

# WELCOME!

## MERCER EDUCATIONAL GARDENS



OF MERCER COUNTY

# Mercer Educational Gardens



Photo courtesy of Hopewell Township engineer—June 2008

**2007-2010**

**Wetland**

**Meadow Restoration**

**At**

**Mercer Educational Gardens**

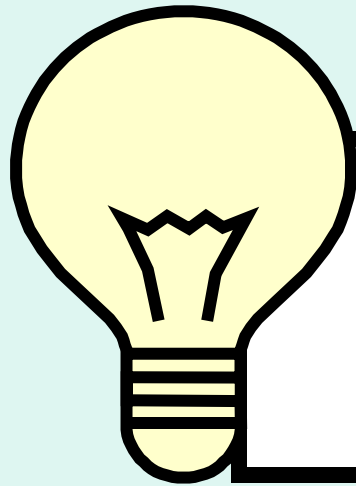


# Meadow in 2007



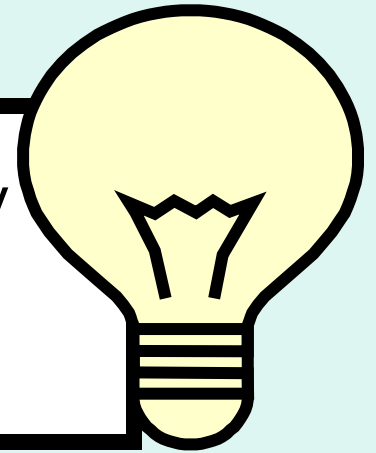
- **Reed canary grass (*Phalaris arundinacea*) is pervasive**
- **Cool season grass**
- **Mat forming**
- **Invasive**
- **Non native**
- **Poor wildlife habitat**

# WHAT TO DO?



Washington Crossing Audubon Society

Holden Grant



- October 31, 2007--Application submitted
- January 18-24, 2008—Herbicide Questions
- March 14, 2008--\$3,940 Awarded

# PROJECT PLANNING

- Coordinate herbicide with Mercer County Parks
- Obtain Soil test from Rutgers
- Prepare plant list and order plant plugs
- Order or obtain necessary supplies
- Recruit MGs to be team leaders
- Recruit MGs to help on planting day
- Divide site into planting sections for teams
- Post explanatory signage

# Soil Testing:

## Following Rutgers Recommendations



- 3/27/08 - Sample sent to Rutgers
- 4/10/08 - Soil pH report = 5.8

- 4/25/08 – Lime application:  
(20lb/1000sq.ft)



# Herbicide Application by Mercer County Parks

**Notice posted on 4/11/08**

On or about April 17th 2008, a licensed Mercer County Parks staff member will be treating the invasive reed canary grass in the adjacent meadow area with Riverdale Aqua Neat, an aquatic herbicide (53.8% Glyphosate, N-(phosphonomethyl)glycine; 46.2% other ingredients) and Brewer side-kick, a nonionic surfactant (100% D'limonene, related isomers and emulsifiers). The treatment will be repeated on any reemerging reed canary grass sprouts on or about May 19th 2008. Control of the invasive reed canary grass is the first step in a meadow restoration project being performed by the Master Gardeners of Mercer County with grant funding by The Washington Crossing Audubon Society.

For further information call 609-4261181.

**4/18/08--First application of  
generic aquatic herbicide  
5/23/08 –Second application  
of generic aquatic herbicide**





# POSTED SIGNAGE

**MEADOW RESTORATION  
IN PROGRESS**

## **MEADOW RESTORATION PROJECT IN PROGRESS**

**GOAL:** To create an attractive bird and butterfly friendly habitat in this meadow by planting a selection of 3 native grasses and 12 native wildflowers that do well in wet soil.

**STEP 1:** Licensed Parks employee sprays herbicide to control invasive reed canary grass (Blue color temporarily indicates where spray was applied)

**STEP 2:** Master Gardeners plant 3,488 plugs of native grasses and wildflowers (Each plant plug marked with a colored flag)

**STEP 3:** Master Gardeners monitor plant health in meadow. Plant maturity expected after 2-3 years.

**Project participants:** Master Gardeners of Mercer County (609-989-6853); Mercer County Parks Commission (609-426-1181). Funds provided by Washington Crossing Audubon Society Holden Grant.

# MEADOW PLANT LIST

## GRASSES (70%)

*Andropogon virginicus* (Broom sedge)

*Juncus effusus* (Common rush)

*Panicum virgatum* (Switch grass)

*Chasmanthium latifolium* (Sea oats)

**All of these plants  
do well in wet soil.**

## FORBS (30%)

*Asclepias incarnata* (Swamp milkweed)

*Helenium autumnale* (Helen's flower)

*Pycnanthemum muticum* (Mountain mint)

*Rudbeckia laciniata* (Green headed coneflower)

*Senecio aureus* (Golden ragwort)

*Solidago graminifolia* (Lance-leaved goldenrod)

*Verbena hastata* (Blue vervain)

*Vernonia noveboracensis* (New York ironweed)

*Veronicastrum virginicum* (Culver's root)

*Tradescantia* 'Purple Profusion' (Spiderwort)

*Physostegia virginiana* (Obedience plant)

# Preparing the Site: 5/28/08

Marking Sections and Transplanting Mature Natives



## Forbs (wildflowers) transplanted on MAY 28, 2008



*Lobelia cardinalis*  
Cardinal flower



*Silphium perfoliatum*  
Cup plant



*Monarda fistulosa*  
Wild bergamot



*Hibiscus moscheutos*  
Swamp hibiscus



*Filipendula rubra*  
Queen of the prairie

# Unexpected Finds



- Mature Sensitive ferns appear after herbicide application



- Box turtle explores the habitat under restoration

# Plugs are Delivered by North Creek Nurseries

- 5/29/08
- 3,216  
Plugs



# Overnight plug storage in Equestrian Center barn

- 5/29/08



3,216 Plant Plugs

# Team leader orientation 8:30am on 5/30/08





# MG's sign up for teams—9:30am



# Teams begin planting



# Music for planting



# And more planting



# And more planting



# And more planting



# It's definitely a wetland!



# Waving Flags = End in Sight





# Planting completed!

12:30pm 5/30/08



A long, but rewarding day!



**Grasses (70% of all plugs) planted on MAY 30, 2008**



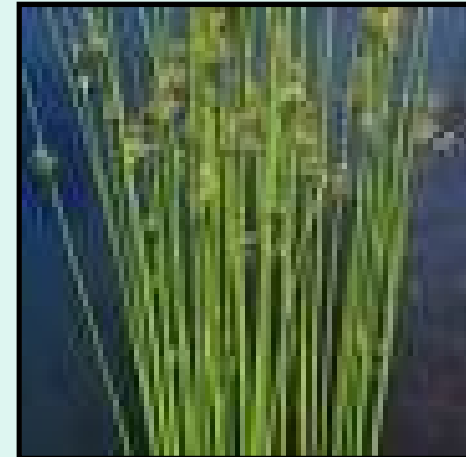
*Andropogon virginicus*  
Broom sedge



*Panicum virgatum*  
Switch grass



*Chasmanthium latifolium*  
Sea oats

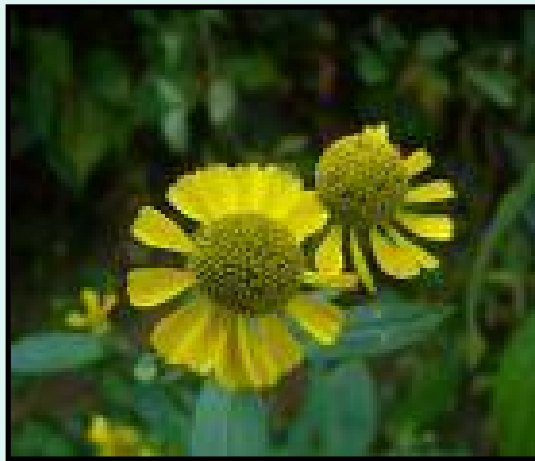


*Juncus effusus*  
Common rush

## Forbs (wildflowers) planted on MAY 30, 2008



*Asclepias incarnata*  
Swamp milkweed



*Helenium autumnale*  
Helen's flower



*Physostegia virginica*  
Obedience plant



*Pycnanthemum muticum*  
Mountain mint



*Rudbeckia laciniata*  
Green headed coneflower



*Senecio aureus*  
Golden ragwort

## Forbs (wildflowers) planted on MAY 30, 2008



*Solidago graminifolia*  
Lance-leaved goldenrod



*Tradescantia virginica*  
Spiderwort



*Verbena hastata*  
Blue vervain



*Vernonia noveboracensis*  
New York ironweed



*Veronicastrum virginicum*  
Culver's root

May 31, 2008



Mother Nature



delivers



$\frac{3}{4}$



rain

# Six weeks later: July 17, 2008



12 weeks later: August 24, 2008





12 weeks later: August 24, 2008



22 weeks later: October 18, 2008



# After annual mowing: January 23, 2009



# After annual mowing: January 23, 2009



Spring: May 20, 2009



Spring: May 20, 2009



# Early Summer: June 28, 2009



# Early Summer: June 28, 2009





# Early Summer: June 28, 2009



Mid-summer: July 17, 2009



Mid-summer: July 17, 2009



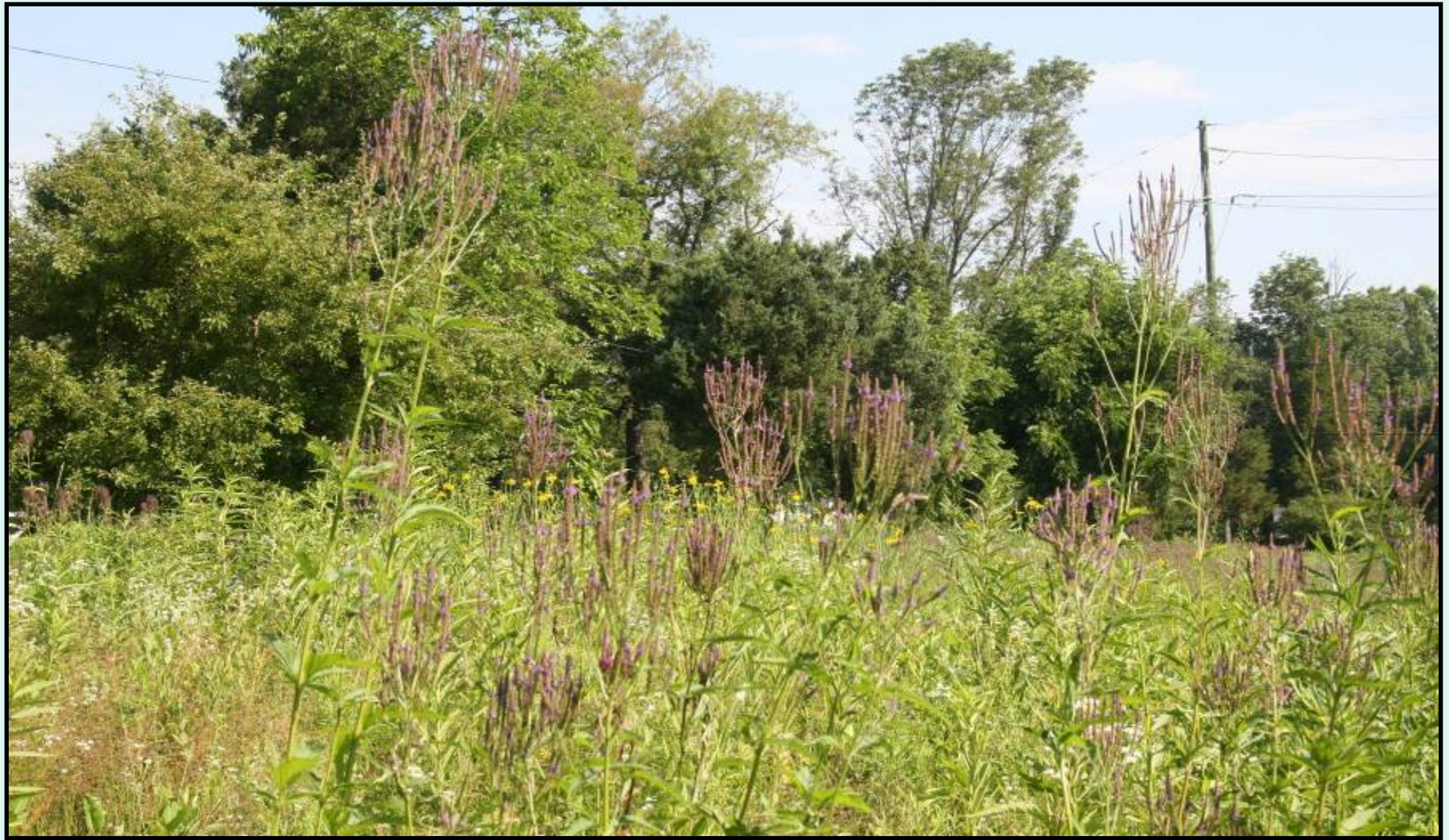
Mid-summer: July 17, 2009



Mid-summer: July 17, 2009



Mid-summer: July 17, 2009



# Early Fall: September 25, 2009

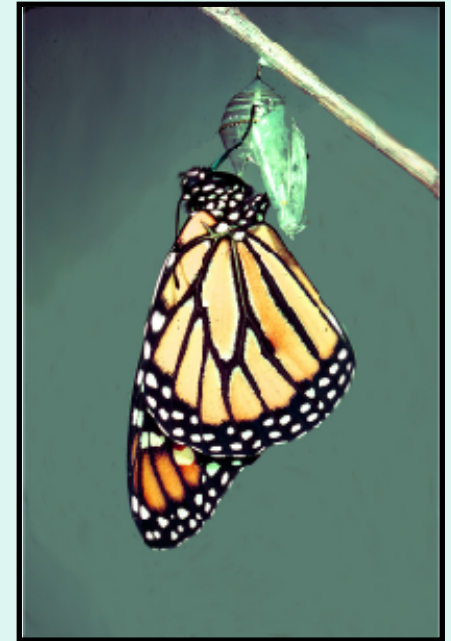


# Early Fall: September 25, 2009





# Sights in the Fall Meadow



Photos courtesy of Douglas Tallamy

# Late Fall: December 7, 2009



# Late Fall: December 7, 2009



Late Fall: December 7, 2009



# Late Fall: December 7, 2009



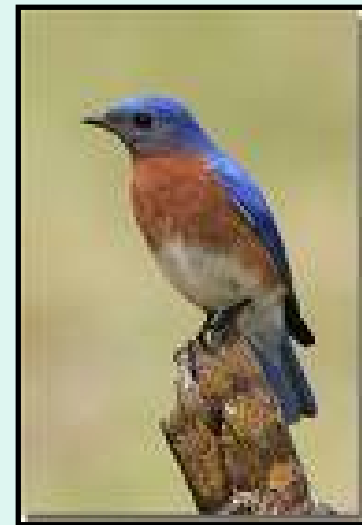
# Late Fall: December 7, 2009



# Late Fall: December 7, 2009



# A few wildlife observations





# Meadow in September 2007



# Meadow in September 2009



# NATIVE GRASSES AND WILDFLOWERS

**PROJECT PARTICIPANTS:**



**FUNDING SOURCE:**

**WASHINGTON CROSSING AUDUBON SOCIETY HOLDEN GRANT**