



# Pollinator Friendly Trees of Indiana

Sara High

# Our Pollinators

**Bees-** They enjoy mild/ pleasant scents and bright whites, yellows, and blues. They are the hardest working pollinators with 4,000 native bees in the U.S.

**Moths & Butterflies-** They like sweet/fresh scents and moths particularly like scents emitted at night. Butterflies enjoy bright colors like orange, yellow, and purple. Moths prefer dull shades of the same color.

**Birds-** They do not need fragrances or scents to be attracted. They prefer Red, Orange, & white colors. Hummingbirds also enjoy Purple flowers.

**Others-** Flies, Bats, Beetles, Gnats, and ants.

## POLLINATORS are more than just HONEY BEES



There are over **4,000** species of **BEES** native to

**NORTH AMERICA**

**DID YOU KNOW?**

Honeybees are not native. They are actually from Europe!



**BUMBLE BEES WORK LONGER HOURS**

and will do **MORE WORK** than other bees



A single female **SOUTHEASTERN BLUEBERRY BEE**

can produce nearly **6000 BLUEBERRIES** in her short life. Honey bees can't pollinate blueberry flowers.



**BATS TAKE THE NIGHT SHIFT**, working

under the cover of the dark to produce **BANANAS, PEACHES, MANGOS**, and even the agave used for **TEQUILA**

**NATIVE BEES** do **90%** of the pollination for **WATERMELONS**



Many **HUMMINGBIRDS** migrate distances well over **2000 MILES**, stopping many places for food and rest, so **HABITAT LOSS ALONG THEIR ROUTES IS A MAJOR THREAT**



**HONEY BEES** contribute about **\$20 billion** to the economy

**BEES DON'T SEE RED WELL**

Most bee-pollinated flowers are **PURPLE, YELLOW, or ORANGE.**



# Issues Impacting our Pollinators



# Trees and Large Shrubs:

Red Maple  
Sugar Maple  
Ohio Buckeye  
Black Locust  
Kentucky Coffeetree  
Black Cherry  
American Basswood  
Serviceberries  
False Indigo  
Eastern Redbud

Pagoda Dogwood  
Round-Leaved  
Dogwood  
Cockspur Hawthorn  
Downy Hawthorn  
Wild Plum  
Pin Cherry  
Chokecherry  
Smooth Sumac  
Staghorn Sumac  
Pussy Willow  
American Bladdernut  
Nannyberry Viburnum  
Prickly Ash

# Canopy Trees: Red Maple (*Acer Rubrum*)

Color: Red/ Yellow

Sun Exposure: Full Sun, Part  
Shade, or full Shade

Soil: Wet Mesic, Mesic, or Dry  
Mesic

Height: about 95 ft

Bloom: April into May

Pollinators attracted: Bees,  
Butterflies, Wasps, Flies  
(Sawflies).



# Canopy Trees: Sugar Maple (*Acer Saccharum*)

Color: Yellow

Sun Exposure: Full Sun, Part Shade,  
or full Shade

Soil: Mesic

Height: about 100 ft

Bloom: April into June

Pollinators attracted: Bees,  
Butterflies, Wasps, Flies (Sawflies).



# Canopy Trees: Ohio Buckeye (*Aesculus glabra*)

Color: Yellow

Sun Exposure: Full Sun, Part  
Shade, or full Shade

Soil: Wet Mesic, Mesic

Height: about 35 ft

Bloom: May

Pollinators attracted: Bees and  
Hummingbirds



# Canopy Trees: Black Locust (*Robinia pseudoacacia*)

Color: White

Sun Exposure: Full Sun, Part  
Shade, or full Shade

Soil: Mesic, Dry Mesic

Height: about 45 ft

Bloom: May into June

Pollinators attracted: Bees, Flies,  
and Hummingbirds.



# Canopy Trees: Kentucky Coffeetree (*Gymnocladus dioica*)

Color: White

Sun Exposure: Full Sun, Part Shade

Soil: Wet Mesic, Mesic

Height: about 75 ft

Bloom: May into June

Pollinators attracted: Bees, Butterflies, and Hummingbirds.



3) Photo Credit  
Jeff Galvan



4) Photo Credit AQ Nature



5) Photo Credit  
Portrait of the Earth

# Canopy Trees: Black Cherry (*Prunus Serotina*)

Color: White

Sun Exposure: Full Sun, Part  
Shade, or full Shade

Soil: Mesic, Dry Mesic

Height: about 100 ft

Bloom: May into June

Pollinators attracted: Bees,  
Butterflies, Wasps, Flies,  
Beetles, and ants.



# Canopy Trees: American Basswood (*Tilia Americana*)

Color: White

Sun Exposure: Full Sun, Part Shade, or full Shade

Soil: Mesic

Height: about 95 ft

Bloom: July into August

Pollinators attracted: Bees, Moths, Wasps, Flies (sawflies), and Beetles.



# Canopy Trees: Serviceberry (*Amelanchier spp.*)

Color: White

Sun Exposure: Full Sun, Part  
Shade, or full Shade

Soil: Wet Mesic, Mesic, Dry  
Mesic

Height: up to 10-25 ft

Bloom: April into June

Pollinators attracted: Bees,  
Flies, and Beetles.



# Canopy Trees: Eastern Redbud (*Cercis canadensis*)

Color: Pink

Sun Exposure: Full Sun, Part Shade,  
or full Shade

Soil: Mesic, Dry Mesic

Height: up to 25 ft

Bloom: May into June

Pollinators attracted: Bees,  
Butterflies, Wasps, Flies, and Beetles.



**FUN FACT:**

Native bees, like this sweat bee, do 90% of the pollination for watermelons.



**FUN FACT:**

Not all pollinators are bees. Birds, bats, and even insects like this hover fly also take part in the process.



# INSECTS MADE MY SUNDAE



## WHIPPED CREAM

is made from the cream part of cow's milk. Cows eat hay and grains that are pollinator dependent.

## CHERRIES

along with most other fruit toppings, require pollinators in order to produce fruit.

## NUTS

are grown from trees and plants, most of which require pollination.

## CHOCOLATE

comes from the cacao tree which is only pollinated by two types of midge.

## SUGAR

comes from either the sugar beet or sugar cane, both of which require pollinators.

## ICE CREAM

is made from milk that comes from cows. A cow's diet is made up of hay (alfalfa, timothy, clover) and grain which are dependent on pollinators.

## VANILLA

flavoring is derived from vanilla orchids that are pollinated by one species of bee and hummingbirds.



Pollinators create more than **\$250 BILLION** in output annually **ACROSS THE GLOBE.**

About **90% OF ALL FLOWERING PLANTS** and about **35% OF CROPS** worldwide depend on pollinators.

We need your help protecting pollinators! Learn more and take an action pledge at



# Trees and Shrubs\*

Trees and shrubs are a very important part of any pollinator planting, providing great amounts of nectar and pollen for pollinators.

Common Name	Latin Name	Plant Information											Pollinator Connection											
		Sun			Soil Moisture					Height	Flower Color	Bloom Time	Hard to Find	Ephemeral	Bee	Beetle	Butterfly/Moth	Fly	Hummingbird	Wasp	Special Notes	Pollinator Magnets		
		Full Sun	Part Shade	Shade	Wet	Wet Mesic	Mesic	Dry Mesic	Dry															
red maple	<i>Acer rubrum</i>	X	X	X		X	X	X			to 95'	yellow	spring			X		X	X			X		
sugar maple	<i>Acer saccharum</i>	X	X	X			X				to 100'	yellow	spring			X		X	X			X		
Ohio buckeye	<i>Aesculus glabra</i>	X	X	X		X	X				to 35'	yellow	spring			X			X					
serviceberry	<i>Amelanchier arborea</i>	X	X	X		X	X	X			10-25'	white	spring			X	X		X				striped hairstreak host	
leadplant	<i>Amorpha canescens</i>	X					X	X	X		1'-3'	purple	summer			X							southern dogface host	*

## NATIVE TREES AND SHRUBS FOR POLLINATORS

	BOTANICAL NAME	COMMON NAME	COLOR	MOISTURE	HEIGHT	BLOOM						POLLINATORS						
						APR	MAY	JUN	JUL	AUG	SEP	BEES	BUTT/MOTH	WASPS	FLIES	BEEPLES	OTHER	
CANOPY TREES	<i>Acer rubrum</i>	Red Maple	red/yellow	m	to 95 ft							X	butterflies	X	X			sawflies
	<i>Acer saccharum</i>	Sugar Maple	yellow	m	to 100 ft							X	butterflies	X	X			sawflies
	<i>Aesculus glabra</i>	Ohio Buckeye	yellow	m	to 35 ft							X						hummingbirds
	<i>Gleditsia triacanthos</i>	Honey Locust	yellow	m,d	to 45 ft							X			X			
	<i>Gymnocladus dioica</i>	Kentucky Coffeetree	white	w,m	to 75 ft							X	butterflies					hummingbirds
	<i>Prunus serotina</i>	Black Cherry	white	m,d	to 100 ft							X	butterflies	X	X	X		ants
	<i>Tilia americana</i>	American Basswood	white	m	to 95 ft							X	moths	X	X	X		sawflies
LARGE SHRUBS AND SMALL TREES	<i>Amelanchier</i> spp.	Serviceberries	white	w,m,d	10-25 ft							X			X	X		
	<i>Amorpha fruticosa</i>	False Indigo	purple	w	12 ft							X					X	
	<i>Cercis canadensis</i>	Eastern Redbud	pink	m	to 25 ft							X	butterflies	X	X	X		
	<i>Cornus alternifolia</i>	Pagoda Dogwood	white	m	to 25 ft							X		X	X	X		
	<i>Cornus rugosa</i>	Round-Leaved Dogwood	white	m,d	5-18 ft							X			X	X		
	<i>Crataegus crus-galli</i>	Cockspur Hawthorn	white	m	to 25 ft							X	butterflies	X	X	X		
	<i>Crataegus mollis</i>	Downy Hawthorn	white	w,m	to 40 ft							X	butterflies	X	X	X		
	<i>Prunus americana</i>	Wild Plum	white	m,d	8-20 ft							X	both	X	X			
	<i>Prunus pensylvanica</i>	Pin Cherry	white	m,d	10-35 ft							X						
	<i>Prunus virginiana</i>	Chokecherry	white	m,d	10-30 ft							X			X			
	<i>Rhus glabra</i>	Smooth Sumac	lime/yell	m,d	6-20 ft							X	butterflies	X	X	X		
	<i>Rhus hirta</i>	Staghorn Sumac	lime/yell	m,d	10-35 ft							X	butterflies	X	X	X		
	<i>Salix discolor</i>	Pussy Willow	white/yell	w	12-35 ft							X	butterflies	X	X	X		sawflies
	<i>Staphylea trifolia</i>	American Bladdernut	white	m	8-20 ft							X		X	X	X		
	<i>Viburnum lentago</i>	Nannyberry Viburnum	white	m,d	8-30 ft							X	butterflies	X	X			
	<i>Zanthoxylum americanum</i>	Prickly Ash	yellow	m,d	6-20 ft							X	moths	X	X	X		

## Trees and Shrubs\* (continued)

Common Name	Latin Name	Plant Information													Pollinator Connection							
		Sun			Soil Moisture					Height	Flower Color	Bloom Time	Hard to Find	Ephemeral	Bee	Beetle	Butterfly/Moth	Fly	Hummingbird	Wasp	Special Notes	
		Full Sun	Part Shade	Shade	Wet	Wet Mesic	Mesic	Dry Mesic	Dry													
indigo bush	<i>Ancropa fruticosa</i>	X	X		X	X				4'-16'	purple	summer			X	X						
devil's walking stick	<i>Aralia spinosa</i>	X	X				X	X		10'-20'	white	summer	X		X	X	X	X		X		
black chokeberry	<i>Aronia melanocarpa</i>	X	X				X	X		2'-4'	white	summer			X			X				coral hairstreak host
pawpaw	<i>Asimina triloba</i>		X	X			X	X		10'-40'	purple	spring			X			X				zebra swallowtail host
New Jersey tea	<i>Ceanothus americanus</i>	X	X					X	X	1'-3'	white	summer			X		X	X		X		summer azure and mottled duskywing host
butterbush	<i>Cephalanthus occidentalis</i>	X	X		X	X	X			6'-12'	white	summer			X		X	X		X		
redbud	<i>Cercis canadensis</i>	X	X	X			X	X		20'-30'	pink	spring			X	X	X	X		X		
silky dogwood	<i>Cornus amomum</i>	X	X				X	X		6'-12'	white	summer			X							bee specialist, summer azure host
grey dogwood	<i>Cornus racemosa</i>	X	X				X	X	X	10'-15'	white	spring			X							bee specialist, summer azure host
persimmon	<i>Diospyros virginiana</i>	X	X					X	X	X	to 60'	white	spring					X				
winterberry	<i>Ilex verticillata</i>	X	X	X	X	X	X			6'-15'	white	summer			X							Henry's elfin host
spicebush	<i>Lindera benzoin</i>		X	X			X	X		6'-12'	yellow	spring					X	X				eastern tiger, black, and spicebush swallowtail host
tulip tree	<i>Liriodendron tulipifera</i>	X	X				X	X	X	70'-100'	yellow	spring			X							eastern tiger swallowtail host
ninebark	<i>Physocarpus opulifolius</i>	X	X					X	X	5'-8'	white	spring/summer			X	X	X					
shubby cinquefoil	<i>Potentilla fruticosa</i>	X	X		X	X	X			2'-4'	yellow	summer			X		X					Dorcas copper host
black cherry	<i>Prunus serotina</i>	X	X	X				X	X	50'-80'	white	spring			X							eastern tiger swallowtail, red-spotted purple and coral hairstreak host
fragrant sumac	<i>Rhus aromatica</i>	X	X					X	X	2'-6'	yellow	spring			X	X		X				X
winged sumac	<i>Rhus copallinum</i>	X	X					X	X	X	7'-15'	green	summer		X	X		X				X
prairie willow	<i>Salix humilis</i>	X	X				X	X	X	2'-8'	green	spring			X	X	X	X			X	bee specialist, eastern swallowtail and mourning cloak host
black willow	<i>Salix nigra</i>	X	X		X	X				30'-60'	green	spring			X	X	X	X			X	bee specialist, eastern swallowtail and mourning cloak host
meadowsweet	<i>Spiraea alba</i>	X			X	X				2'-6'	white	summer			X	X	X	X				
steplebush	<i>Spiraea tomentosa</i>	X			X	X				2'-4'	pink	summer			X		X					
coralberry	<i>Symphoricarpos orbiculatus</i>	X	X	X			X	X		3'-6'	white	summer			X	X	X	X			X	
American basswood	<i>Tilia americana</i>	X	X	X				X		to 95'	white	summer			X	X	X	X			X	
highbush blueberry	<i>Vaccinium corymbosum</i>	X	X				X	X		3'-15'	white	spring			X		X					
maple leaf viburnum	<i>Viburnum acerifolium</i>	X	X	X			X	X	X	4'-6'	white	summer			X		X	X				Henry's elfin host
arrowwood viburnum	<i>Viburnum dentatum</i>	X	X	X			X	X	X	3'-9'	white	summer			X		X	X				Henry's elfin host