

Detention Basin Wetland Development



In 2005 when the new parking lots for the ORNL Conference Center were being constructed, a detention basin was required to help control sediment runoff. After much thought and debate, it was decided that instead of using a non-native fescue grass mix for the cover vegetation, native plants should be used instead. The goal was to create a wetland area using native plants that would be suitable for this type of ecosystem.

The planting began in early 2006 with both plants and seeds purchased from local sources as well as plant transfer from some of the other wetlands on the ORR. In addition to the plants brought in, volunteers grew from the existing bank of seeds in the soil. In 2007, native shrubs were planted. The basin has undergone little maintenance since the plantings. Only a few spot sprayings of herbicide have been made to eliminate invasive plants.

In addition to requiring more maintenance, fescue-based cover would provide little habitat structure for native animals, especially when mowed. Planting with a variety of native plants helps support the habitat structure. This means increased cover, nesting and feeding opportunities for wildlife. This, in turn, results in much higher wildlife diversity in an area. Finally, a wetland plant-based cover would filter sediment and contaminant runoff more efficiently than would a fescue-based cover.

