#### What is a native plant?

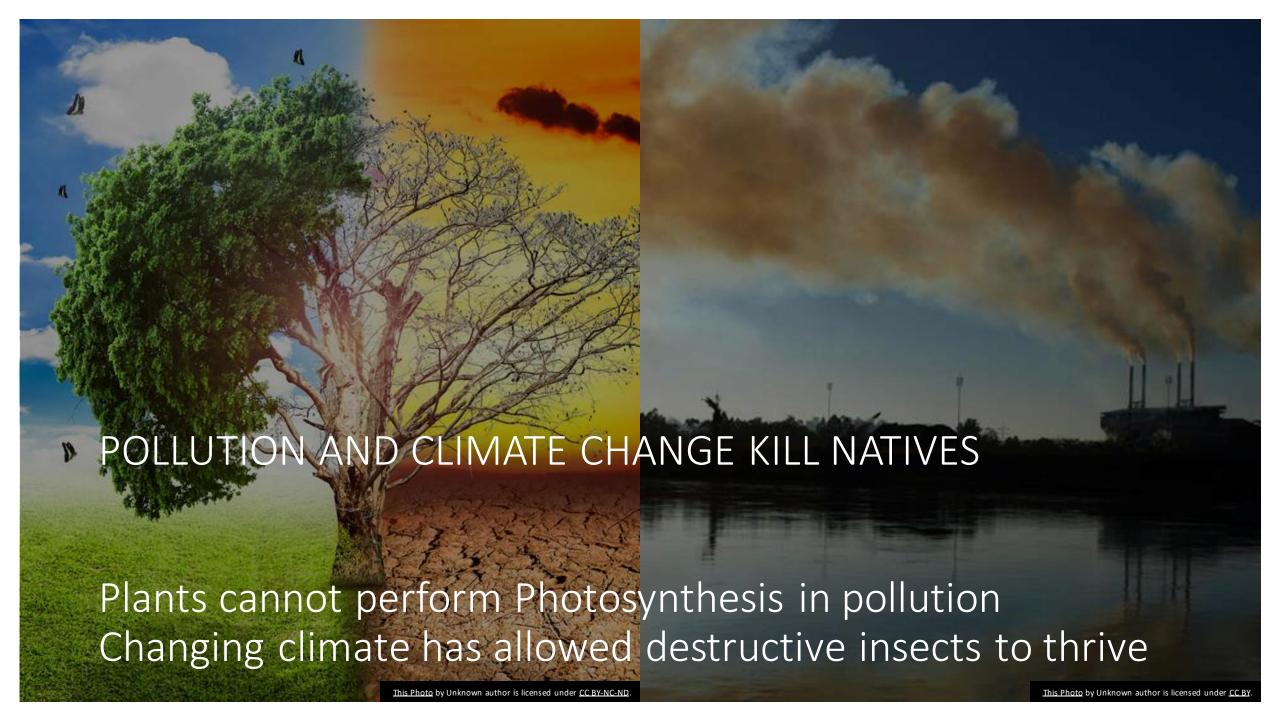
- Our native plants evolved with wildlife for millions of years to meet each other's needs.
- Plants here before explorers came with their own natives
- Plants are native to different geographical areas on this continent.



Development has replaced natives

WHERE HAVE ALL THE NATIVES GONE?













Invasive NON-NATIVE plants displace natives

### LAWNS TAKE THE PLACE OF NATIVES

Pesticides Fertilizers Fungicides





# Too abundant deer populations eat natives

- Groundhogs eat natives
- Rabbits eat natives



### CULTIVARS REPLACE NATIVE PLANTS

"desirable"
traits are
developed
through genetic
engineering:
stem cutting,
tissue culture
or
grafting

- Malus
- Domestica
- 'Granny Smith'
- **GENUS-Malus**
- SPECIES-Domestica
- CULTIVAR-'Granny Smith'

#### • ALTERED:

- Leaf color
- Size
- Shape
- Fruit production
- Taste
- Smell
- Pest resistance
- -----
- Look for straight species



Downy Serviceberry-common name

Amelanchier Arborea-Latin name

#### • CULTIVARS

- 'Glenn Form'
- 'Honeywood'
- 'Pembina'
- 'Rainbow Pillar'
- 'Brilliance'

#### THE PROBLEM WITH CULTIVARS

They can crossbreed with natives resulting in the extinction of the native

Double flowers usually offer no pollen, nectar or fruit

Wildlife often
does not
recognize berries
as sustenance

A change in leaf size or color can make it unappealing to insects



**DOUBLE FLOWERED BLOODROOT** 

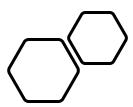
## THERE IS ALWAYS A "GOOD" REASON TO CUT DOWN TREES

- Wood burning for heat
- Recreational wood burning
- Housing developments
- Stores
- More roads
- Toilet paper





Loss of vegetation worldwide causes
DESERTIFICATION



## TREES CAPTURE CARBON AND MAKE OXYGEN

Neighborhoods with Trees have the most value.

Trees are cooling, calming and they retain moisture







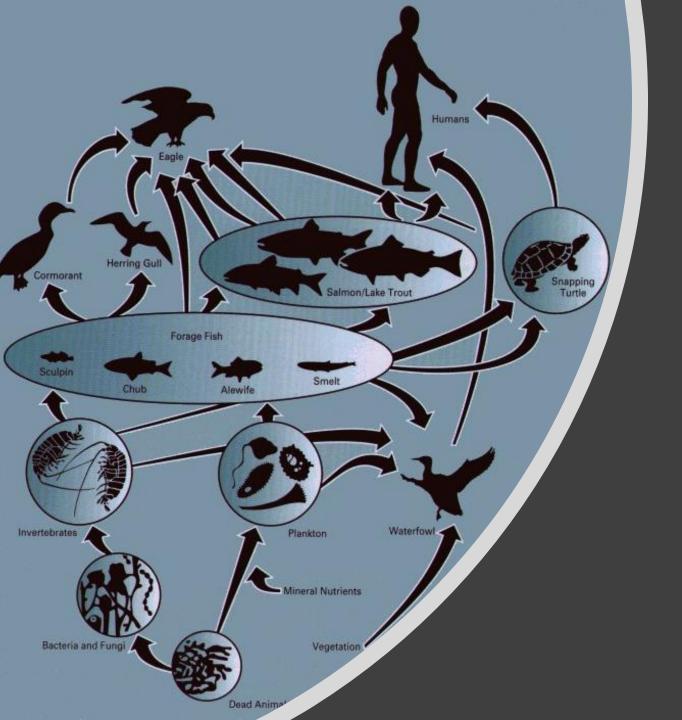
## Top **KEYSTONE TREES** for Eco-region 5

- WHITE OAK-445
- AMERICAN PLUM-409
- WILLOW-397
- YELLOW BIRCH-385
- AMERICAN ASPEN-337
- SWEET CRAB APPLE-285
- MAPLE-276
- Numbers indicate how many species rely on the tree for sustenance

SOME POPULATIONS OF INSECTS HAVE DECLINED BY 70% IN THE LAST FEW DECADES

climate change loss of native plants chemicals and pesticides





#### WE NEED INSECTS

- To Break down waste
- To pollinate our food crops
- To form the basis of the food chain on earth



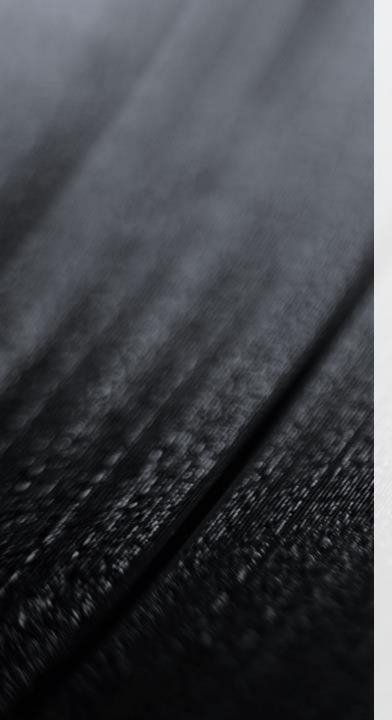
- Birds eat insects on native plants
- No native plants=no insects=no birds
- Free roaming non-native cats kill birds
- Human activity tames wild areas
- Chemicals and pesticides kill birds and insects











#### Resources

FIND NATIVE Plants in your own yard!

Mail order-Prairie nursery, Prairie moon, etal

Dawns wild things rescue(Pittstown)

Gade Farm, Faddegans (occasionally)

Facebook groups e.g.: Native Plants of the Northeast

NYSDEC, Xerces Society (Butterflies)

**Audubon Society** 

## THE RIGHT NATIVE PLANT IN THE RIGHT PLACE

PH/ ACID OR ALKALINE soil

**DRY OR MOIST** 

DROUGHT TOLERANT-MOISTURE LOVING FULL SUN-PARTIAL SHADE-FULL SHADE

GROWING ZONE hardiness

**SANDY-LOAMY** 

MONOECIOUS-DIOECIOUS









Monarch caterpillar-host orange milkweed swamp milkweed

#### HOST PLANTS

### THE ONLY PLANTS OR PLANT A MOTH OR BUTTERFLY WILL LAY EGGS ON

Questionmark butterfly-Host



HOPS, ELM, HACKBERRY AND NETTLE









White spotted skipper host black locust, ground nut, American wisteria, etal.





Black swallowtailhost

- Golden Alexander
- Fennel
- Dill



Karner blue caterpillar host

Named by Nabokov Author of "Lolita"

Wild blue lupine

**SAVETHEPINEBUSH.ORG** 



#### Luna Moth -Host



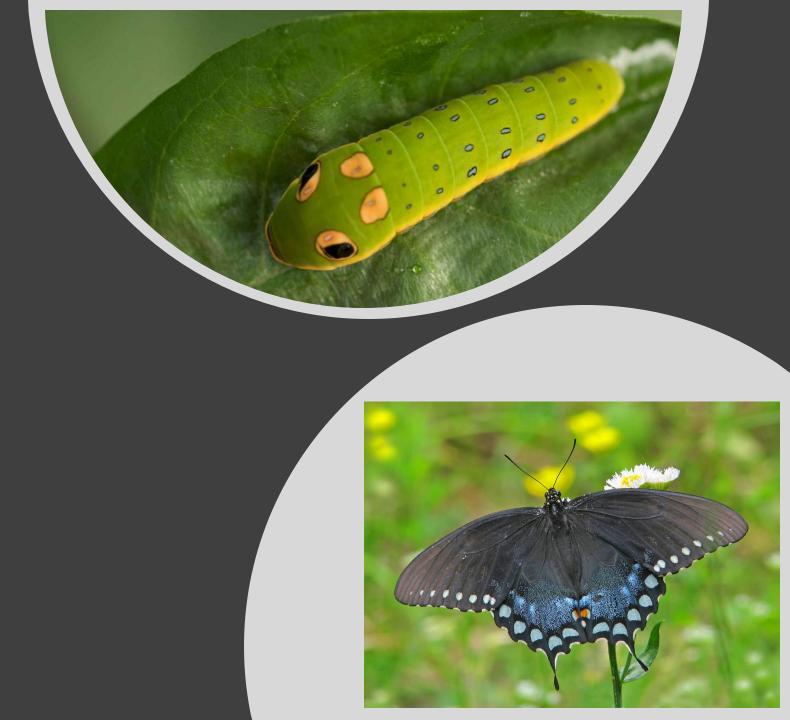


White Birch

<u>This Photo</u> by Unknown author is licensed under <u>CC BY-SA</u>.

# Spicebush swallowtail-host

- Cottonwood
- Ash
- Birch
- Wild black cherry
- Spicebush



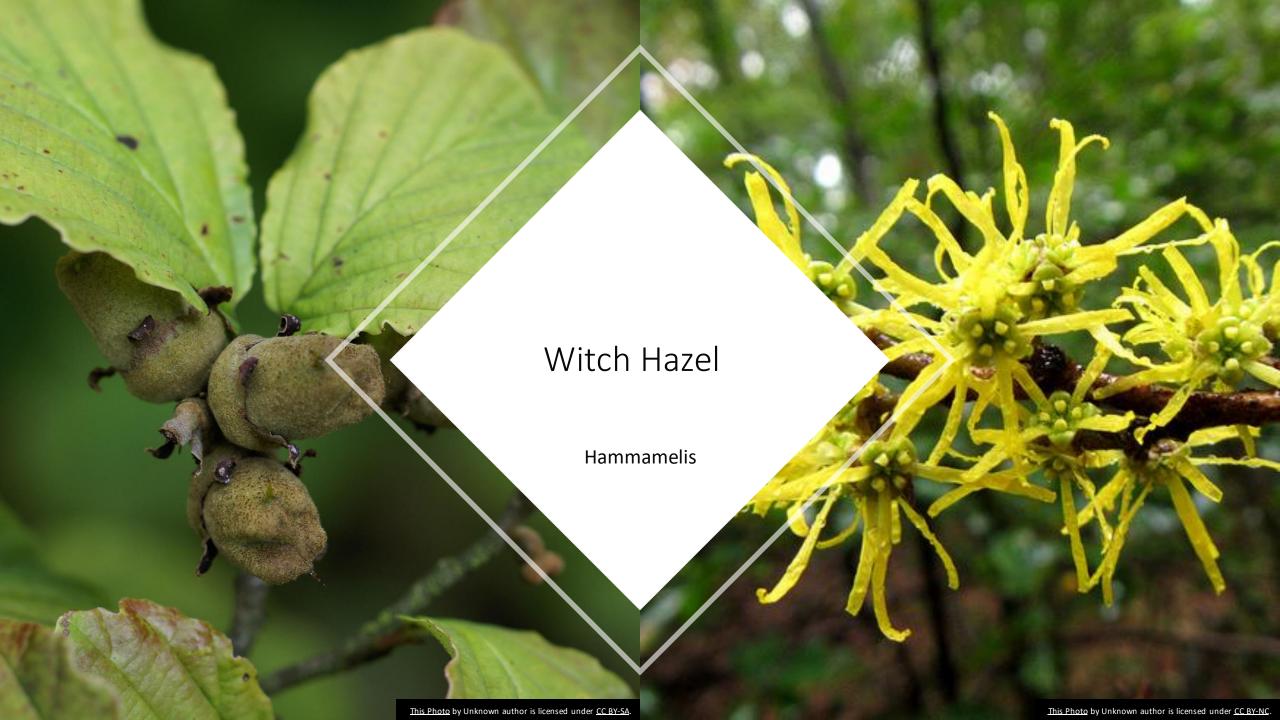




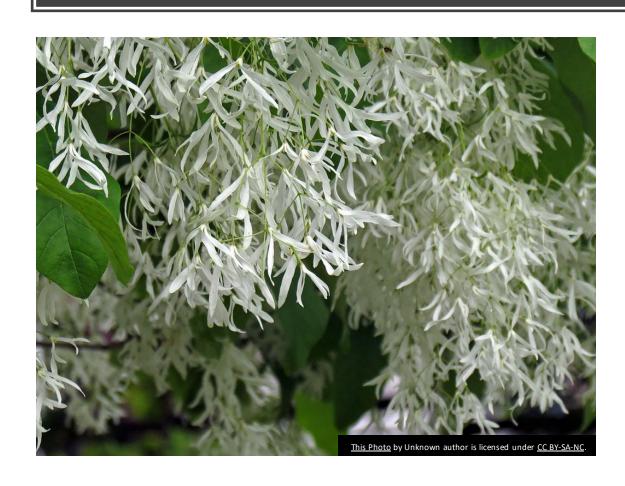


## Shrubs to support birds-aronia

Choke cherry



### Fringe Tree Chionanthus

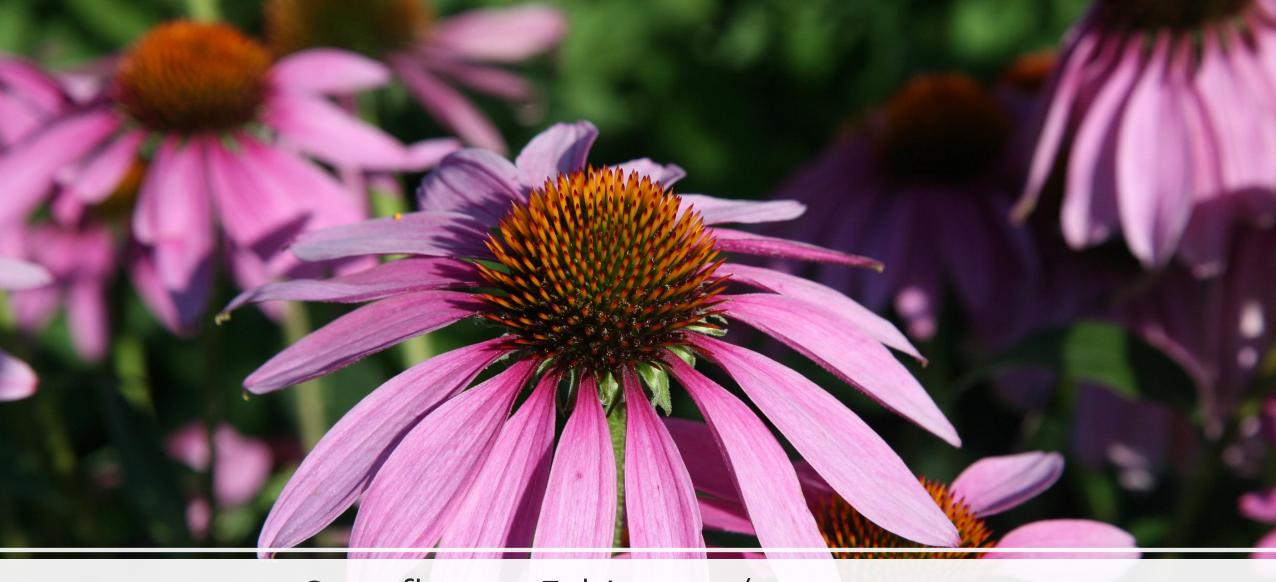




# THE BEAUTY OF NATIVE PLANTS

- GOLDENROD-Solidago
- (24 DIFFERENT SPECIES)





Coneflower-Echinacea (Medicinal uses)



Wild Bee Balm

Monarda

## Black EyedSusan

Rudibeckia hirta



#### COLUMBINE Aquilegia





### PRAIRIE CLOVER Dalea



BIG BLUESTEM Andropogon

#### GREAT BLUE LOBELIA







VIRGINIA ROSE Rosa Virginiana



#### BUTTONBUSH

Cephalanthus







CHRISTMAS
FERN
Polystichum



NORTHERN BAYBERRY Myrica

#### MAPLE LEAF VIBURNUM







**ELDERBERRY Sambucus** 





#### CHOKECHERRY Prunus

#### App for phone identifies plants





# Bring birds and insects back to your yard

Connect with the Natural world

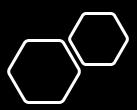


- FORAGING MANY NATIVES HAVE EDIBLE PARTS THAT ARE MORE NOURISHING THAN FOOD FROM THE STORE
- MEDICINAL NATIVE PLANTS ARE USED TO REMEDY MANY HEALTH PROBLEMS



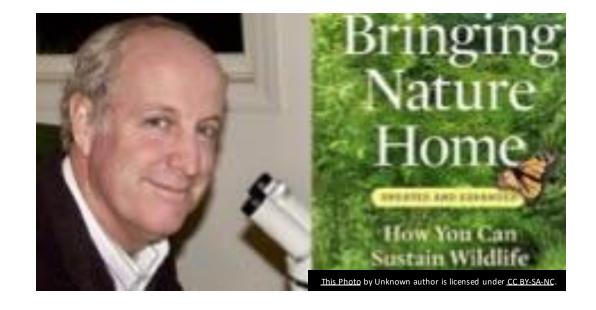
ANYONE
WITH A YARD
CAN MAKE A
DIFFERENCE!

**SAVETHEPINEBUSH.ORG** 



#### Doug Tallamy

Homegrown National Park



#### REVIEW

**NATIVE PLANT** 

**CULTIVAR** 

HOST PLANT-BUTTERFLY-the only plant the caterpillar can eat

**KEYSTONE** TREES-feed the most species

**NECTAR** PLANTS-provide blooms for spring, summer and fall

SHRUBS FOR BERRIES

**NEW AESTHETIC**