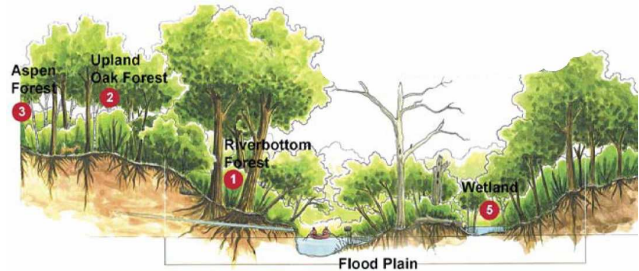


Nature Manitoba

Bois des Esprit

A Botanical Walk with Charles Burchill

June 17, 2010.



The Bois des Esprit is a ~47 hectare (117 acre) riparian woodland located primarily on the east shore of the Seine River, Winnipeg, between John Bruce road and Shorehill drive. This forest represents the longest continuous protected woodland in Winnipeg. A protection plan was started in 2001/2 and was identified as a 'park' in 2004. In 2007 a trail and sustainable development plan was proposed in collaboration with the City of Winnipeg, Save our Seine, and other groups. The current 2km crushed limestone trail was completed in 2009 as part of the ongoing plan.

When walking the path watch for the forest 'spirits' or sculptures carved into the dead stems or trunks of many of the trees.



This forest hosts five broad plant communities: river bottom, wetland, oak forest, aspen forest, and grassland. It is home to over 100 plant species, 24 mammals, 149 bird and water fowl, 5 amphibian, and 6 fish species. The area is well represented by Oaks, Trembling Aspen, with some Maples, Cottonwood, Ash, and Elms near the river and wetlands. The mature trees found in several long term monitoring plots are fairly uniform in size and age (~75 years); the forest fairly young. Within the forest there are 10 heritage trees with many more, including Winnipeg's largest tree, found elsewhere along the river. Although the forest appears to be pristine, and for an urban area it is, things are not always as they appear. There are relatively few Elm trees in the river bottom forest due to the removal from Dutch Elm disease. If you look closely at the bark of the Oak trees in the upland forest you will see many small orange and yellow lichens – more pristine forests have many larger green and grey shield lichens that are not found here.

Fast Facts:

Bur Oak (*Quercus macrocarpa* Michx.)

Largest acorns of all the oaks, drought and fire resistant, can live as long as 300+ years, predominates on the high terraces on the edge of flood plains, often grows in almost pure stands or alone but will associate with other trees, it is a pioneer species, growing across most of eastern North America.

Trembling Aspen (*Populus tremuloides* Michx.)

Clonal species, leaves tremble in the breeze due to flat petiole (stem), most widely distributed tree in North America, in southern MB small scrubby tree but can be larger – 30m tall,

Further Information:

http://home.cc.umanitoba.ca/~burchil/plants/bois_des_esprit/



A Management Approach for Bois des Esprit

1 Riverbottom

- Diverse habitats - attractive to many different wildlife species, providing a variety of food and shelter, and are close to water.
- Habitats located along waterways are also called riparian habitats.
- Riverbottom forests can generally be divided into three sections: the channel shelf or riverbank, the floodplain, and the terrace.

Riverbank: gently sloping area right next to the edge of a river, stream or creek. Dominated by trees such as willow and cottonwood. Few shrub species dominate in the riverbank area because of yearly flooding and damage from spring ice breakup. Instead, this part of the forest has more grasses and annual wildflowers.

Floodplain: Dominated by trees such as green ash, basswood, American elm, and Manitoba maple. The greatest variety of species is usually found on the floodplain, containing flood-tolerant perennial species. Common shrub species include: American hazelnut, beaked hazelnut, downy arrowwood, and chokecherry. Many flowers and grasses, as well as woody and non-woody vines also exist in the floodplain.

Terrace: Areas above the floodplain, on the highest elevation within the riverbottom forest, farthest from the river. As this area is not flooded as often, this part of the forest is dominated by plants which prefer a drier habitat such as bur oak. Many of the plants found in the floodplain may also grow on the terrace.

2 Wetland

- Remnant ox-bow lakes or depressions containing water for all or most of the year.
- Maintain water from surface run-off or flooding.
- Rich marsh-wetland habitats with plants that are adapted to growing in wet or saturated soils.
- Habitat for various mammals, birds, amphibians, reptiles, insects

Source: City of Winnipeg, Natural Services Branch

3 Oak

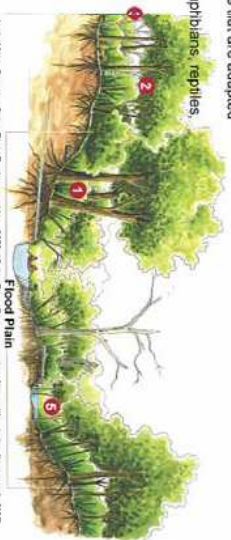
- Oak forest: canopy of bur oak trees with an understory of shrubs such as hazel, hawthorn, poison ivy, snowberry and wild rose.
- Dominates upper terrace within a riverbottom forest where flooding rarely occurs.
- Bur oak trees are found mixed in with aspen trees, and most of the aspen forest habitat sites inventoried in Winnipeg also contain some oak trees.
- In the tall-grass prairie region of southern Manitoba small stands of oak can be found mixed with openings of native prairie, creating a blend of plant communities referred to as "oak savanna".

4 Aspen

- Trembling aspen stands, often with grassland openings "aspen parkland".
- May contain native tall-grass or mixed-grass prairie plants - in lowlying areas, they are home to wet meadow species or may contain small wetlands.
- Aspen forest also may contain bur oak trees in dry areas and balsam poplar trees in lowlying, wet areas. Manitoba maple and green ash trees may also be present.
- Aspen stands contain a rich variety of shrubs, grasses and wildflowers to grow in its understory - red-osier dogwood, roses, chokecherry, pincherry and saskatoon occur on the edges of the aspen forest. Disturbed areas are often occupied by wild raspberries.
- Many of the shrubs provide food (seeds, berries or nuts) for wildlife - White-tailed deer, red squirrels, eastern chipmunks, eastern cottontail rabbits and many birds all take refuge in aspen forest.

5 Grassland

- Grassland areas containing remnant species typical to tall-grass or mixed-grass prairie environments including a variety of grasses, flowers and wildlife.



Adapted from Save Our Shore River Enhancement Inc., 2005, "Save Our River Diversity: a river has nothing to be diverse". Map

Natural Habitat Areas & Grades