

The Wetland Communities of Lake Lansing Park North

Rich Tamarack Swamp



A living monument to Michigan's natural history

The tamarack is a shade intolerant, deciduous, short lived conifer common throughout the Great Lakes region and Canada. This tree is typical of northern boreal forests and high elevations. In the Great Lakes region, however, it can be found in swamps or bogs where cold air drains from the surrounding uplands, forming low-lying fog in the summer.

As the Great Wisconsin Glacier receded about 14,000 years ago, boreal forest species such as white and black spruce, balsam fir, northern white-cedar, and tamarack migrated from the south and east into the barrens of Michigan. The present tamarack and white-cedar swamps are remnants of Michigan's ancient boreal forest.



Rich tamarack swamps are dominated by the tamarack (*Larix laricina*), along with swamp white oak, red maple, American elm, and black ash. They are rich in understory diversity, with American hazelnut, poison sumac, nannyberry, winterberry, and gray and silky dogwoods, and a ground layer of royal fern, swamp aster, common arrowhead, skunk cabbage, bluejoint grass, swamp goldenrod, marsh fern, and many species of sedge.

Sources of Information:
Barnes, B.V. Wagner, W.H. Michigan Trees. A Guide to the Trees of the Great Lakes Region.
Michigan Natural Features Inventory. Michigan's Natural Communities: <http://mnfi.anr.msu.edu>
Functions and Values of Wetlands. <http://water.epa.gov/type/wetlands/functions.cfm>

Southern Wet Meadow



Fort Custer Recreation Area
Courtesy of Joshua Cohen



Highland State Recreation Area
Courtesy of Joshua Cohen



Huron Meadows Metropark
Courtesy of Joshua Cohen

The southern wet meadow plant community is tolerant of seasonal changes in water levels, with species such as tussock sedge, lake sedge, bluejoint grass, fringed brome, swamp milkweed, swamp aster, Joe-Pye weed, marsh fern, sensitive fern, and common arrowhead. Wet meadows provide home and nesting grounds for animals such as the marsh wren (Michigan special-concern species), muskrat, and sandhill crane. In many areas, wet meadows are being invaded by non-native cattails.



Sandhill Crane
Courtesy of www.in.gov



Spring Peeper
Courtesy of www.michigan.gov



Muskrat
Courtesy of www.dnr.wi.gov



Joe-Pye Weed
Courtesy of Leslie Kuhn



Gray Tree Frog
Courtesy of Leslie Kuhn



Marsh Wren
Courtesy of www.idaho.gov



Common Boneset
Courtesy of Leslie Kuhn

The open conditions of the Southern Wet Meadow are maintained by seasonal or beaver-induced flooding and fire. These natural disturbances keep shrubs and trees from dominating. In their absence, the wet meadow will succeed to shrub-carr and eventually hardwood swamp, which have more shade tolerant species. A mix of wetland communities contributes to the biodiversity of the park by providing a variety of habitat for different types of wildlife. Wetlands also have great economic value as they filter and store up to 1.5 million gallons of water per acre.

Southern Shrub-Carr

The southern shrub-carr plant community is an intermediate stage in wetland succession between a more open herbaceous wetland community such as the southern wet meadow, and a more closed canopy community dominated by trees such as the tamarack swamp or hardwood swamp. Shrub-carr is dominated by woody shrubs such as dogwoods, buttonbush, winterberry, sumacs, American hazelnut, poison sumac, and several species of willow.



Common Yellowthroat
Courtesy of www.dnr.state.oh.us



American Woodcock
Courtesy of www.fws.gov

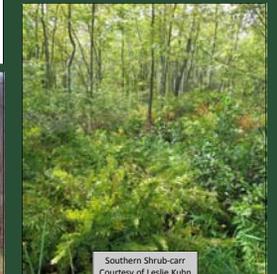


Ant Mound
Courtesy of www.msue.anr.msu.edu

The dense cover and late summer fruit of the shrub-carr community provides great habitat for a variety of foraging and nesting birds.



Southern Shrub-carr
Courtesy of <http://webga.csc.noaa.gov>



Southern Shrub-carr
Courtesy of Leslie Kuhn

Below is a snapshot of a wetland in Lake Lansing Park North. Shrub-carr can be found on the edges of forest and wetland and in "shrub islands" in the southern wet meadow. Dead ash trees line some of the wetland edges, a result of the emerald ash borer invasion.



The Stewardship Network
Pulling together for nature

