

# The Maryland Schoolyard Habitat Partnership

## *Common Qualities of Excellent Schoolyard Habitats*

Schoolyard habitats are naturalized areas on the school grounds that are easily accessible to the entire school community. Both human and natural communities benefit from excellent schoolyard habitats.

Creating an excellent schoolyard habitat takes time and commitment. It is not expected that any schoolyard project meets all of these qualities of excellence at its inception. The common qualities of excellent schoolyard habitats are: ecological significance, curriculum integration and long term community connection.

Excellent schoolyard habitats improve the community's environmental health by reducing storm-water runoff, solving erosion problems, increasing canopy cover, increasing biodiversity as well as providing children with opportunities for formal and informal interactions with the natural world. These accessible habitats, whether created or existing natural areas, are used for classroom instruction and for interaction with the natural world. Educational experiences are embedded within excellent

schoolyard habitats. The existence of a schoolyard habitat is not the same as an integrated schoolyard habitat program. The project itself is just the physical space.

Excellent schoolyard habitats are an integrated component of the curriculum inextricably linked to the academic achievements of the school as well as the ecological health of the community.

The explicit curriculum of every school is available on the school system websites. The implicit curriculum of the school is available with one quick look at each individual schoolyard. A barren and stale landscape states to the students, teachers and the community an equally stale view of education. A diverse landscape with opportunity for informal and formal learning communicates participation, interaction and long term commitment to the community. These diverse landscapes are unique to each school community, allowing room for the interdisciplinary engagement for children. These schoolyards can include aspects such as wildlife habitat, art projects, and reading gardens.



*The purpose of identifying the elements of the excellent schoolyard habitat is to encourage these goals in the development of all schoolyards.*

*As the elements become accepted into school culture, the green infrastructure of the schoolyard will become as integral to the school community as the grey infrastructure of the building.*

## Ecological Significance

Schoolyards are valuable green spaces within communities. Beyond a convenient place for neighbors to walk their dogs and play softball, schoolyards are places where communities can improve biodiversity, sequester carbon and reduce storm-water runoff.

Municipalities are becoming increasingly aware that they simply do not have the green space to waste. Collectively throughout Maryland there are still acres and acres of unused lawn on schoolyards; no one uses them for marching, playing or running. Meanwhile, many native and migratory bird and butterfly populations are decreasing, due in large part to the lack of native plant communities. Climate change and poor water quality continue to threaten our future, yet both can be addressed through changing these unused, mowed spaces into valuable wildlife habitat.

The environmental impact and sustainability of a schoolyard habitat project is dependant upon: site selection, ground preparation, implementation and maintenance. To create valuable wildlife habitat, reduce the school's carbon footprint and affect stormwater runoff, the schoolyard project has to be of a significant size and quality.

Schoolyard projects should be patterned after large-scale habitat restoration. Depending on size, soils and placement, forests, wetlands, rain gardens and meadows are vital habitats that restore the natural systems that were in place before the land was developed.

Proper site selection and implementation requires students and teachers to find outside experts and organizations that can ensure the technical and ecological viability of the habitat. Critical to a successful project is the exclusive use of native plants. Native plant populations are the foundation to the native ecosystem.

## Curriculum Integration

Excellent schoolyard habitats combined with effective teacher professional development offer students the opportunity to explore, discover and learn. Schoolyard habitats are more than wildlife habitats. They are the habitats for learning, encouraging students to think, create and interact across all academic disciplines.

Although there are many schoolyard habitats throughout the state, the assessment-driven atmosphere restricts the use of these habitats for even the most motivated and enthusiastic teachers. No Child Left Behind and other high stakes standardized testing protocols have forced school systems to abandon or marginalize any area that is not directly tested. As a result, environmental education, let alone simply time to interact with the natural world, is rarely a part of the current school culture.

Like a school's books or computers, schoolyard habitats are tools that can be used to achieve curricular goals. Schoolyards can provide a critical context for the comprehension of the curricular outcomes in many content areas; including but not limited to: science, social studies, research, writing, math, and art.

Students can collect authentic data to assess the natural systems of their schoolyard and investigate how they can improve the schoolyard's impact to the local ecosystem. Some of the data that students can collect includes biodiversity surveys, plant growth, slopes, land use, erosion problems, insect and bird population studies, and water quality. Providing this type of meaningful context is at the heart of any truly comprehensive initiative for high-achieving schools.



## Long Term Community Connection

The excellent schoolyard should be easily accessible for exploration and passive recreational opportunities by the community. As a schoolyard project evolves through the years, it creates a sense of place and a sense of community. When highlighted by signage, brochures or media, the project can become a highly visible and instructive model for the community. Partnerships are essential for success. Parents, all levels of school personnel, local businesses and organizations and government agencies can play a role in a successful project.



One of the most important aspects of a schoolyard habitat is maintenance. All landscapes require some level of maintenance. Before the project is started there must be a clear understanding of how much effort it will take to maintain the project and who will be responsible for the different aspects of the maintenance. To reduce the

maintenance burden, develop the project using only native plants in a naturalized landscape and involve your facilities personnel while choosing and planning a project.

All projects need outside funding, because they are outside the realm of ordinary school business. Finding local, state or national funding sources that are interested in the ecological and environmental impact of the project is vital to the project's success.

## Ecologically Significant

### To be Ecologically Significant the schoolyard habitat must:

- Replicate the native habitat and use native vegetation
- Be of significant enough size to support native communities
- Reduce storm-water pollution



### To provide long-term Community Connection the schoolyard must:

- Offer opportunities for exploration by the community at large
- Have a long term maintenance plan and ongoing technical support
- Actively engage partners through its continued development

### To provide Curriculum Integration the schoolyard must:

- Provide for focused professional development for teachers
- Create a context for students to understand curricular content
- Directly address learning goals in several subject areas

Community Connection

Curriculum Integration

## Conclusion

We have in our schoolyards the opportunity to engage the students, teachers and the community in the exact type of problem solving that is essential to confront the challenges of the 21st Century.

Schoolyards stand in the geographic center of so many of our communities and provide untapped opportunities to connect with natural spaces, something often missing from many of our busy lives. The Common Qualities of Excellent Schoolyard Habitats are goals to help us rethink our communal uses of green space.

The Maryland Schoolyard Habitat Partnership's Common Qualities of Excellent Schoolyard Habitats is a compilation of the schoolyard habitat work of the Maryland Association for Environmental and Outdoor Education (MAEOE), the U. S. Fish and Wildlife Service Chesapeake Bay Field Office, and the NOAA Bay Watershed Education and Training Program (NOAA-BWET). These organizations have collaborated to support schoolyard habitats throughout Maryland over the last two decades. In their collective experience they have found that these are the common qualities that evolve as an excellent schoolyard habitat is developed, used and expanded.



*An excellent schoolyard habitat can be a clear example that a school community is invested in both the health of the environment and the community members. These projects also demonstrate that environmental education and action is a significant factor in the school culture. The MAEOE Maryland Green School Award recognizes schools that exemplify an integrated approach to learning, incorporating local environmental issue investigation with environmental best management practices and community stewardship.*



NOAA Bay Watershed and  
Educational Training



Maryland Association for  
Environmental and Outdoor  
Education



US Fish & Wildlife Service  
Chesapeake Bay Field Office