



Habitat Information Tracking System



Dec 9, 2009

Project Overview

Project: (39990) TNC Mil Neck Reforestation

Type: Habitat Improvement
Orgcode: (51120) DELAWARE BAY ESTUARY PROJECT
Entered By: Richard Mccorkle, 3026539152
Point of Contact: Richard McCorkle
Creation Date: Sep 12, 2006
Status: Completed
Completion Date: Apr 2007
State: Delaware
FWS Region: 5

Project Narrative:

The Service's Delaware Bay Estuary Project (DBEP) entered into a cooperative agreement with The Nature Conservancy to restore 44 acres of habitat within their Milford Neck Preserve. All of these acres were leased for agricultural production through 2005. The project includes two sites, one of which comprises 36 acres (upland reforestation), and the other is an 8 acre site (seasonal wetland and buffer). DBEP will be contributing \$20,000 to this restoration effort, and will be assisting with project planning and implementation. Restoration will include removal and control of exotic invasive species, contract-planting of native hardwood seedlings, and establishment of habitat islands within the interior of the restoration area to accelerate natural succession. This latter approach involves the installation of seedlings and larger saplings at higher densities than in surrounding areas. The higher density greatly reduces browse damage from deer. The larger saplings in these habitat islands immediately attract bird use, resulting in an increase in seed dispersal within the interior of the restoration site, and an earlier establishment of secondary successional tree and shrub species (e.g., cherry spp., hawthorn spp., viburnum spp.). This project is part of a multi-year effort that will ultimately restore 265 acres of forested wetlands, upland forests, riparian buffer, and emergent wetlands within the Preserve.

The Milford Neck Preserve is part of a 10,000 acre conservation area that includes both state and private conservation land holdings. This area occurs along the Delaware Bayshore, just south of Bombay Hook National Wildlife Refuge, and just north of Prime Hook National Wildlife Refuge. It has been recognized for its importance to neotropical migrant songbirds and waterfowl as an important stopover area. In addition, there are several bird species of conservation concern which nest in or near Milford Neck, or are considered possible nesters and would benefit from an increase in overall forest cover. Most of these species are

sensitive to forest fragmentation. The northern parula, American redstart and hooded warbler are all state endangered nesters in Delaware, all are sensitive to forest fragmentation, and all have been documented in or near Milford Neck as possible nesters. The black billed cuckoo is also a state endangered breeder which is known to nest nearby. This species prefers early successional woodlands and would also benefit from reforestation efforts. The yellow throated warbler and barred owl are both considered very rare during the breeding season in Delaware. The former has been documented as a possible nester in Milford Neck, while confirmed nesting has been documented for the latter. The hairy woodpecker, pileated woodpecker, white breasted nuthatch, black and white warbler, worm eating warbler, Kentucky warbler and summer tanager are all confirmed, probable, or possible nesters in or near the Milford Neck area. All of these species are rare nesters in Delaware, and all are sensitive to forest fragmentation.

Given that many of the above forest fragmentation sensitive species of conservation concern have been documented as possible nesters in or near Milford Neck, any efforts to increase forest cover and decrease forest fragmentation are likely to improve their status in Milford Neck and Delaware in general. The Maryland-Delaware-New Jersey Gap Analysis results indicate that the forests of Milford Neck represent a potential hotspot for rare bird species. Considering the rural nature of the Milford Neck area, the amount of land area that is now protected from development, the potential to reduce forest fragmentation through restoration efforts, and the potential of this area to support many rare species through habitat improvements, this is a logical focus area for habitat restoration efforts.

DBEP has already completed several habitat restoration projects in the Milford Neck area in the past, including wetland and forest restoration projects on Delaware Wild Lands properties, and an 83 acre reforestation project within TNC's Milford Neck Preserve. Prior to entering into this cooperative agreement with TNC, Service representatives evaluated portions of the 83 acre reforestation project (planted 1999-2001) and found that this previous effort was highly successful. TNC staff have done an excellent job of controlling exotic invasive species and ensuring success of this earlier effort. This project is in keeping with DBEP's continuing efforts to restore large tracts of forested habitat for migrating and breeding songbirds.

Public Description:

The U.S. Fish & Wildlife Service's Delaware Bay Estuary Project (DBEP) entered into a cooperative agreement with The Nature Conservancy (TNC) to restore 44 acres of habitat within their Milford Neck Preserve. DBEP will be contributing \$20,000 to this restoration effort, and will be assisting with project planning and implementation. Restoration will include removal and control of exotic invasive species, contract-planting of native hardwood seedlings, and establishment of habitat islands within the interior of the restoration area to accelerate natural succession.

This latter approach involves the installation of seedlings and larger saplings at higher densities than in surrounding areas. The higher density greatly reduces browse damage from deer. The larger saplings in these habitat islands immediately attract bird use, resulting in an increase in seed dispersal within the interior of the restoration site, and an earlier establishment of secondary successional tree and shrub species (e.g., cherry spp., hawthorn spp., viburnum spp.). This project is part of a multi-year effort that will ultimately restore 265 acres of forested wetlands, upland forests, riparian buffer, and emergent wetlands within the

Preserve.

The Milford Neck Preserve is part of a 10,000 acre conservation area that includes both state and private conservation land holdings. It has been recognized for its importance to neotropical migrant songbirds and waterfowl as an important stopover area.

The Maryland-Delaware-New Jersey Gap Analysis results indicate that the forests of Milford Neck represent a potential hotspot for rare bird species. Considering the rural nature of the Milford Neck area, the amount of land area that is now protected from development, the potential to reduce forest fragmentation through restoration efforts, and the potential of this area to support many rare species through habitat improvements, this is a logical focus area for habitat restoration efforts.

DBEP has already completed several habitat restoration projects in the Milford Neck area in the past, including wetland and forest restoration projects on Delaware Wild Lands properties, and an 83 acre reforestation project within TNC's Milford Neck Preserve. TNC staff have done an excellent job of controlling exotic invasive species and ensuring success of this earlier effort. This project is in keeping with DBEP's continuing efforts to restore large tracts of forested habitat for migrating and breeding songbirds.

Project mechanism(s):

- 1. Title:** TNC Milford Neck Reforestation
Mechanism Type: Cooperative Agreement

Mechanism: TNC Milford Neck Reforestation

Title: TNC Milford Neck Reforestation

Mechanism Type: Cooperative Agreement
Agreement No.: 50181-6-J033
Primary Non-FWS Party: NGO/Land Trust
Date of Mechanism: Aug 01, 2006
Length of Mechanism: 3 years
Funds Obligated Date: Aug 2006
Funding Source Fiscal Year: 2006

Mechanism accomplishment(s):

- | | |
|---|--|
| 1. Title: Asche-Black Site
Habitat Type: Upland
Accomplishment Type: Restoration | 2. Title: Stratham Lane Site
Habitat Type: Wetland
Accomplishment Type: Restoration |
|---|--|

Accomplishment: Ashe-Black Site

Accomplishment:Ashe-Black Site
Mechanism:TNC Milford Neck Reforestation

Coordinates: Longitude: -75.366666666, Latitude: 38.99583333
Watershed (HUC): BROADKILL - SMYRNA
Congressional District: DE00
Michael N. Castle (R)
County: Kent
State: Delaware
FWS Region: 5 - Region 5
FWS Ecoregion: Delaware River/Delmarva Coastal Area
Joint Venture Area: Atlantic Coast Joint Venture
Accomplishment Status: Final
Accomplishment Type: Restoration
Habitat Type: Upland
Habitat Class: Broadleaf Forest
Habitat Sub-Class: Oak - hickory forest
Completion Date: Apr 30, 2007
Primary Trust/Resource Benefits: Migratory Birds
Secondary Trust/Resource Benefits: Non-Federal Trust Species
Overlay Protection Holder: NGO/Land Trust
Protected in perpetuity? yes

Accomplishment area(s):

1. **Title:** TNC Milford Neck Reforestation
Primary Non-FWS Party: NGO/Land Trust

Area: TNC Milford Neck Reforestation

Accomplishment: Ashe-Black Site
Area: TNC Milford Neck Reforestation

Primary Non-FWS Party: NGO/Land Trust
Fiscal Year of Work: 2007
Treatment / Technique: 1 Planting-Maintaining Trees/Shrubs
Est. Acres After: 36.0
Acres After: 36.0

Area partner(s):

Partner: Landowner Requests Anonymity

Partner Type: Other

Partner Inkind Contribution: \$1996.00

Fiscal Year: 2007

Comments: for Landowner Requests Anonymity

170 Volunteer Hours (various volunteers)

Partner: The Nature Conservancy

Partner Type: NGO/Land Trust

Is this partner a landowner? yes

Partner Inkind Contribution: \$14851.00

Fiscal Year: 2006

Area sub-activity(s):

FWS Sub-Activity: Coastal Program - 1124

Contribution Fiscal Year: 2006

Funding Source Fiscal Year: 2006

Est. Cash: \$16364.00

Cash: \$13049.00

Est. FWS Days: 6.0

FWS Days: 9.0

Area ITIS species:

Species Name: Terrapene carolina carolina

Common Name: Eastern Box Turtle

Species Name: Mniotilta varia

Common Name: Black-and-white Warbler

Species Name: Helmitheros vermivorus

Common Name: Worm-eating Warbler

Species Name: Parula americana

Common Name: Northern Parula

Species Name: Icteria virens

Common Name: Yellow-breasted Chat

Species Name: Wilsonia citrina

Common Name: Hooded Warbler

Species Name: Setophaga ruticilla

Common Name: American Redstart

Species Name: Vireo olivaceus

Common Name: Red-eyed Vireo

Species Name: Icterus galbula

Common Name: Baltimore Oriole

Species Name: Hylocichla mustelina

Common Name: Wood Thrush

Species Name: Piranga olivacea

Common Name: Scarlet Tanager

Species Name: Piranga rubra

Common Name: Summer Tanager

Area monitoring:

Staff Days: 1.0

Fiscal Year: 2007

Accomplishment: Stratham Lane Site

Accomplishment: Stratham Lane Site

Mechanism: TNC Milford Neck Reforestation

Coordinates: Longitude: -75.346914682, Latitude: 38.9700471185

Watershed (HUC): BROADKILL - SMYRNA

Congressional District: DE00

Michael N. Castle (R)

County: Kent

State: Delaware

FWS Region: 5 - Region 5

FWS Ecoregion: Delaware River/Delmarva Coastal Area

Joint Venture Area: Atlantic Coast Joint Venture

Accomplishment Status: Final

Accomplishment Type: Restoration

Habitat Type: Wetland

Habitat Class: Palustrine

Habitat Sub-Class: Forested Wetland

Completion Date: Apr 30, 2007

Primary Trust/Resource Benefits: Migratory Birds

Secondary Trust/Resource Benefits: Non-Federal Trust Species

Overlay Protection Holder: NGO/Land Trust

Protected in perpetuity? yes

Accomplishment area(s):

1. **Title:** TNC Milford Neck Wetland Restoration

Primary Non-FWS Party: NGO/Land Trust

Area: TNC Milford Neck Wetland Restoration

Accomplishment: Stratham Lane Site
Area: TNC Milford Neck Wetland Restoration

Primary Non-FWS Party: NGO/Land Trust
Fiscal Year of Work: 2007
Treatment / Technique: 1 Planting-Maintaining Trees/Shrubs
Est. Acres Before: 0.0
Acres Before: 0.0
Est. Acres After: 8.0
Acres After: 8.0

Comments:

Prior converted wetland was under agricultural production. It will be taken out of production and planted with native trees and shrubs. Acreage includes upland buffer.

Area sub-activity(s):

FWS Sub-Activity: Coastal Program - 1124
Contribution Fiscal Year: 2006
Funding Source Fiscal Year: 2006
Est. Cash: \$3636.00
Cash: \$2900.00
Est. FWS Days: 2.0
FWS Days: 2.0

Area ITIS species:

Species Name: <i>Hyla chrysoscelis</i> Common Name: Cope's Gray Treefrog	Species Name: <i>Ambystoma maculatum</i> Common Name: Spotted Salamander
Species Name: <i>Ambystoma opacum</i> Common Name: Marbled Salamander	Species Name: <i>Ambystoma tigrinum</i> Common Name: Tiger Salamander
Species Name: <i>Notophthalmus viridescens</i> Common Name: Eastern Newt	Species Name: <i>Ardea herodias</i> Common Name: Great Blue Heron
Species Name: <i>Seiurus motacilla</i> Common Name: Louisiana Waterthrush	Species Name: <i>Oporornis formosus</i> Common Name: Kentucky Warbler

Total Area

Total Project Area By Habitat Type

Est. Upland Acres After: 36.0

Upland Acres After: 36.0

Est. Wetland Acres After: 8.0

Wetland Acres After: 8.0

Total Project Area

Est. Acres After: 44.0

Acres After: 44.0

Total Contributions

Total Partner Contribution to Project By Habitat Type

Upland Inkind: \$16847.00

Total Partner Contribution to Project

Inkind: \$16847.00

Total Service Contribution to Project By Habitat Type

Est. Upland Cash: \$16364.00

Upland Cash: \$13049.00

Est. Wetland Cash: \$3636.00

Wetland Cash: \$2900.00

Est. Upland FWS Days: 6.0

Upland FWS Days: 9.0

Est. Wetland FWS Days: 2.0

Wetland FWS Days: 2.0

Total Service Contribution to Project

Est. Cash: \$20000.00

Cash: \$15949.00

Est. FWS Days: 8.0

FWS Days: 11.0