

Blooms for Bees: How to Provide Pollen and Nectar Sources

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Honey bees (*Apis mellifera*) need your help. This fact sheet suggests plant species you can plant or maintain which provide supplemental forage for honey bees during their critical periods.

Honey bees directly or indirectly pollinate one-third of our food crops and contribute about \$15 billion in increased crop value each year (USDA–ARS). Honey bees pollinate a diverse range of familiar crops including cranberry, blueberry, melon, squash, and apple. They provide a vital link in nature by moving pollen between flowers and ensuring the production of seeds and fruits. In addition to pollination services, honey bees produce honey and wax, creating an array of valuable consumer products.

While honey bees pollinate flowers like cranberry or cucumber, these food crops, however, offer insufficient nectar and pollen to maintain the health of honey bee colonies. Honey bee colonies transported between agricultural regions further stress colony food supplies and health. Recent losses from honey bee diseases and colony declines has left beekeepers, farmers, landowners and the public concerned about how they can help provide a healthier environment for honey bees.

The health of honey bee colonies depends on access to food, in the form of pollen and nectar, from a varied and plentiful sequence of flowers throughout the growing season, as well as clean water and nest sites. Whether you are a backyard gardener, maintain a home landscape, commercial beekeeper, farmer, or commercial grounds maintenance landscape manager, you can help honey bees by planting and protecting wildflowers, shrubs, and trees that provide pollen and nectar.

Food availability gaps during honey bee active periods from February through November can weaken colonies. Particularly difficult periods for honey bees occur during warm, early-spring days when bees emerge from hives searching for food but few plants are flowering. The natural environment often does not provide sufficient flowering plants for honey bees during active periods, so your plantings can help.

The chart below lists herbaceous plants, shrubs, and trees that provide food for honey bees during the springtime. These flowering plants also feed beneficial insects such as wild bees, butterflies, and natural enemies of agricultural crop pests. By making plantings from the recommended listing below, you not only enhance honey bee services, but also augment landscape beauty, wildlife shelter habitat of birds and mammals, and overall biodiversity in your area.

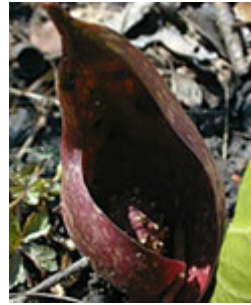
The recommended plants listed on pages 2–3 are predominantly natives to the Mid-Atlantic, typically well adapted to regional climate and soils. The table on pages 4–6 advises on the growth habit, longevity, moisture requirement, mature height, bloom color and timing, and commercial availability of these plants. To provide food resources throughout the entire period of bee activity, you may want to add several recommended plants to your landscape. Learn more about these plants' usefulness to honey bees, other beneficial insects, and wildlife from the list of resources. A few weed or wetland species that can serve as a good spring food source for honey bees are listed (dandelion, skunk cabbage). You may already have some of these plants growing. They are not likely to be planted, but rather passively maintained and protected when their habitat is on properties under your management.

Listing of Food Sources for Honey Bees in Order of Bloom Time (earliest to latest)



Hamamelis species

Witchhazels
February to March
Photo Credit: Missouri Botanical Garden



Symplocarpus foetidus

Skunk Cabbage
February to April
Photo Credit: Illinois Wildflowers



Salix species

Weeping Willow, White Willow
February to May
Photo Credit: Virginia Tech University



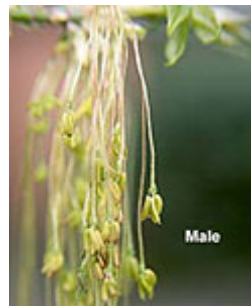
Claytonia virginica

Virginia Springbeauty
February to May
Photo Credit: USDA-NRCS PLANTS Database



Cercis canadensis

Redbud
March to May
Photo Credit: Missouri Botanical Garden



Acer negundo

Boxelder
March to June
Photo Credit: Oregon State University



Geranium maculatum

Spotted Geranium
March to August
Photo Credit: Missouri Botanical Garden



Lindera benzoin

Northern Spicebush
March to April
Photo Credit: University of Connecticut



Salix discolor

Pussy Willow
March to April



Acer rubrum

Red Maple
March to May



Mertensia virginica

Virginia Bluebells
March to July
Photo Credit: Morguefile.com



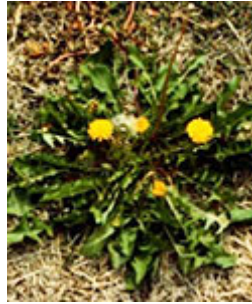
Acer saccharum

Sugar Maple
March to June
Photo Credit: Iowa State University



Scilla siberica

Siberian Squill
March to June
Photo Credit: Missouri Botanical Garden



Taraxacum officinale

Common Dandelion
April to June
Photo Credit: Virginia Tech University



Ranunculus fascicularis

Early Buttercup
April to June
Photo Credit: Morguefile.com



Itea virginica

Virginia Sweetspire
April to July
Photo Credit: Missouri Botanical Garden



Prunus species

Peach, Plum, Cherry, Beach Plum,
Etc.
April to June
Photo Credit: Virginia Tech University



Amelanchier arborea

Common Serviceberry
April to July
Photo Credit: Missouri Botanical Garden



Ribes missouriense

Missouri Gooseberry
April to May



Malus species

Crab apples, Quince
April to June



Trifolium species

Clovers

April to November

Photo Credit: Missouri Plants



Vaccinium corymbosum

Highbush Blueberry

May to June

Photo Credit: Michigan State University



Cornus racemosa

Gray Dogwood

May to June

Photo Credit: Virginia Tech University



Aronia melanocarpa

Black Chokeberry

May to July

Photo Credit: Jenny Carleo



Hydrophyllum spp.

Waterleaf

May to June

Photo Credit: USDA-NRCS PLANTS Database



Blephilia spp.




























































































Pagoda-plant

May to June

Photo Credit: Missouri State University

Table of Plant Characteristics

Plant Name	Native to NJ	Growth Form	Type	Moisture Need	Height at Maturity (feet)	Bloom Color	Attractive to Honeybees	Attractive to Wild Bees	Comm. Available	Bloom Period
Witchhazels (<i>Hamamelis</i> species)			P		10					J F M A M J J A S O N D
Skunk Cabbage (<i>Symplocarpus foetidus</i>)			P		2					J F M A M J J A S O N D
Weeping Willow, White Willow (<i>Salix</i> species)			P		70					J F M A M J J A S O N D
Virginia Springbeauty (<i>Claytonia virginica</i>)			P		0.5					J F M A M J J A S O N D
Redbud (<i>Cercis canadensis</i>)			P		30					J F M A M J J A S O N D
Boxelder (<i>Acer negundo</i>)			P		65					J F M A M J J A S O N D
Spotted Geranium (<i>Geranium maculatum</i>)			P		0.5					J F M A M J J A S O N D
Northern Spicebush (<i>Lindera benzoin</i>)			P		12					J F M A M J J A S O N D
Pussy Willow (<i>Salix discolor</i>)			P		40					J F M A M J J A S O N D
Red Maple (<i>Acer rubrum</i>)			P		68					J F M A M J J A S O N D
Virginia Bluebells (<i>Mertensia virginica</i>)			P		2.3					J F M A M J J A S O N D
Sugar Maple (<i>Acer saccharum</i>)			P		90					J F M A M J J A S O N D

Siberian Squill (<i>Scilla siberica</i>)			P		1					J F M A M J J A S O N D
Common Dandelion (<i>Taraxacum officinale</i>)			P		0.5					J F M A M J J A S O N D
Early Buttercup (<i>Ranunculus fascicularis</i>)			P		1					J F M A M J J A S O N D
Virginia Sweetspire (<i>Itea virginica</i>)			P		10					J F M A M J J A S O N D
Peach, Plum, Cherry, Beach Plum, Etc. (<i>Prunus</i> species)			P		12					J F M A M J J A S O N D
Common Serviceberry (<i>Amelanchier arborea</i>)			P		36					J F M A M J J A S O N D
Missouri Gooseberry (<i>Ribes missouriense</i>)			P		4					J F M A M J J A S O N D
Crab apples, Quince (<i>Malus</i> species)			P		20					J F M A M J J A S O N D
Clovers (<i>Trifolium</i> species)			A		1.5					J F M A M J J A S O N D
Highbush Blueberry (<i>Vaccinium corymbosum</i>)			P		12					J F M A M J J A S O N D
Gray Dogwood (<i>Cornus racemosa</i>)			P		10					J F M A M J J A S O N D
Black Chokeberry (<i>Aronia melanocarpa</i>)			P		6					J F M A M J J A S O N D
Waterleaf (<i>Hydrophyllum</i> spp.)			P		1–2					J F M A M J J A S O N D



P



1-2



Key



Yes



No



Herbaceous Flowering Plant



Shrub or Small Tree



Tree

P

Perennial

A

Annual



Requires low soil moisture



Requires moderate soil moisture



Requires moderate-to-high soil moisture



Requires high soil moisture