



# Assawoman Wildlife Area: Sassafra Landing Reforestation Project

Project Status:  
Completed in October 2018

*Reforestation is one of the most cost-effective ways to improve water quality.*

## Project Summary

### Background

In 2018, the Center developed a Watershed Reforestation Plan, which used a geospatial model to rank and select agricultural parcels in the Inland Bays watershed for tree planting projects. Ranking criteria were based on both the potential water quality improvements and ecological benefits expected from reforesting former croplands. This 3.5-acre parcel at Sassafra Landing was ranked as “highest priority” due to its close proximity to existing protected lands and Miller Creek, a tributary of Little Assawoman Bay.

### Project Description

Three hundred and twenty-five container-sized, native hardwood trees were planted in late October 2018 during a “Trick or TREE-t” volunteer event. Species included a variety of oaks, mockernut hickory, persimmon, and black haw viburnum. The trees were installed in a one-acre “habitat island.” Their seeds will populate the rest of the parcel with new trees in subsequent years. A 10-foot-high fence was constructed around the planted trees to prevent damage from browsing deer.

### Objective

The goal of this project was to create wildlife habitat and improve water quality while also adapting to the conditions present at the site. The fencing gives the young trees a head start by reducing mortality from deer browse and increases the chance of survivability. Ongoing monitoring of the site will provide data to help improve the Center’s reforestation methods in the future.

### Project Contact:

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### Project Partner:

DNREC Division of Fish and  
Wildlife

### Funding & Partners:

Project design/implementation  
cost: \$6,956

### Funding Partners:

- DNREC Division of Fish and Wildlife
- U.S. Environmental Protection Agency

### Project Timeline:

A Watershed Reforestation Plan was developed in 2018, with this project planted in late October 2018.







The map above shows this reforestation project within the Assawoman Wildlife Area.

## Project Highlights

- Four acres of new interior forest habitat were created.
- Forty volunteers assisted with the planting.
- Fall is the best time to plant container-sized trees. The combination of warm soil and cool air stimulates root growth before the ground freezes.
- This project, located within the Assawoman Wildlife Area on Mulberry Landing Road in Frankford, Delaware, serves as an excellent demonstration project for the “habitat island” approach to reforestation.

## Outcomes/Conclusions

Converting this parcel to forest will reduce the annual inputs of nitrogen and phosphorus to Miller Creek and Little Assawoman Bay by 59.5 pounds and 1.4 pounds, respectively.

The new trees will combat climate change by sequestering about 7 million pounds of atmospheric carbon over 20 years.

## CCMP Focus Area

This project fulfills objectives outlined in the Comprehensive Conservation Management Plan (CCMP) for the Delaware Inland Bays:

- Focus Area: Coordinating Land and Water Use Decisions
- Objective: Provide maximum protection of waterways, forested stream corridors, groundwater, natural areas, open space, tidal and non-tidal wetlands, and encourage additional acquisitions or conservation set-asides and protection.



Some woodland creatures and their friends joined in tree-planting fun.



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The Delaware Center for the Inland Bays is a nonprofit organization established in 1994 to promote the wise use and enhancement of the Inland Bays and its watershed. With its many partners, the Center conducts public outreach and education, develops and implements restoration projects, encourages scientific inquiry and sponsors research. To learn how you can get on board with the bays, please visit [www.inlandbays.org](http://www.inlandbays.org) and follow us on Facebook @deinlandbays!