

ENVIRONMENTAL SCIENCE MERIT BADGE
At Cub Run RECenter

The Environmental Science program is now a single 5-hour class. This is a very time consuming merit badge – and there is a fair amount of prework (!!!) needed to complete the merit badge.

Scouts should be dressed appropriately for the weather. Part of our time will be spent outdoors, rain or shine, heat or cold ☺. Be Prepared.

Please bring:

- Blue card, pen, and pencil (Fill out your blue card in PEN not pencil)
- 4 sandwich size Ziploc bags for packaging material experiment. Used grocery bag to carry them all
- Clipboard for taking notes outside
- Snack/lunch and water bottle
- All prework/homework should be brought to class. If you haven't done the prework, then scouts can still attend class to receive a partial signature on the blue card.
- **ARRIVE ON TIME – EARLY IS BETTER! PLAN TO ARRIVE 10 MINUTES EARLY. IF SCOUTS ARE LATE, THEY MAY NOT COMPLETE THE BADGE.**

Scouts should read the Boys Scout pamphlet/booklet on the Environmental Science Merit Badge prior to class.

Scouts need to do some work at home prior to class. If for some reason you cannot complete the work in time, we will sign partial cards. Assignments will be accepted at a later date at which time we will fully sign your blue card. We promise to help in anyway throughout the process.

TO DO AT HOME as PREWORK prior to class:

2. **Define the following terms: population, community, ecosystem, biosphere, symbiosis, niche, habitat, conservation, threatened species, endangered species, extinction, pollution prevention, brownfield, ozone, watershed, airshed, nonpoint source, hybrid vehicle, fuel cell.

3e. **Endangered Species (chose one below 1 or 2) (READ CAREFULLY)

- 1. Do research on one endangered species found in your state. Find out what its natural habitat is, why it is endangered, what is being done to preserve it, and how many individual organisms are left in the wild. Prepare a 100-word report about the organism, including a drawing. Present your report to your patrol or troop.**
- 2. Do research on one species that was endangered or threatened but which 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.**

SCOUTS WILL PRESENT THEIR ENDANGERED SPECIES PAPER TO THE MERIT BADGE CLASS.

5. **Using the construction project provided or a plan you create on your own, identify the items that would need to be included in an environmental impact statement for the project planned. (use handout provided in class) (SEE HANDOUT BELOW TO HELP YOU EVALUATE YOUR PROJECT – feel free to call me on this.) It should be a pretend construction project, like a building, home, highway or bridge. THIS IS A REQUIREMENT THAT REQUIRES SOME THOUGHT ABOUT HOW PROJECTS ARE EVALUATED.

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.**

**6/16/2015
CRRC: CTM**

**ENVIRONMENTAL SCIENCE MERIT BADGE
Environmental Impact Assessment
(For Requirement 5)**

What would a civil engineer/project manager have to consider about whether or not to build a project? Fill out this form for a real or made-up project to get an idea. Here are some project suggestions to evaluate: a bike path through the woods to your school or neighborhood pool, or a bridge across your local creek, or a new bridge across the Potomac River or build a new building. Or, anything else that interests you. This is a BUILDING PROJECT, NOT A PROJECT TO HELP THE ENVIRONMENT. You are weighing the good/bad things about the project and whether or not to build.

Project Description

Describe the project, Include type of project and why it is needed

Site Description

Generally describe the site: Is it forested? A field? A wetland?

Recommendations:

Should the project either go ahead or be stopped or redesigned. Why?
