

# Meadow Restoration and Habitat Enhancement

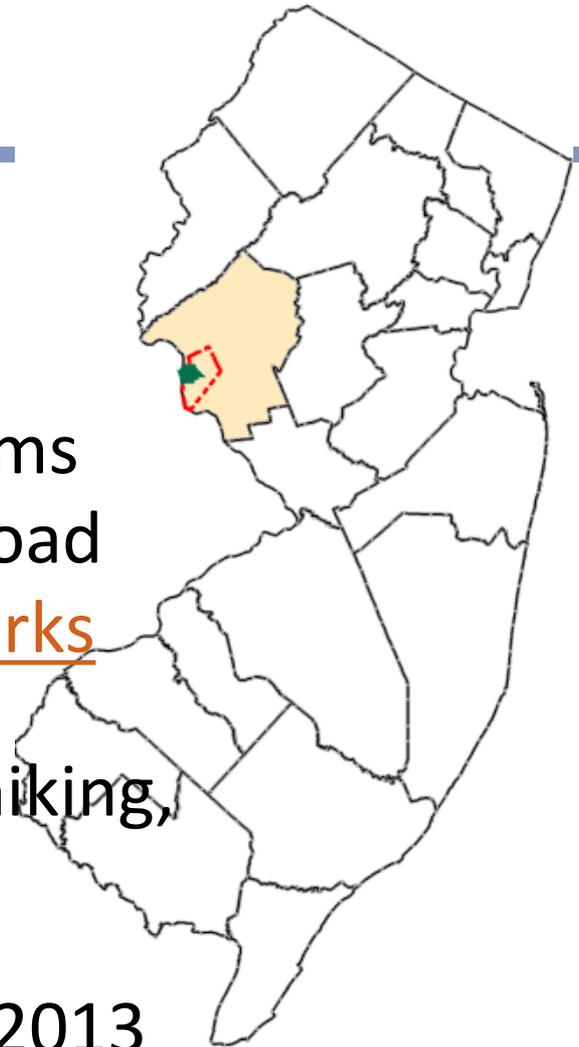


**Horseshoe Bend Park  
Kingwood Township  
Environmental  
Commission**

# Horseshoe Bend Park

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- Established in July 2011
- 450 acres
- Woods, fields, wetlands and streams
- 2 entrances on Horseshoe Bend Road
- <http://kingwoodtownship.com/parks> for trail maps
- Over 10.5 miles of trails used for hiking, biking, horseback riding, nature observation and birding
- 3,500 visitors enjoyed the park in 2013



# Butterflies

- North Jersey Butterfly Club surveyed butterfly population (<http://www.naba.org/chapters/nabanj>) & created a meadow management plan
- high diversity of butterflies (44 species)
  - Gray Comma (very rare)
  - White M Hairstreak (uncommon)
  - Common Sootywing (uncommon)
  - Sleepy Orange (uncommon)
  - Monarch



**Tawny-edged Skipper**  
*Polites themistocles*

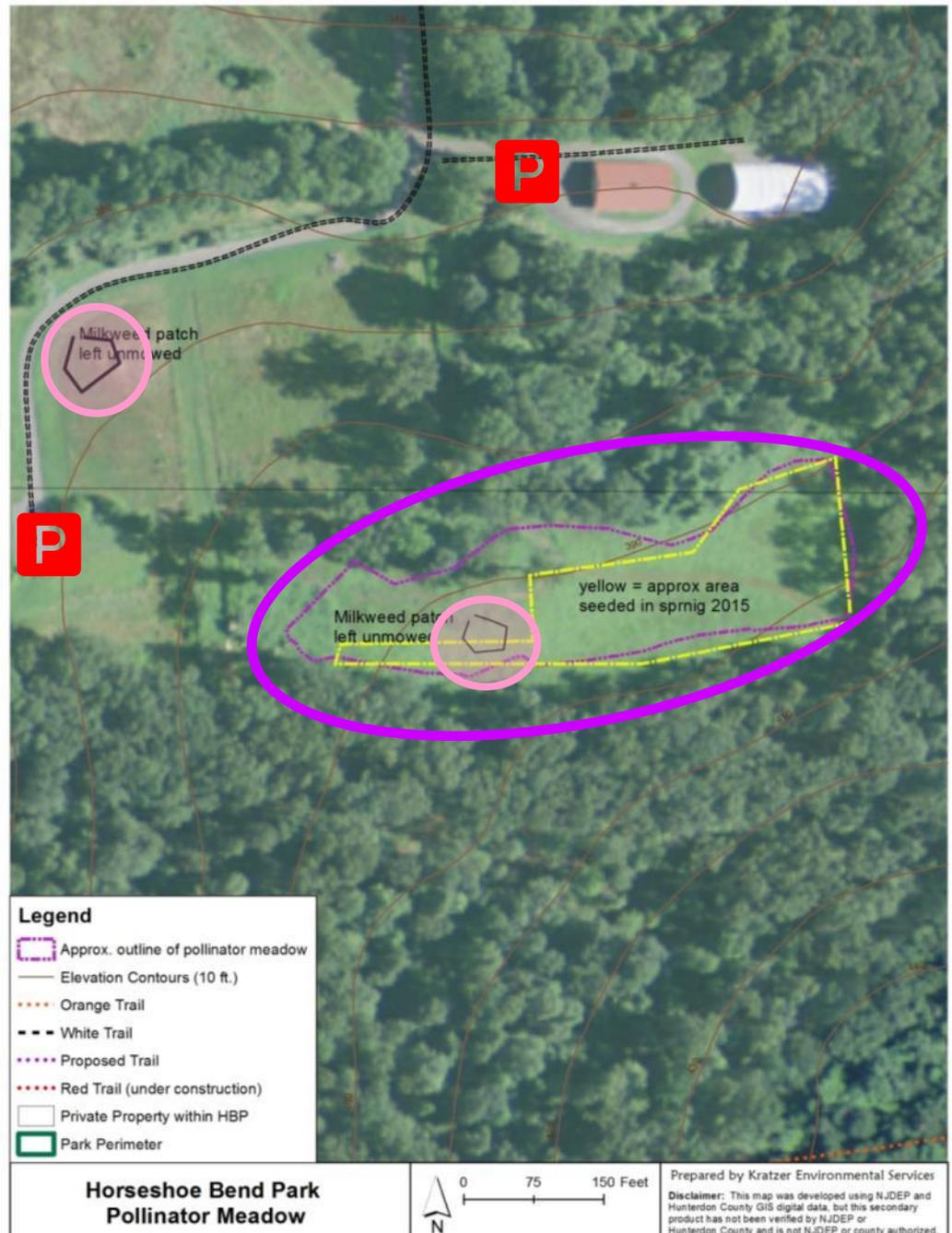
# Objectives

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- restore and enhance meadow habitat for pollinators, especially rare and uncommon butterflies on a 2.5 acre field within the park
- control invasive species which surround the meadow
- provide a living demonstration meadow with interpretive sign to educate the public about native plants and pollinators
- provide volunteer opportunities

# Location of meadow project

- From Horseshoe Bend Road, use south entrance, across from Spring Hill Road



# Selection of seed mix

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- Species native to Hunterdon County
- “XERCES Mid-Atlantic Pollinator Mix” from Ernst Conservation Seeds
  - 33% Little Bluestem (*Schizachyrium scoparium*)
  - 17% Purple Coneflower (*Echinacea purpurea*)
  - 11% Anise Hyssop (*Agastache foeniculum*)
  - 10% Lanceleaf Coreopsis (*Coreopsis lanceolata*)
  - 7% Partridge Pea (*Chamaecrista fasciculata*)
  - 6% Common Milkweed (*Asclepias syriaca*)

# Seed mix (continued)

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- Minor amounts of
  - Ohio Spiderwort (*Tradescantia ohiensis*)
  - Marsh Blazing Star (*Liatris spicata*)
  - Blue False Indigo (*Baptisia australis*)
  - Giant sunflower (*Helianthus giganteus*)
  - Wild Bergamot (*Monarda fistulosa*)
  - New England Aster (*Symphyotrichum novae-angliae*)
  - Showy Goldenrod (*Solidago speciosa*)
  - Slender Mountainmint (*Pycnanthemum tenuifolium*)
  - Boneset (*Eupatorium perfoliatum*)

Before (looking west, April 2015)



After discing (looking east, May 2015)



Seeds were mixed with kitty litter



# Volunteers broadcast seed/litter mix



5 weeks later...



Partridge Pea  
(*Chamaecrista fasciculata*)



Existing milkweed  
area had been left  
un-plowed



# 2 ½ months later...

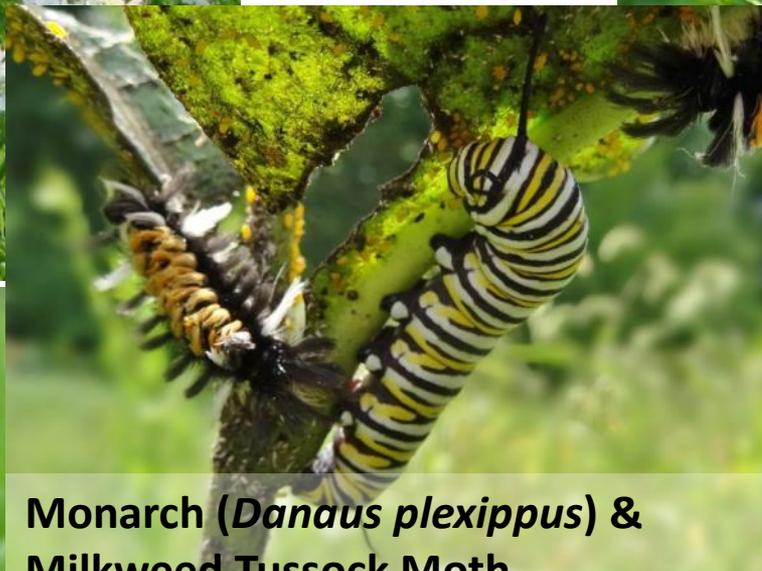
Slender mountainmint  
(*Pycnanthemum tenuifolium*)



Partridge Pea  
(*Chamaecrista fasciculata*)



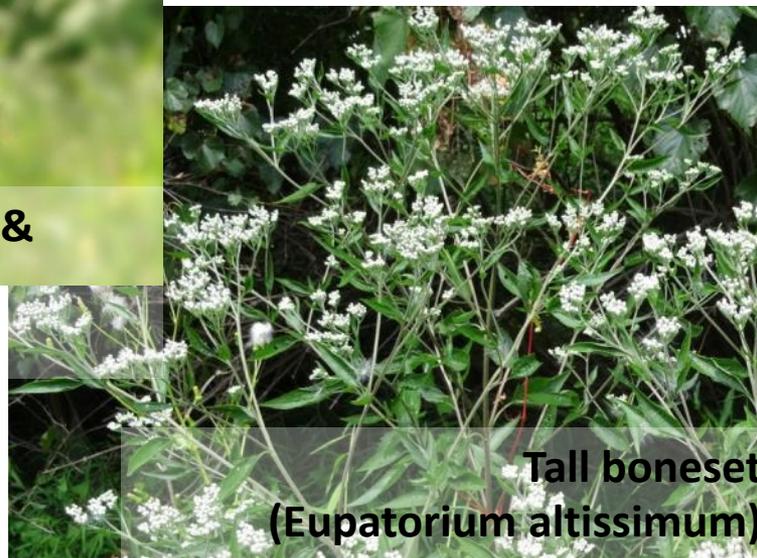
Monarch (*Danaus plexippus*) &  
Milkweed Tussock Moth  
(*Euchaetes egle*) caterpillars



Anise Hyssop  
(*Agastache foeniculum*)



Tall boneset  
(*Eupatorium altissimum*)



# Next steps

- Install interpretive sign about pollinators & native plants
- Disc the other half of the field
- Sow seeds in other half of the field
- Mow to 8" height annually
- Continue to remove Invasives
- Monitor butterfly population



# Contact

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