



Teaching the Standards of Learning in an Outdoor Classroom



A schoolyard habitat gardening project is an outdoor classroom that can be used across all grade levels and subject areas, including science, language arts and math. For example, planting a garden requires measuring the dimensions and area of plant beds (math), researching and writing about the plants and animals that can live there (technology, language arts), and understanding the interactions between plants, animals, and their environment (science).

The most obvious "fit" between outdoor classroom instruction and the Standards of Learning is with the SCIENCE standards. For the elementary grades, this means the Life Processes and Living Systems strands. For the upper grades, it fits in Life Science, Earth Science, Biology, Ecology, and Environmental Science. Here is a general summary of Science SOL topics that can be taught in a schoolyard habitat:

Elementary

- K.6 Life processes of plants and animals
- 1.4 Plant needs and plant parts
- 1.5 Animal needs and animal characteristics
- 2.4 Plants undergo changes
- 2.5 Habitats change over time
- 3.5 Food chains
- 3.6 Habitats
- 4.5 Habitats
- 5.5 Classification of plants, vertebrates & invertebrates
- 6.7 Watersheds (because wildlife and habitat resources are part of a watershed)

Life Science

- LS.4 Plant needs and animal habitats
- LS.7 Food web
- LS.9 Food web
- LS.12 Humans and ecosystems (change in habitat)

Physical Science

- PS.7 Temperature

Earth Science

- ES.7 Renewable vs. Non-renewable resources

Biology

- BIO.1 Observations of living organisms

Please note that the above list is only a sampling of the learning objectives that can be taught with a garden project. During our Schoolyard Habitat training we will touch on some of these and discuss how the teachers can apply the material to their particular needs. As mentioned above, there are many other standards that can apply.