

Stop Mowing, Start Growing

How Native Plants Build a Better Community

Presented by

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What We Will Cover This Morning

- Why Natives Matter
- Benefits of Using Native Plants
- How an HOA can help Reverse the Trend
- Examples of Beautiful Native Landscapes
- Resources

Video

Why Natives Matter

- The Basics – The Meadow Project Video

Who Knew? 6000 - 9000 Caterpillars to raise ONE brood of Chickadees

Handout – “A Chickadee’s Guide to Gardening”

- Study by Narango

- Wood Thrush Population Decline >50%

Narango Study² on Suburban Chickadee Populations

- Desirée Narango studied the relationship between native plants and the ability of Chickadees to maintain their population levels.



“Most insectivorous birds are absent or declining in urban areas.... When nonnative plants increased, both insect availability and chickadee population growth declined.

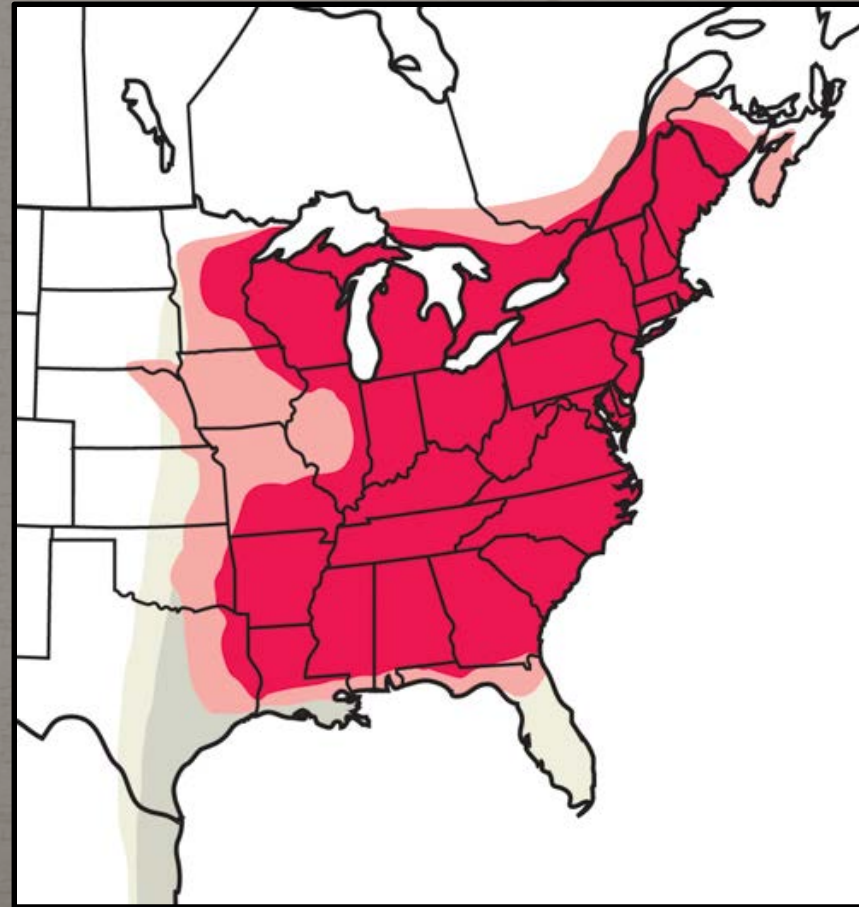
... populations could only be sustained if the nonnative plants constituted <30% of plant biomass.”

² Narango, D.L., Tallamy, D.W. and Marra P.P. (2018) Nonnative plants reduce population growth of an insectivorous bird. Proceedings of the National Academy of Sciences Nov. 6, 2018, 115(45):11549-11554. <https://doi.org/10.1073/PNAS.1809259115>

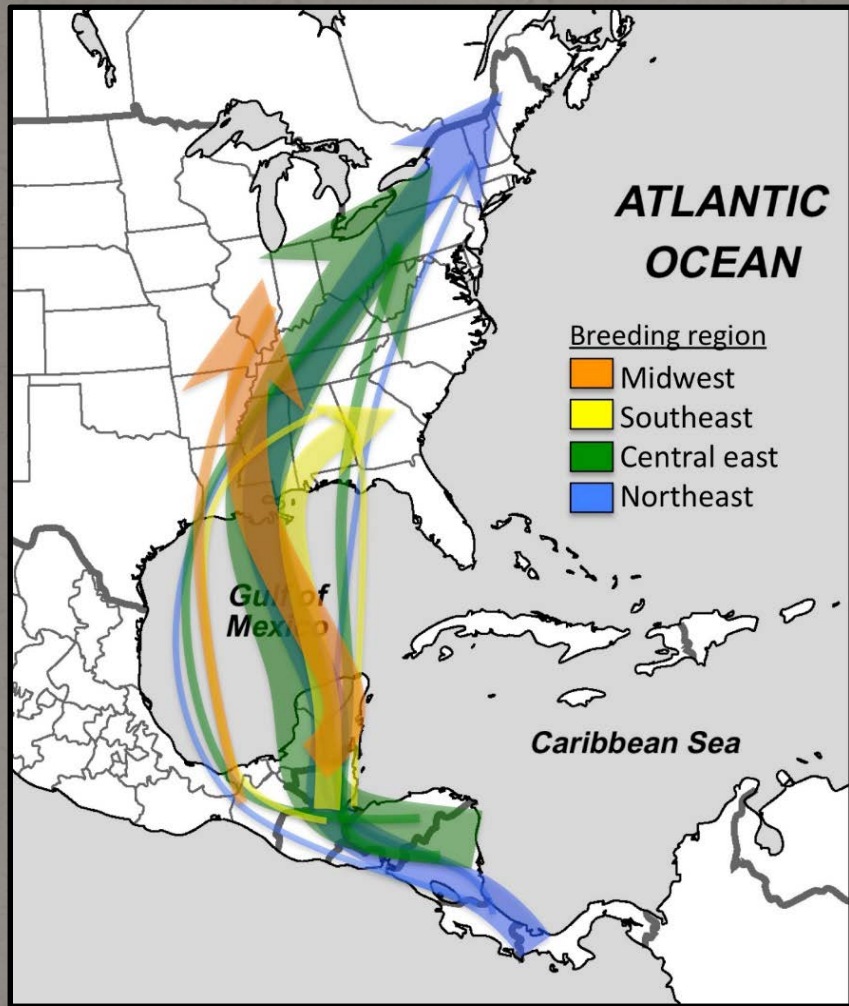


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Breeding Range (Red): Wood Thrush



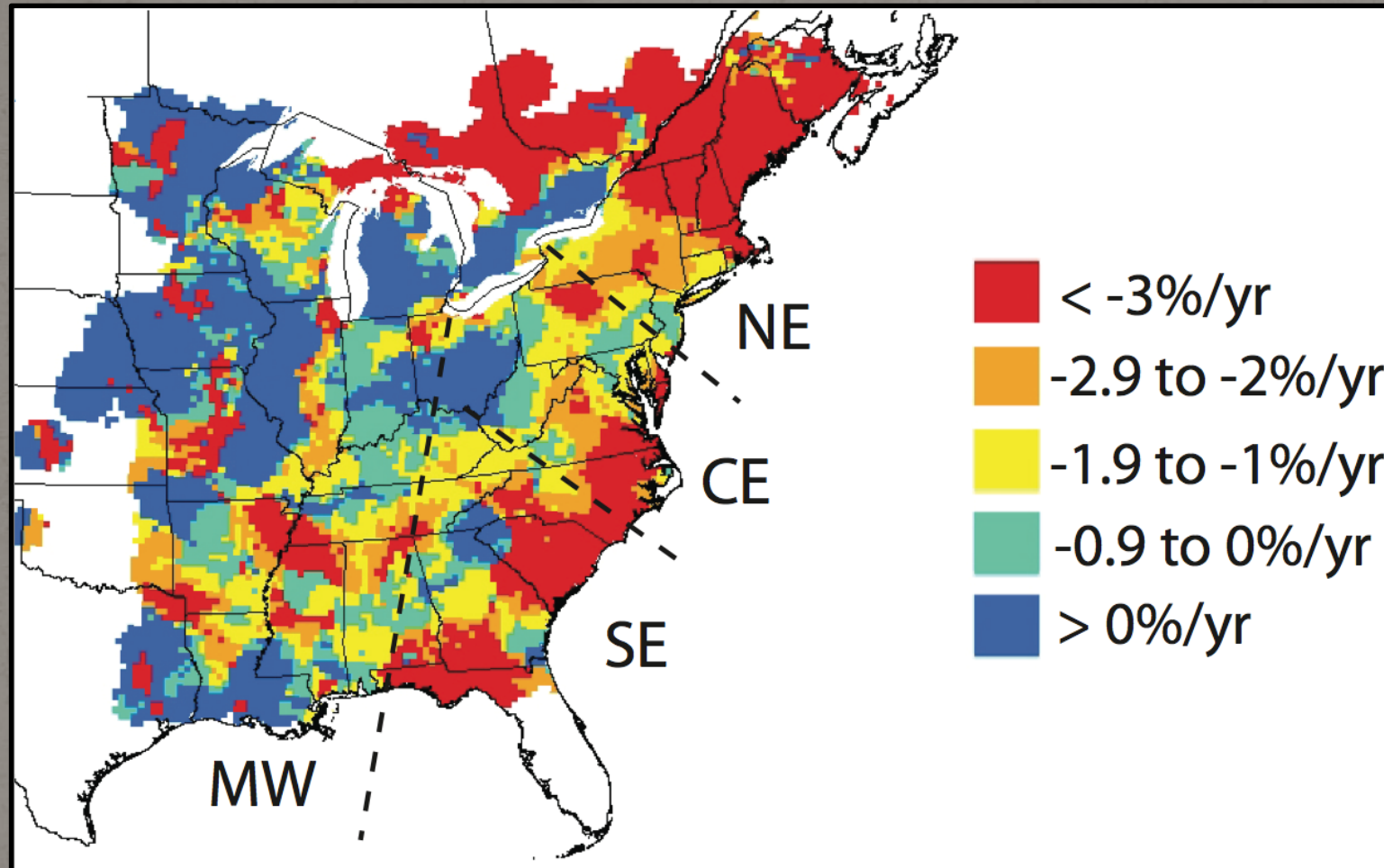
Wood Thrush: Spring Migration Route



Source: Dr. Emily A. McKinnon, Dept. of Biological Sciences, University of Manitoba
www.BirdBiologist.WordPress.com

Wood Thrush Breeding Population

>50% Decline between 1966 - 2012



Source: Dr. Emily A. McKinnon, Dept. of Biological Sciences, University of Manitoba
www.BirdBiologist.WordPress.com



- Wood Thrush In Braemar –
An anecdotal testimony

Loss of Native Forest Cover & Habitat over 26 Years. Loss of habitat is County-wide

Linton Hall Road

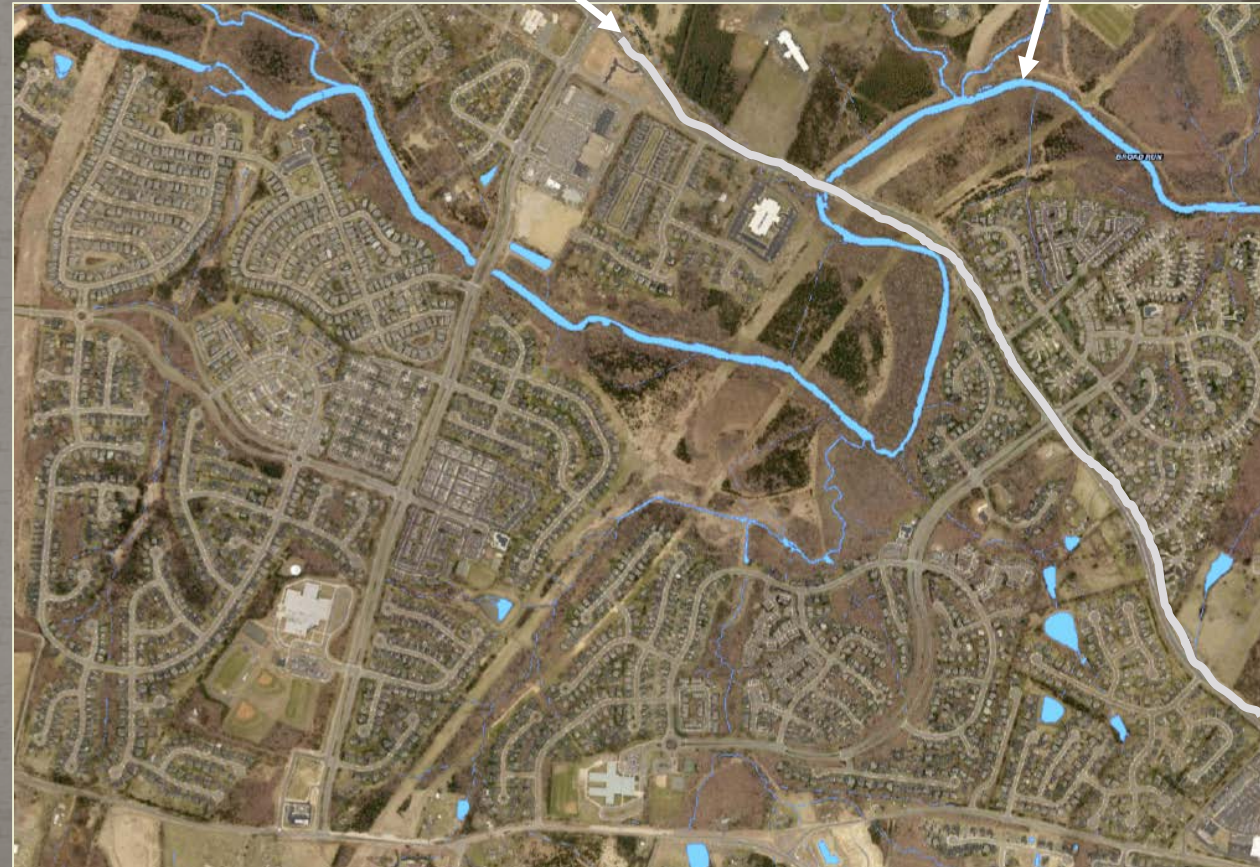
Broad Run



1991

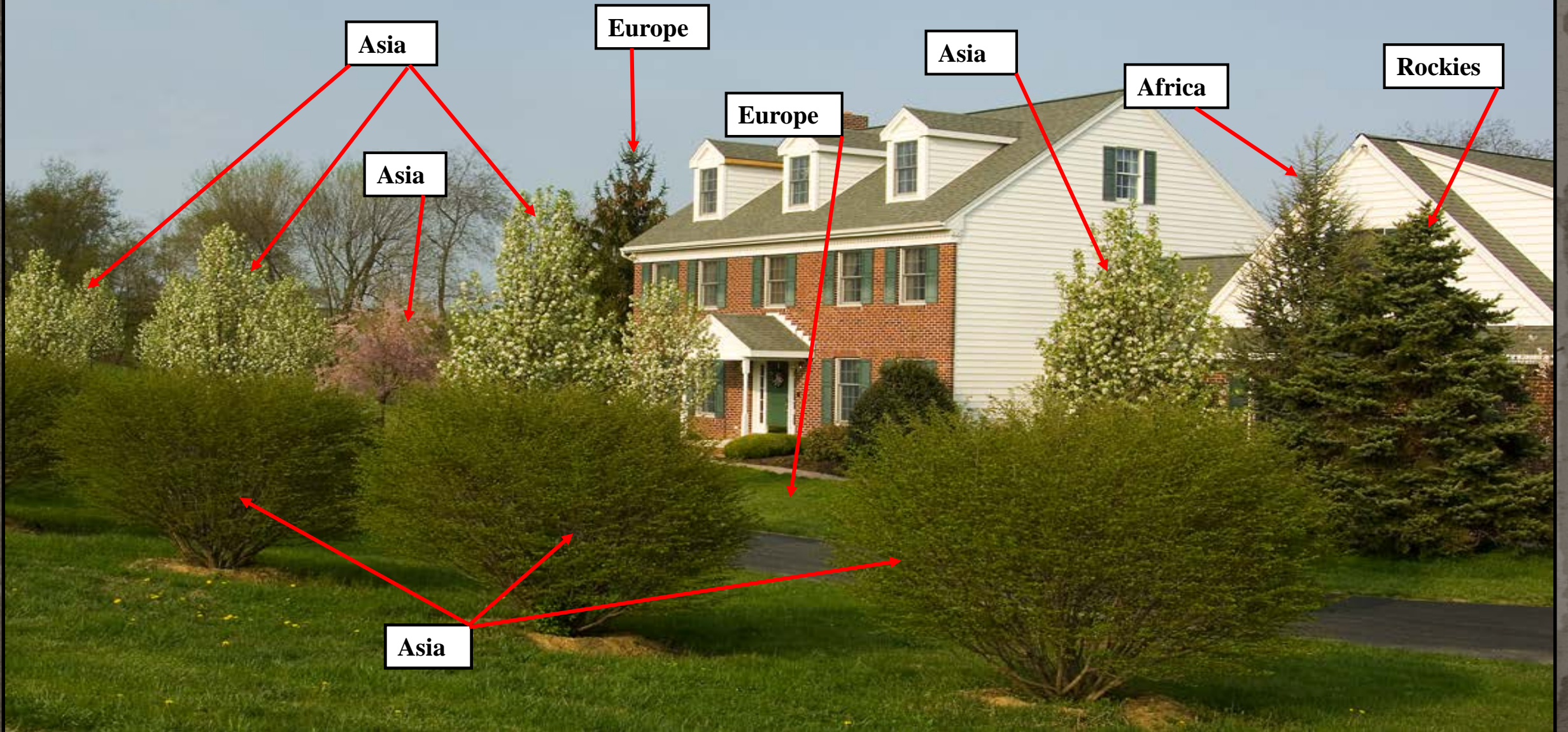
Linton Hall Road

Broad Run



2019

The suburban food desert



Replacement of Forest with Expansive Lawns



Replacement of Native Plants with Nonnatives

- A Few of the Common Nonnative Plants in the Landscape

- Bradford Pear*
- Japanese Barberry*
- English Ivy*
- Miscanthus*
- Asian Azaleas
- Crepe Myrtle
- Butterfly Bush*
- Burning Bush*
- Heavenly Bamboo (Nandina)*
- Managed Turf (Fescues, Kentucky Bluegrass, Zoysia, Centipede, Bermuda Grass)



* Invasive

Benefits of Using Native Plants

- Foster healthier, sustainable, populations of native flora and fauna (pollinators, birds)
- Potential for saving Money on Maintenance
 - Example: Central District Police Station
 - Money savings from replacing lawn, reduce mowing & fertilization
- Water Conservation (\$\$\$)
- Reduced Use of Pesticides
- Creating Beauty that is more than skin deep – Fostering life
- Learning About Diversity and How Nature Works.

Pollinators

Pollinators do the work of carrying pollen from one flower to another, facilitating pollination and thereby fruit production.

Most pollinators are insects.

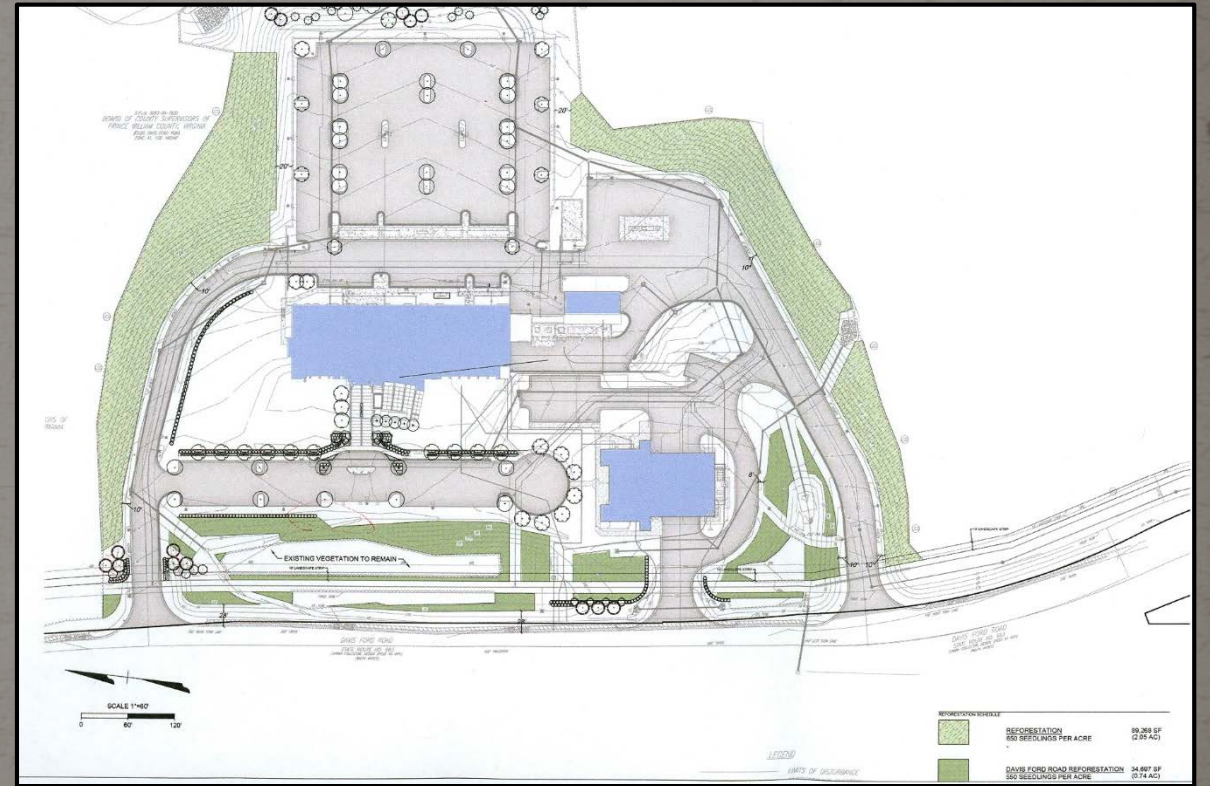
Pollinators make the world of plants go 'round.



Native Bees and Butterflies visit Butterfly Weed (*Asclepias tuberosa*)



Saving Money by Reducing Lawn Central District Police Station & Fire Station 26



CDPA Cost Savings

- Annual Mowing cost for 3 acres = \$12,000
- Approx. cost of reforestation & meadow combined = \$60,000
- Net Savings over 30 year period = \$300,000

98 Community Volunteers planted 525 trees to reforest Davis Ford Road frontage. April 2017.





March 2017 –
Before Planting in April

Reforestation Progress Over 3 Growing Seasons



June 2017 –
Early in 1st Growing Season



May 2019 –
3rd Growing Season

Meadow Progress - South Flank



**May 2017, Before
Meadow Sown**



**June 2017 -
1st Growing Season**



**May 2019
3rd Growing Season**

Meadow Life



Beautiful Native Wildflowers
Lance-leaf Coreopsis
American Vetch

Meadow in Fall
(October 2018)



Monarch Butterfly
Caterpillar in 1st Year of
Meadow Development

How Your HOA Can Reverse the Trend

- Identify Areas Where Conversion of Lawn to Native Plants Makes Practical Sense
 - Ex., the “Flanks” of the Central District Police Station site
 - Steeply sloped areas
 - Land too shady to support lawn
 - Fringes of SWM ponds (check with Watershed Management Branch first)
 - Areas connected to native forests



How Your HOA Can Reverse the Trend

- Start Small
 - Guarantee a successful project
 - Tackle pre-conceptions (Lions & Tigers & Bears, Oh My!)
 - A small conversion area or tree planting can start to change how people view landscapes
- Swap Out Old/Dying Nonnatives with Natives
 - Some nonnative landscapes are short-lived (e.g., Austrian Pine, Purple-leaf Plum)

How Your HOA Can Reverse the Trend

- Identify areas with high irrigation needs –
 - Convert to drought resistant natives
- Solve a Stormwater Related Problem with a Rain Garden
- Create a Vegetated Buffer along Intermittent or Perennial Streams & Ponds
- Use Community Newsletter to Promote Native Plant Sales and the Benefits of Natives
- Host a Community Event with Speaker on Natives
(Cooperative Extension, Master Gardener or Master Naturalist)

Native Options for Nonnative Invasives

Nonnative Plant

- Chinese Wisteria
- Bradford Pear
- Burning Bush
- Japanese Barberry
- English Ivy
- Lawn

Native Substitute

- American Wisteria
- Downy Serviceberry, White Fringetree
- Smooth or Winged Sumac
- American Beauty Berry, Winterberry
- Stone Crop, Plantain-leaf Sedge
- Native Meadow, Perennial Bed, Plantain-leaf Sedge

Bee Balm



Sample Native Landscapes

Garden Phlox



Black-eyed Susan



Native Ground Covers



Carex pensylvanica



Mitchella repens



Tiarella cordifolia



Chrysogonum virginianum

Sample Native Landscapes

Maidenhair
Fern



Joe-Pye Weed
& Tiger
Swallowtails



Cardinal Flower with
Ruby-throated Hummingbird



Solutions for Shady Areas

Hayscented Fern
(*Dennstaedtia punctilobula*)



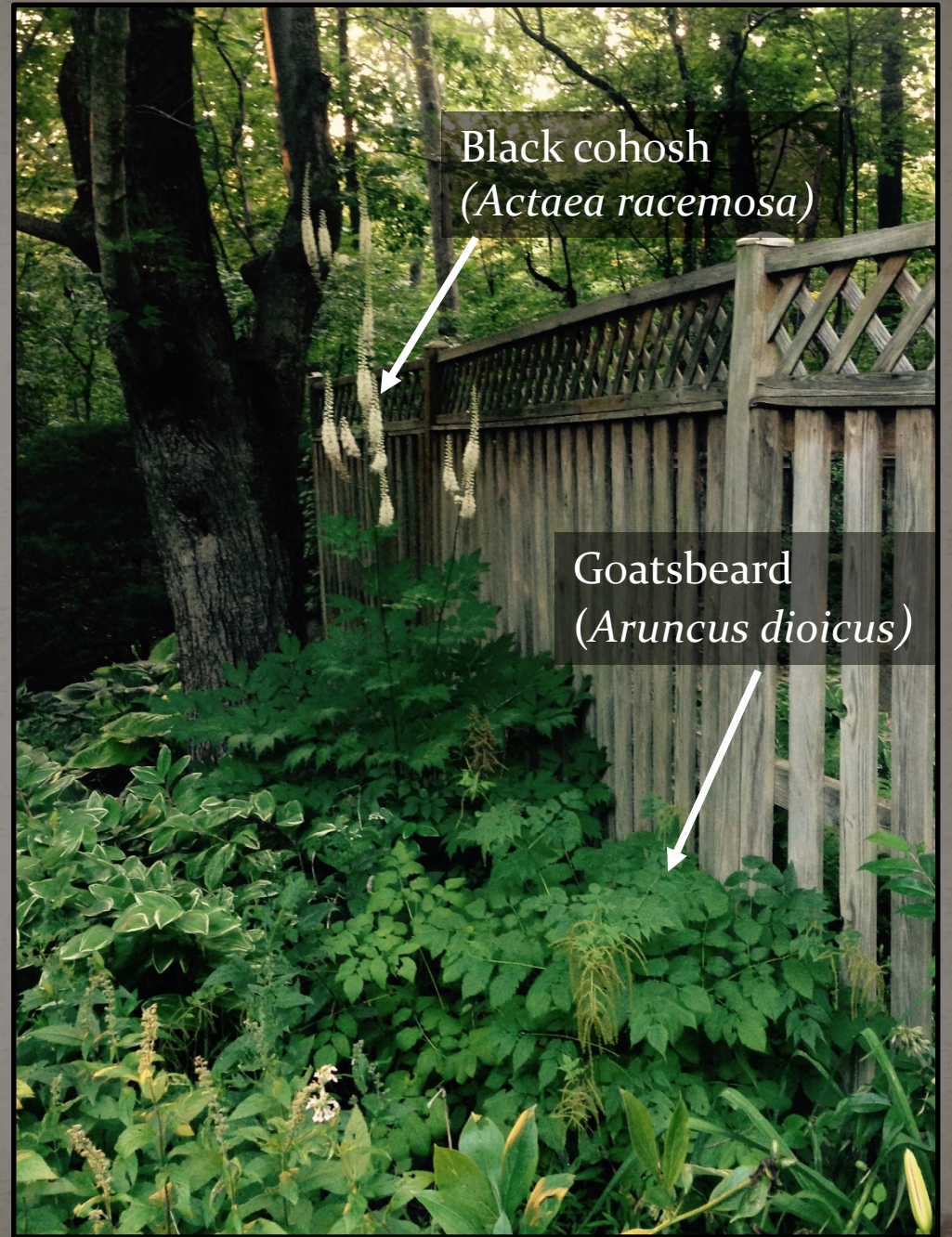
Virginia Bluebells
(*Mertensia virginica*)



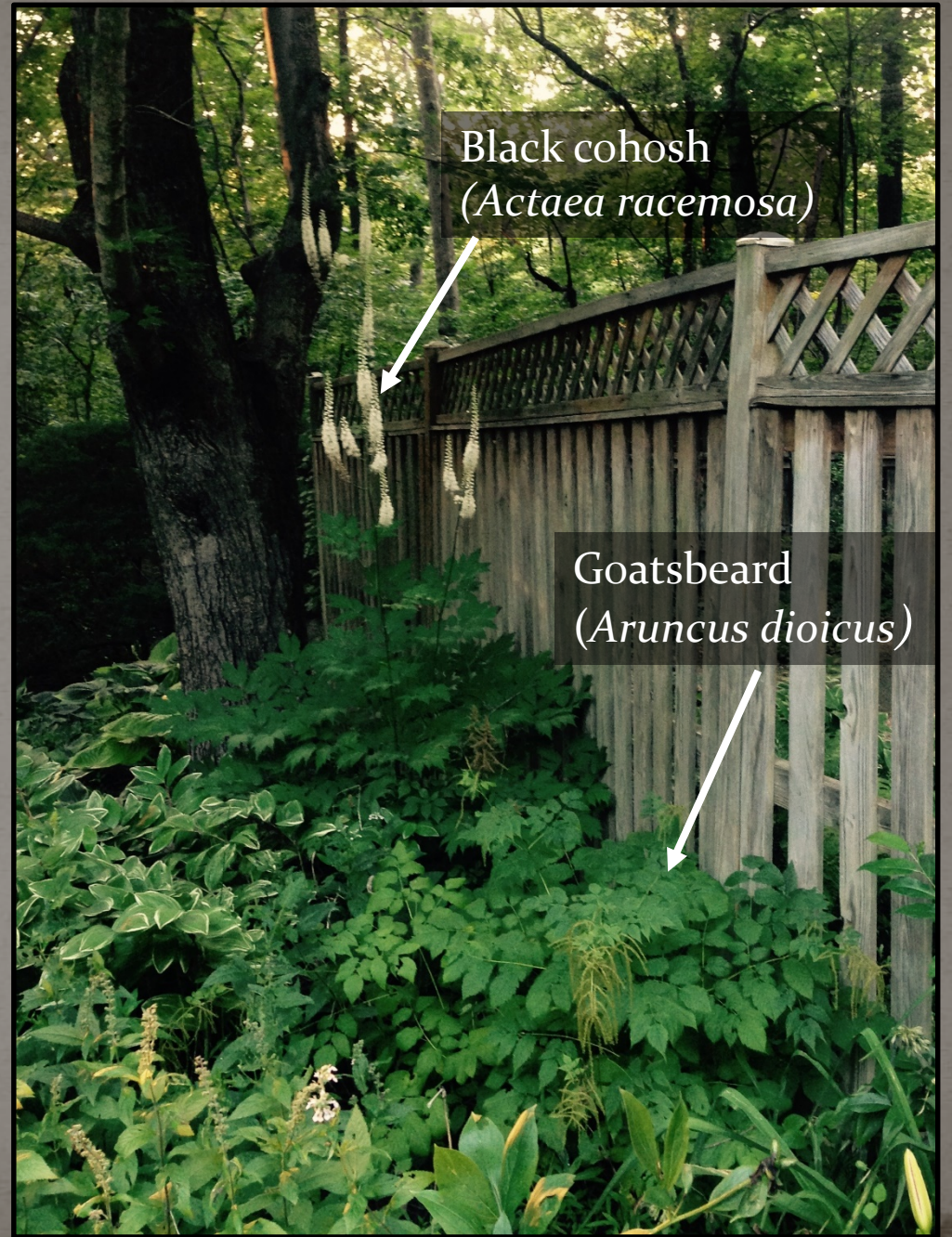
Wild Ginger (*Asarum canadense*)



Black cohosh
(*Actaea racemosa*)



Goatsbeard
(*Aruncus dioicus*)





Broom Sedge

Create a Meadow



Pink Muhley
Grass



Tall Goldenrod



Resources - Educational:

- “Stop Mowing/Start Growing”
Native Plant Symposium for Beginners
February 8, 2020 at the NVCC Workforce Center in Woodbridge
- Plant Nova Natives www.PlantNovaNatives.org
- Virginia Cooperative Extension
- Xerces Society (info on butterfly habitat)
- Audubon at Home

Plant Nova Natives

PlantNovaNatives.org

Plant Guide Specific to
Northern Virginia
from Plant NoVa
Natives

\$5 Guide
(download and app are free)



Resources - Financial

- Prince William Soil & Water Conservation District
Va. VCAP program <https://vaswcd.org/vcap>
- Va. Dept. of Forestry “Virginia Trees for Clean Water Grant Program”
(\$\$ for Reforestation & Community Beautification)
<http://www.dof.virginia.gov/financing/grants.htm>
- Prince William County, Watershed Mgmt. Branch
Reforestation Program (703) 792-7208.

Resources – Native Gardens

- Merrimac Farm Wildlife Management Area, Nokesville, VA
Demonstration Wildlife Garden
<http://www.pwconserve.org/merrimacfarm/>
- Green Springs Garden Park, Annandale, VA,
Native Plant and Woodland Demonstration areas.
<https://www.fairfaxcounty.gov/parks/green-spring>
- Blandy Farm, State Arboretum, Boyce, VA
Native Plant Garden & Warm Season Meadow
- National Arboretum
(Fern Valley Native Plant Collection, natives of eastern U.S.)
<https://www.usna.usda.gov/discover/gardens-collections/fern-valley/>
- Mt. Cuba Center, Hockessin, Delaware. <https://mtcubacenter.org/>

Questions?