

Threats to Ecological Value

In terms of botanical value, the continued spread of glossy buckthorn along Prairieville Creek poses the greatest ecological threat to PCA 3. These exotic shrubs tend to form dense thickets, crowding and shading out native shrubs and herbs.



Glossy Buckthorn

The diverse herbaceous communities in the Prairieville Creek basin, prairie fen and southern wet meadow, continue to be displaced during dry years, when lower water levels favor colonization by glossy buckthorn. This process reduces the size of a rare plant community (prairie fen) and replaces it with a more common plant community (shrub swamp), which results in a net loss in the diversity of plant communities in this area.

Over the next several decades, residential development could also threaten this PCA. The central portion of PCA 3 includes a narrow band of upland forest that connects the bog and the Prairieville Creek basin. Residential development into this upland area would disrupt the movement of wildlife between the two wetland basins.

Management Recommendations

PCA 3 is a very good candidate for conservation priority. However, the widespread glossy buckthorn is very well established. Removal of the glossy buckthorn would improve the floristic quality of the area. In addition, the establishment of beaver dams along streams could help flood out the glossy buckthorn and maintain a plant community with more herbaceous plants.



Jack-in-the-pulpit

The bog is currently a thicket of smooth highbush blueberry. Wild calla and other light-sensitive species of interest grow where there are openings in the blueberry canopy. Maintaining openings for these plants is necessary for their survival.



Wild Calla

Finally, restricting residential development in the central portion of this site will maintain the wildlife corridor that connects the west and east wetland basins.

Prairieville Township Prairieville Creek PCA 3

Location

Potential Conservation Area (PCA) 3 is located sections 25, 26, 35, and 36 of Prairieville Township. This 421-acre property of upland and wetland habitat is bounded by M-43, Bendere Rd., Hickory Rd., and Lockshore Rd.



High priority potential conservation areas
Prairieville Township

Legend

- state highways
- county roads
- township boundary
- lakes
- rivers
- sections
- potential conservation areas



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Michigan
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Features
Inventory

Diverse Ecosystems

Site Description

Most of the site lies in the watershed of Prairieville Creek, a tributary of Gull Lake. A bog near the western end of the PCA is separated from Prairieville Creek by a patchwork of upland forest and abandoned farmland. The property is bordered largely by agricultural fields, old fields, and low-density housing.



Potential conservation area 3
Prairieville Township
421 acres



Legend

- potential conservation area
- roads
- wetlands

Communities and Ecosystems

A number of plant communities occur in PCA 3: dry-mesic southern forest, old field, shrub swamp, prairie fen, southern wet meadow, bog and emergent marsh. The diversity of the plant communities is a result of the varying topography across the site.

The majority of the upland habitat is dry-mesic southern forest with predominantly oak-hickory trees, which occurs predominantly on the slopes adjacent to the wetland basins. Most of the remaining upland habitat is old field, where land that was once in agriculture has been left fallow and subsequently has been colonized by herbaceous plants.



The Prairieville Creek basin is largely shrub swamp, although prairie fen and southern wet meadow communities are also present.



South of Hickory Rd. patches of southern wet meadow and prairie fen remain.

Plants and Animals of Interest

Habitat suitable for many animals of interest are found in this PCA. The abundant wetland vegetation, and alkaline fen mosses in PCA 3 provide favorable habitat for, green frogs, and pickerel frogs. Varying topography throughout the area offers habitat for many species of turtles, including the Eastern box turtle.



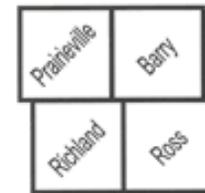
Pickerel Frog

During the 2003 Michigan Breeding Bird Census 58 species of birds were identified in this area.



cut-leaved
water parsnip

The herbaceous plant communities along Prairieville Creek are generally of high ecological value. The prairie fen and bog communities are home to plant species of interest such as cut-leaved water parsnip.



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