

E COUNTY FOREST PRESERVE

Preservation, Restoration, Education and Recreation

Final Report

Cuba Marsh Nest Cover Improvement

Introduction

Land development, conversion of pasture to row crops, fragmentation of habitat, and encroachment by native and exotic brush species have all conspired to reduce available nesting habitat for grassland bird species. The goal of our project was to restore native habitat for non-game, grassland birds, including meadowlarks, bobolinks, grasshopper sparrows, and horned larks.

Management Area

The project setting is a 15 acre brushy field within Cuba Marsh Forest Preserve. It is located near the town of Lake Zurich, in Ela Township, sections 30 and 31.

Prior to management efforts the field was dominated by shrub and brush species, including gray dogwood, European buckthorn, multiflora rose, blackberry, and honeysuckle. Also present were cool season grasses, wild strawberry, sweet clover, goldenrods, and Canada thistle.

Materials and Methods

In September 1993 the field was mowed to a height of 3-5 inches to knock back existing brush and weeds. Oaks growing on site were mowed around.

In June of 1994, after giving the mowed brush sufficient time to resprout, the field was herbicided with Garlon 3A, at an application rate of 2 gallons per acre, plus one pint of surfactant per acre. We decided on Garlon rather than Round-up, as specified in our proposal, because we felt it would be more effective on the woody vegetation, and would not kill the grasses and would therefore not affect the native sedges and rushes growing in the low areas. We avoided spraying one low area where spiderwort were abundant.

Four days after herbiciding, the field was sown with a mixture of indiangrass and big bluestem. The extensive root systems of the woody vegetation prevented use of our seed drill, and the seed was

broadcast by hand from the back of a truck which covered the entire field.

Results and Discussion

Mowing the site was necessary in order to reduce vegetation height to the point where the field could be effectively covered by a boom sprayer in order to easily herbicide the woody vegetation over a broad area. Mowing also allowed sunlight into previously shaded areas which will be important for early growth of the indiangrass and bluestem.

The Garlon 3A, at 2 gallons/acre plus surfactant, was effective in killing the resprouted buckthorn, rose, honeysuckle, and blackberry. The field was sprayed on a Friday, and the woody vegetation was significantly wilted the following Monday. The herbicide was \$56/gallon and the surfactant \$19.17/gallon for a total chemical cost of \$1,715.94, or \$114.40/acre.

Evaluation of our success in establishing native grasses on site and the impact on breeding birds will have to wait until next spring.

Summary

A 15 acre field growing in with invasive brush species was mowed in the fall of 1993, and herbicided and seeded with native grasses the following summer. The project goal was to restore a native grassland adjacent to a shallow marsh.