Activity name: Do Biotic, Abiotic Factors Determine Biodiversity?

This activity is meant to provide a real-world application of the ATEEC Recommended Core Curriculum's math, science, technical, communications, or critical thinking knowledge and skill concepts identified by ATEEC Fellows as necessary preparation for environmental technology occupations.

Appropriate for which course(s)? HS environmental biology, CC bio/ecology

Concept/skill learned (i.e. from K/S Tables): Draw conclusion, interpret data, discover rules, underlying relationships, etc.

Approximate time to complete activity: 5 class meetings (approx)

Source of idea or activity (for published source, please include author, title, publisher, date): none

*Materials/resources needed (equipment, print media, electronic media, videos, supplies, etc.):*Common weather instruments, field manuals (local plants, animals (invertebrate) chem test materials: pld).

Description of activity:

1. Student groups choose outdoor areas (different types) to analyze.
2. Students do analysis of these above-ground factors:
   abiotic: wind, temp, light % cover
   biotic: identify plants, animals
3. Students do analysis of these below-ground factors:
   abiotic: pH, soil types, water absorption, perk time
   biotic: identify organisms
   (macro, possible micro using petri dish culture
4. Students compare results and attempt to correlate the results, explain differences.
5. Students use compiled above-ground data and predict below-ground factors.

Activity submitted by Babe Willey