

Final Report
**Boone County Conservation District Distillery Conservation Area Henslows'
Sparrow Habitat Expansion**
Project # T-29-D-1

The 40 acre project area that the Boone County Conservation District (BCCD) has restored was once an old brome pasture and remnant oak savanna that had been significantly overgrown with invasive brush. The goal of the project was to remove the nonnative and invasive species to provide higher quality habitat for the fauna that reside within the Distillery Conservation Area. An emphasis was put on grassland birds such as the state threatened Henslows' Sparrow, which is also a species of concern in the State Wildlife Action Plan. The project began by removing the nonnative and invasive trees and brush. Once completed, the emphasis moved to the groundcover of Hungarian Brome and Reed Canary Grass.

All of the invasive trees and brush on the site were removed with a geoboy brush cutter, an A-300 all wheel steer loader, and chainsaws. The geoboy brush cutter and operator were hired by the BCCD. Wright Tree Service is the firm that had the most competitive pricing through the bidding process. The work was performed in February of 2007 at a cost of \$6979.84. The Geoboy maneuvers on large rubber tracks. It is because of these tracks the weight is dispersed evenly causing minimal ground disturbance.

An A-300 all wheel steer loader also performed tree and brush removal. This piece of equipment is owned and was operated by BCCD staff. It like the geoboy creates minimal ground disturbance because all four wheels are able to turn unlike a skid steer loader which turns like a tank. This machine was equipped with a feller buncher attachment that was able to pinpoint and remove one by one any non native or invasive tree or shrub. Anything that was too large for the machinery was removed by hand with chainsaws. BCCD brush removal took place throughout the winters of 2006-2007 and 2007-2008. This work was done while the ground was firm enough to do work without disturbance. As the work was completed herbicide was applied to the stumps avoiding as many resprouts in the spring as possible.

During the spring of 2008 a seed mix for the short grass prairie portion of the project was created. This species list was put out to competitive bid. Prairie Moon Nursery was able to supply the majority of species at the lowest cost. The total cost for the mix was \$9,538.69 Along with the seed that was purchased seed collected by BCCD staff was also planted. The total cost of seed collected was \$3,354.60. This was based on the winning bids pricing. The seed bed was prepared for the short grass prairie planting with Glysophate being sprayed over the entire brome field in early May of 2008. The seed was planted later in the same month both by hand and with a no till seed drill. Once planting was complete weeds were controlled mechanically as needed throughout the 2008 growing season.

During the fall of 2008 the seed bed for the wet/mesic savanna was prepared. Any woody resprouts and Reed Canary Grass were sprayed with herbicide. The Savanna seed mix was created and put through a competitive bid process. Prairie Moon Nursery was awarded the bid. This seed was broadcast in the late fall once the chance of germinating had past. The cost of the seed was \$11,020.50.

The project took three years to complete. The first two years were spent doing invasive tree and brush removal. The majority of this was done on frozen ground and significant ground disturbance was avoided because of this. During the removal phase many stumps were treated with herbicide to keep resprouts to a minimum. The cost of herbicide during the project was \$846.89.

- All of the seed that was purchased for the project had an origin within 200 miles of Boone County.
- All of the seed collected by BCCD staff came from remnant habitat or restorations on BCCD properties.
- BCCD in kind staff costs throughout the project were \$6,556.80.
- The invasive trees and brush that were removed are as follow: Buckthorn, Eurasian bush Honeysuckles, and Boxelder.

Future plans for the project area. Weeds will be controlled by hand and mechanically as needed throughout the next two growing seasons. The entire project area is planned for a burn in the spring of 2011. Once this is completed it will be put on a maintenance and burn regime by BCCD natural resource staff.

Annual Report

Project Title: Boone County Conservation District Distillery Conservation Area
Henslows' Sparrow Habitat Expansion

Project number: T-29-D-1

Work on project T-29-D-1 is on schedule as planned. Work began in the fall of 2006. All woody plants of value were identified and marked before the tree and brush removal process started. Pictures of the site were taken before work began as well. In early winter of 2006 invasive tree removal was started by Boone County Conservation District (BCCD) staff. The bid process for the heavy tree and brush removal also started at this time. The bid process played its course and Wright Tree Service was awarded the contract. The work was completed in February of 2007. BCCD staff continued to do tree and brush removal until the ground thawed in March of 2007. During the months of July-September of 2007 the invasive resprouts were sprayed with herbicide. Tree and brush removal will resume in the winter of 2007-2008 and will be completed. The site is scheduled to be burned and planted in the spring of 2008.