtain blue card sign-off. Digital photographs of your scout doing the element and a picture of the completed requirement will be sufficient evidence, unless otherwise stated.

If your scout needs blue card sign-off after the class date, please call 703-759-9018 to arrange a time to meet with a merit badge counselor.

We're looking forward to working with your scout.

Riverbend Park  
703-759-9018  
8700 Potomac Hills Street  
Great Falls, VA 22066  
<http://www.fairfaxcounty.gov/parks/riverbend-park/>