Powderhorn is an excellent example of dune and swale topography set in the sandy plain of what was once glacial Lake Chicago. (The vast glacial lake gradually drained and receded into what are now the familiar borders of Lake Michigan.) On the higher ground is little blue stem and porcupine grass; on the lower ground are cord grass, sedges, and blue joint grass. Marshes with cattails, bulrush and buttonbush are present.

In presettlement times, the main trees were black, white and bur oaks, ash and willows. The structure of black oak savanna, complete with an array of sand prairie and savanna understory plants, is very much in evidence at Powderhorn today.

A good selection of wildlife can be found. The herons typical of the Calumet wetlands are all found here, as are least bitterns and Virginia rails. Osprey have nested at Powderhorn Lake. Franklin’s ground squirrel and Blanding’s turtle, two state-endangered species, have been seen here.

In the center of the preserve is Powderhorn Lake, which is not within the city limits. The portion within the city is part of the Calumet Open Space Reserve.

The potential expansion sites located north of 134th St. consist of second-growth woods filled with cottonwoods, daisy fleabane, foxtail grass, and yellow sweet clover. Its most important habitat contribution is its strategic location; to the south is Powderhorn Marsh and Prairie, part of Burnham Woods Forest Preserve; to the north only a short distance away is Wolf Lake and the William Powers Conservation Area (site 88, p. 127). Beyond that is Eggers Woods Forest Preserve (site 23, p. 54). All of these important sites are made much more significant by the presence of the others, providing extensive habitat for wildlife. When sites are linked, amphibians, reptiles, insects and other wildlife can migrate from one location to another.