Exploring the Environment of the High School

Upper Class Ecology

SOL’s Covered: None, as this course does not have any SOL standards

Time Frame: One 90 Minute Block plus one night’s homework

Objectives:

Students will complete a lab on the environments within and without the school and the biology that inhabits them.

Strategies:

Students often think of a school as a somewhat “sterile” environment. However, if given the chance to observe indoor and outdoor environments they will find that life often is found where they don’t expect it or biodiversity is absent when they think it should be there. Depending on what type of school you teach in, this activity can be tailored to fit it. At my high school we are very fortunate to have a nature trail, agricultural fields and woods in additional to the more traditional, urban environments. Students will be broken up into groups and each group will be assigned a different environment and be given the necessary tools to complete the lab. Some examples are the parking lot, lawns, landscaped areas, and fields and woods. Each group will do the following activities and answer the following questions.

1. Go to your area and record environmental conditions such as temperature, amount of sunlight and level of human input. Obviously a classroom environment will be much more controlled than a wooded natural area. Give a physical description of the environment as well.

2. Count as many species, both plant and animal, as you can.

3. Identify as many of the found species as you can.

4. List reasons why the organisms you found can survive in that environment.

5. If you didn’t find many living things, try to guess why that might be the case.

Assessment:

Students will complete a short essay of 1-2 pages for homework answering the question “Given what you learned in today’s lab, how do attempts to create a comfortable human environment foster or deter other organisms from living in and on the grounds of our school?”