

Gardening for Honey Bees

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You don't need a large property to start a garden to attract honey bees, or native bees. Take a piece of the lawn that gets 5 to 6 hours of sunlight and turn it into a garden. Think big and start small. Start with a few plants and add more each year. Increase the garden area each year with more plants or propagate the ones you have. If you run out of garden space start giving plants or seeds to neighbors.

When starting the garden strive for several things:

- Abundance-** Clump plants so the bees can find and visit many flowers in one location. This provides a worthwhile food stop! Coneflowers in a large clump will attract honey bees and all types of native bees and butterflies.
- Sequence** – Plant for bloom succession. You need a succession of overlapping blooming from spring to fall. Learn when specific plants bloom so you get a good overlap.
- Diversity** - Select plants that will provide pollen as well as nectar. Bees need diverse pollen and nectar sources for balanced diet. Don't forget trees and shrubs that can provide pollen and nectar.
- Pesticide use** - If possible, do not use pesticides! Insecticides can kill beneficial insects as well as the insect you are trying to kill. Herbicides may kill plants (dandelions and Dutch white clover) that bees can get pollen and nectar from. So, do not go for that perfect lawn with no weeds in it.

Plant traits that may attract bees:

- Flower color- bright white, yellow, blue or UV
- Flower shape- shallow, have a landing platform, tubular, single flower top
- Nectar guides present- guides the bees into the plant
- Nectar is present- usually fresh, mild and a pleasant smell
- Pollen- often sticky and scented

Observe the bees closely to learn the plants from which they collect nectar and pollen. Introduce these into your garden. Try some native plants. Know if cultivated plants are hybrids. Some hybrids have been bred for flower size and no longer provide nectar or pollen for bees. Learn the plants preferred soil type (wet/dry, acid/neutral), how much sun or shade they need, and hardiness zone for the plant. Know how tall they get so they do not overpower shorter plants. Some plants may need room to spread and some require precautions so they do not get out of control.

Keep records of dates when plants are in bloom, what time a day you see bees on the plants, what you see the bees getting- pollen or nectar. Know also what other plants are in the area that the bees can forage. Drive around and notice when the trees and plants are blooming.

The following pages list plants that may attract honeybees and native bees. Start out with a few of these plants and add others as you build your garden. Add bushes in the back of the garden. Small trees may be included in the garden. Large trees are better planted somewhere else in your yard. There are a few bee plants that will grow in the shade, but most are sun-loving plants.

Pollen and Nectar Plants of Indiana

The following list of nectar and pollen plants is not all-inclusive.

Some plants may not grow well in certain areas due to climate or water needs of plants.

Abbreviation meanings: **N** = Nectar source **P** = Pollen source
 NA = Native plant **I** = considered invasive or a weed

Trees	Blooms	additional information
Alder (<i>Alnus incana</i>)	March	P
American Mountain Ash (<i>Sorbus americana</i>)	May - June	P, NA
Apple (<i>Malus spp.</i>), fruit and crabapple varieties	April-May	N, P
Basswood (<i>Tilia americana</i>), Also called Linden	June	N, P, NA
Black Locust (<i>Robinia pseudo-acacia</i>)	May – June	N, P, NA, I
Chokeberry (<i>Aronia sp.</i>), Black or red chokeberry	May - June	N, NA
Catalpa (<i>Catalpa spp.</i>)	May - June	N, P, NA
Chestnut (<i>Castanea dentata</i>)	May - June	P
Common Hackberry (<i>Celtis occidentalis</i>)	April – May	N, P, NA
Elm (<i>Ulmus spp.</i>)	March – April	P, NA
Hawthorn (<i>Crataegus spp.</i>)	April –May	N, P
Hazelnut (<i>Corylus spp.</i>)	March – April	P
Honey locust (<i>Gleditsia triacanthos</i>)	May – June	N, P
Hop Tree (<i>Ptelea trifoliata</i>)	June – July	N
Korean Evodia or Bee-bee tree (<i>tetradium daniellii</i>)	June - August	N
Maple (<i>Acer spp.</i>)	March – April	P, NA
Oak (<i>Quercus spp.</i>)	March - April	P, NA
Pear (<i>Pyrus spp.</i>) Fruit tree- <i>P.communis</i>	April – May	N
Persimmon (<i>Diospyros virginiana</i>)	May – June	N
<i>Prunus spp.</i> , Plum, Cherry, Peach	April – May	N, P
Redbud (<i>Cercis canadensis</i>)	March - April	N, P
Sassafras (<i>Sassafras albidum</i>)	April	N, P, NA
Sumac (<i>Rhus spp.</i>)	March - June	N, P, NA, I
Sycamore (<i>Platanus occidentalis</i>)	April – May	P, NA
Tulip Poplar (<i>Liriodendron tulipifera</i>)	May – June	N, P, NA
Walnut (<i>Juglans spp.</i>)	April – May	P
Willow (<i>Salix spp.</i>)	March - April	N, P

Shrubs & Brambles	Blooms	Additional Information
Boxwood (<i>Buxus microphylla</i>)	March – April	N
Blueberry (<i>Vaccinium corymbosum</i>)	May – June	N
Blackberry & Raspberry (<i>Rubus spp.</i>)	May – June	N, P
Blue Mist Bush (<i>Caryopteris x Longwood blue</i>)	July – September	N
Button Bush (<i>Cephalanthus occidentalis</i>)	June – July	N, NA
Butterfly Bush (<i>Buddleia spp.</i>)	July – September	N, I
Clethra, Summersweet (<i>Clethra alnifolia</i>)	July – August	N
Cotoneaster (<i>Cotoneaster spp.</i>)	May – June	N, P
Devils-Walkingstick (<i>Aralia spinosa</i>)	July – August	N
Elderberry (<i>Sambucus canadensis</i>)	June-July	P
Gooseberry (<i>Ribes uva-crispa</i>)	April	N, I
Holly (<i>Ilex spp.</i>)	April – June	N, P

Pussy Willow (<i>Salix spp.</i>)	March – April	N, P, NA
Redvein Enkianthus (<i>Enkianthus campanulatus</i>)	May - June	N
Rose (<i>Rosa spp.</i>)	June –September	P
Serviceberry (<i>Amelanchier arborea</i>)	April – May	N, NA
Viburnum (<i>Viburnum spp.</i>)	May June	N

Perennials, Annuals for Gardens	Blooms	Additional Information
Ageratum (<i>Eupatorium spp</i>)	June- September	N
Allyssum (<i>Lobularia maritima</i>)	June – September	N, P
Anise Hyssop (<i>Agastache foeniculum</i>)	July – frost	N, NA
Asparagus (<i>Asparagus officinalis</i>)	May – June	P
Asters (<i>Aster spp.</i>)	September – frost	N, P, NA
Smooth Aster, New England Aster, Woods light blue		
Autumn Joy (<i>Sedum spectabile</i>)	August – September	N, P
Basil (<i>Ocimum spp.</i>)	June - September	N
Beardtongue/foxtongue (<i>Penstemon digitalis</i>)	June	N, NA
Black -eyed Susan (<i>Rudbeckia hirta</i>)	June – July	N, NA
Blazing Star (<i>Liatris spicata</i>)	July – August	N, NA
Blue False Indigo (<i>Baptisia australis</i>)	June	N, P, NA
Boneset (<i>Eupatorium spp.</i>)	August- September	N, P, NA
Joe-Pye weed, white snakeroot		
Borage (<i>Borago officinalis</i>)	June – Frost	N, P
Brown-eyed Susan (<i>Rudbeckia fulgida</i>)	July – August	N, NA
Butterfly weed (<i>Asclepias tuberosa</i>)	July – August	N
Candytuft (<i>Iberis sempervirens</i>)	May	N
Carolina Lupine (<i>Thermopsis villosa</i>)	June – August	N
Canola (<i>Brassica napus</i> L.)	May – June	N, P
Cosmos (<i>Cosmos spp.</i>)	August – September	P
Catnip/Catmint (<i>Nepeta cataria</i>)	June – September	N
Chives (<i>Allium schoenoprasum</i>)	May – September	N, P
Creeping Phlox (<i>Phlox stolonifera</i>)	May – June	N
Crocus (<i>Crocus vernus</i>)	March – April	P
Cucumber (<i>Cucumis sativus</i>)	June - August	N, P
False Sunflower (<i>Heliopsis helianthoides</i>)	July – August	N, P
Germander (<i>Teucrium canadense</i>)	June - September	N, NA
Giant Hyssop (<i>Agastache sp.</i>)	July – August	N, NA
Globe Thistle (<i>Echinops ritro</i> or <i>bannaticus</i>)	August	N
Goldenrod (<i>Solidago spp.</i>)	September – October	N, P, NA
<i>S. caesia, S. canadensis,</i>		
Grape Hyacinth (<i>Hyacinthus muscari</i>)	April	N
Hyacinth (<i>Hyacinthus orientalis</i>)	April	N, P
Lamb’s Ear (<i>Stachys byzantina</i>)	May	N
Lavender (<i>Lavendula spp.</i>)	June – September	N
Leopards Bane (<i>Doronicum cordatum</i>)	April – May	N, P
Lungwort (<i>Pulmonaria spp.</i>)	May	N
Mexican Sunflower (<i>Tithonia grandiflora</i>)	August-September	N
Mints (<i>Mentha spp.</i>)	July – September	N, I
Mustard (<i>Brassica spp.</i>)	April – June	N, P
Mustard, broccoli, cauliflower, cabbage		

Obedient Plant (<i>Physostegia virginiana</i>)	July - September	N, NA, I
Orange Coneflower (<i>Rudbeckia ful. var. fulgida</i>)	July – October	N
Oregano (<i>Origanum vulgare</i>)	June – September	N
Parsley (<i>Petroselinum spp.</i>)	July – August	N
Pot marigold (<i>Calendula officinalis</i>)	June – September	N, P
Purple Coneflower (<i>Echinacea purpurea</i>)	July - August	N, NA
Purpletop Vervain (<i>Verbena bonariensis</i>)	July – Frost	N
Rosemary (<i>Rosmarinus officinalis</i>)	June – July	N
Russian sage (<i>Perovskia artiplicifolia</i>)	July – September	N
Salvia (<i>Salvia spp.</i>)	May – June	N, NA
Sneezeweed (<i>Helenium autumnale</i>)	August – September	N, NA
Speedwell (<i>Veronica spp., V. spicata, V. longifolia</i>)	May - June	N
Spider flower (<i>Cleome spp.</i>)	August- October	N
Sunflower (<i>Helianthus annuus</i>)	June – September	N, P
Strawberry (<i>Fragaria spp.</i>)	May – June	N, P
Thyme (<i>Thymus spp.</i>)	June - July	N.
Valeriana/garden heliotrope (<i>Valeriana officinalis</i>)	June – July	N, I, NA
Wild Blue Phlox (Phlox <i>divaricata</i>)	May – June	N
Zinnia (<i>Zinnia spp.</i>)	August - October	N

<u>Agricultural crops</u>	<u>Blooms</u>	<u>Additional Information</u>
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Alfalfa (<i>Medicago sativa</i>)	July – August	N, P
Blueberry (<i>Vaccinium corymbosum</i>)	May – June	N
Buckwheat (<i>Fagopyrum esculentum</i>)	August- September	N, P
Fruit trees (apples, peaches, pears, plums)	April-May	N, P
Soybean (<i>Glycine soja</i>)	July – October	N
Strawberry (<i>Fragaria spp.</i>)	May – June	N, P
Sweet corn (<i>Zea mays</i>)	June – July	P
Pickles (<i>Cucumis spp.</i>)	June - August	N, P
Pumpkin (<i>Cucurbita spp.</i>)	July – Frost	N, P
Melons (<i>Cucumis melo</i>), Cantaloupes & Muskmelons	June – frost	N, P
Spearmint (<i>Mentha spicata</i>)	June – August	N
Watermelon (<i>Citrullus lanatus</i>)	June – July	N, P

<u>Other Plants Bees may Visit</u>	<u>Blooms</u>	<u>Additional Information</u>
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These plants may be seen in prairie/native planting or open cropland. Some are considered weeds to lawn and agriculture. They may not be ideal for a home garden.

Alsike Clover (<i>Trifolium hybridum</i>)	May – July	N, P
Birdsfoot trefoil (<i>Lotus corniculatus</i> L.)	June – August	N, I
Blue Weed (<i>Echium vulgare</i>)	June – August	N
Blue Vervain (<i>Verbena hastata</i>)	July – August	N, NA
Bronze Bugle (<i>Ajuga reptans</i>)	May- June	N, P, I
Cat-Tail (<i>Typha latifolia</i>)	July	P
Common Milkweed (<i>Asclepias syriaca</i>)	July – August	N
Chick weed (<i>Stellaria media</i>)	April – July	N, P, I
Culver’s Root (<i>Veronicastrum virginicum</i>)	June – August	N, NA
Cup plant (<i>Silphium perfoliatum</i>)	July –September	N, P, NA

Dandelion (<i>Taraxicum officinale</i>)	March – October	N, P
Figwort (<i>Scrophularia spp.</i>)	June - September	N, NA
Great Blue Lobelia (<i>Lobelia siphilitica</i>)	July - October	N, NA
Henbit (<i>Lamium amplexicaule</i>)	March – April	N, I
Horehound (<i>Marrubium vulgare</i>)	July	N
Horsemint (<i>Monarda fistulosa</i>)	July - September	N, I
Ironweed (<i>Vernonia fasciculata</i>)	July – October	N, NA, I
Jerusalem Artichoke (<i>Helianthus tuberosus</i>)	July - October	N, NA, I
Mallow (<i>Malva alcea fastigiata</i>)	June - September	P
Marsh milkweed (<i>Asclepias incarnata</i>)	July – August	N
Mountain Blue (<i>Centaurea montana</i>)	August – frost	N, I
Mountain Mint (<i>Pycnanthemum virginianum</i>)	August – frost	N
Prairie Coneflower (<i>Ratibida pinnata</i>)	June – July	N, NA
Queen of the Prairie (<i>Filipendula rubra</i>)	July	N, NA
Self-Heal (<i>Prunella vulgaris</i>)	June – August	N
Smartweed (<i>Polygonum spp.</i>)	August – September	N, P, I
Wild Mustered (<i>Synapis arvensis</i>)	April - June	N, P, I
White Dutch clover (<i>Trifolium repens</i>)	June – August	N, I
White Sweet clover (<i>Melilotus alba</i>)	May – August	N, I
Yellow Sweet clover (<i>Melilotus officinalis</i>)	May – August	N, I
Tickseed (<i>Bidens spp.</i>)	June - October	N, P, NA, I
Vetch (<i>Vicia spp.</i>)	June – July	N, P, I

Other information on plants for bees & wildflowers:

Gardening for Native Bees in North America: <http://www.ars.usda.gov/Main/docs.htm?docid=12050>

Illinois Wildflower: <http://www.illinoiswildflowers.info/>

Reference:

Dirr, Michael A. (1990). *Manual of Woody Landscape Plants, Their Identification, Ornamental Characteristics, Culture, Propagation and Uses*. Champaign Illinois: Stipes Publishing Company.

Pellett, Frank C. (1947). *American Honey Plants*. New York: Orange Judd Publishing Company.

Phillips, Ellen & Burrell, Colston C. (1993). *Rodale's Illustrated Encyclopedia of Perennials*. Emmaus, Pennsylvania: Rodale Press.

Tew, James E. *Some Ohio Nectar and Pollen Producing Plants*, Fact Sheet HYG-2168-98. Wooster, OH: Ohio State University Extension.

