Schoolyard Habitats – Habitat Features

The following is a list of habitat features that increase habitat diversity and attract more wildlife. Also included are amenities that can help make outdoor learning areas more interesting or useable. An ideal time to incorporate these features is during the planning process for new school construction or renovation projects. Most of these can also be added to an existing site.

Logs **-** Rotting logs are habitat for many insects, salamanders and small mammals. Logs can be used to learn about the process of decay and the life associated with it. Logs can be placed in any of the habitat types or anywhere else on the playground. Partially submerged logs in wetlands or ponds provide a place for turtles and frogs to sun.

Snags **-** Standing dead trees or snags provide nest sites for cavity nesting birds including woodpeckers, chickadees and many more. Many insects live in snags which attract a variety of birds. Predatory birds perch on snags for a better view of prey.
Brush piles. Brush piles provide excellent cover for rabbits, chipmunks, small birds, and insects. Place brush piles in woodlands and along wooded edges. Discarded Christmas trees can be used as a brush pile.

Water **-** If there is not room for a wetland or pond, consider a way to provide water for wildlife. A half barrel or a cement mixing trough filled with water works well. If the soil has enough clay, simply dig a few shallow holes and let the rain fill them. Dripping water into a puddle is irresistible to birds. Check with a local library or nursery for directions on building a small lined pond.

Nesting boxes **-** Nesting boxes are a good habitat amendment for cavity nesting birds. Bat boxes and squirrel boxes can also be built. A Bird Trail can be built by placing several nesting boxes at least 100 yards apart, preferably along a forest edge or in a meadow. Boxes need to be placed on posts with predator guards. Boxes should be monitored and cleaned after each brood. Many birds may use bird boxes for nesting. All birds are protected by law.

Feeders **-** Place bird feeders near protective shrubs and trees to attract more birds. A bird feeder project should have some long term benefit for the students and not be a onetime project. Remember not to feed birds during summer months when bears could be a problem.

Schoolyard Habitats – Amenities

Signs - Identify projects with signs to help with community recognition. Signs will help publicize the project and can generate awareness about the wild appearance of natural habitats.
Trails - Trails should be an integral part of any project. Make sure wheel chair access is incorporated into trail design. A nature trail could eventually wind throughout the entire schoolyard. Regularly mowed grass trails are easily maintained in sunny areas. Design the trails to be at least as wide as the mower. A 6-foot width works well. Wood chips are a good ground cover for wooded trails. Many tree maintenance companies or mills will provide free wood chips.

Wildlife observation blind - A simple three-sided structure with slats cut out at eye level will allow students to view wildlife on the other side. It should be placed in front of bird feeders, wetlands, in meadows or along thickets for closer observation of secretive wildlife.

Trail cameras – Contact Steve Brockmann (**steve_brockmann@fws.gov**) about borrowing our trail camera kit or handheld computer kit.

Outdoor seating - An area or several areas where class can be held outside or a child/ group can go to complete a task or read/write in privacy. Picnic tables can be used for lunchtime and as work stations. Place in an area that is easy to access from school. Hillsides are a good place for a small amphitheater.

Wildlife tracking box - A wooden box filled with mud or modeling clay and placed near water or a feeding area makes a good tracking box. Visiting animals will leave tracks which students can identify, make plaster castings of, write stories about, etc.

Composting - Large or small scale composting can be used to teach many lessons. Your local Cooperative Extension Service office can provide information on different composting structures.

Native plant landscaping - The typical foundation landscapes around schools consist of ornamental non-native plants. Native plants can be added to enhance the existing landscape or native plants can be used to replace the existing landscape. A native plant landscape provides learning opportunities for children and adults. Native plants give people a sense of place within their local environment. Native plants attract native wildlife and help add to the biodiversity of schoolyards. Contact a landscape architect with experience in native landscape design.

Hills - One or a group of small hills can be constructed with excess soil. This seemingly strange feature can add to the diversity and enjoyment of playgrounds. An open or enclosed lookout tower can be built on top of a hill and in winter it can be used for sledding.

Gardens - A wide range of gardens are possible. Planned garden areas should be included in the school design. Some types of gardens include:

- *A native plant garden or arboretum*
- *A butterfly/insect garden. Include several species that bloom during the school year*
- *Vegetable and/or herb garden. Use primarily early and late season vegetables so students can enjoy the harvest*
- *Sensory garden. Select plants for their aromatic, textural, visual, or edible qualities*
- *Berry patch. A patch of harvestable berries such as watermelon berries, salmon berries, blueberries, or crow berries.*
- *Cultural garden. Select plants for cultural uses – e.g. berries, ferns, and devil's club*
- *A rain garden.*

Considerations for gardens include:

- *Is the area sunny or shaded?*
- *Is there a nearby faucet?*
- *Is topsoil or loam needed?*
- *Raised beds*
- *Ease of access*

Art - There are many types of murals, blacktop diagrams, sculptures and other art related projects that can be done to enhance the outdoor learning environment.

Shade - Plant shade trees throughout the site especially near the playground. Arbors can be built to create shade. An open air cabana can provide shade.

Weather Station - A weather station is an excellent compliment to any outdoor learning area.

Geology study area **-** Develop an area on the playground where samples of local rocks are kept to learn about local geology. The samples should be large so that they are not removed. Fencing – If you need to fence an area off, try using logs or large boulders instead of chain-link, it is much more attractive and can serve the same purpose in some instances.