

Experimental Tree Planting

Planting trees within the riparian zone (land directly adjacent to a stream or river) is an important part of restoring a high-quality ecosystem for several reasons including:

- 1) Tree and shrub roots facilitate the stabilization of the bank, helping to slow down slumping and erosion.
- 2) The tree canopies provide shade to the water, minimizing temperature fluctuations.
- 3) A riparian area with a diversity of trees and shrubs, both in age and variety, provide good wildlife habitat.

In 2008, 15 plots were developed as a research project to identify plant materials and techniques that are successful in restoring riparian zones in areas similar to this site. Some of the issues addressed in this experimental plot include flooding, competition from existing grass and weeds, and deer browsing.

On June 5, 2008 approximately 900 trees were planted in this riparian zone. Plots 1–4 are 150' x 50' and are located adjacent to the river. These plots contain: False Indigo, Sandbar Willow, and Gray Dogwood.

Plots 5–9 are 50' x 50' and are located further up the bank. These plots each received a different treatment for weed control. The species are the same as those found on plots 1–4.

Plots 10–15 are 50' x 50' and are located just down from the highest terrace. These plots contain: Golden Willow, Northern Hackberry, and Bur Oak trees. Plots 10–12 received a different treatment for deer browsing control.

White topped metal fence posts mark each corner of the plots. Each plot is identified with a sign.



Planting experimental plots.

Plot Descriptions

<u>Plot Number</u>	<u>Species Present</u>	<u>Treatment</u>
1	False Indigo, Sandbar Willow, Gray Dogwood	None
2	Sandbar Willow	None
3	Gray Dogwood	None
4	False Indigo	None
5	False Indigo, Sandbar Willow, Gray Dogwood	None
6	False Indigo, Sandbar Willow, Gray Dogwood	Mow between trees
7	False Indigo, Sandbar Willow, Gray Dogwood	Fabric around trees
8	None (control)	None
9	False Indigo, Sandbar Willow, Gray Dogwood	Chemical weed control
10	Bur Oak, Golden Willow, Northern Hackberry	Control
11	Bur Oak, Golden Willow, Northern Hackberry	Tree Shelter
12	Bur Oak, Golden Willow, Northern Hackberry	Plantskydd



Volunteers planting experimental plots.