

Creating a Meadow for Honey bees

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CLAY COUNTY BEEKEEPERS

Why create a "honey bee friendly" meadow?

The beautiful floral diversity of Florida provides a wealth of opportunity to present an abundance of natural sustenance to honey bees and native bees in the form of meadows which can be enjoyed by all. The backyard of the homeowner can be carefully planted to attract and provide for bees and butterflies. Public right of ways kept in flower can have a succession of blooms, providing much needed forage. There are many ways for us to participate in creating a healthier environment for honeybees and native bees.

Meadows with nectar rich plants provide much-needed habitat for honey bees, native bees and a variety of other wildlife. These creatures, invaluable for the pollination they provide for our farm crops, backyard fruit and nut trees and vegetable gardens, are vital to us.

They are the key link between the rich minerals which plants take up from the earth, the sunshine which provides energy to the plant and the flower signaling the plant's readiness to transfer this energy into new life through the honey bee's visitation to the blossoms and the spreading pollen between these fragile apparitions. Only after pollen is carried on the delicate fluff of a tiny bee's resilient body and touched to the grateful recipient flower does delicious fruit appear on the plant for us and for wildlife to enjoy.

Meadows link State and Federally protected wilderness areas with farmland to help honeybees and wildlife migrating from one area to another and provide sustenance to those animals most feeling the effects of careless land use and degradation.

From flowers in the yard around your home to acres set aside by astute farmers around their cropland, every place we plant and care for helps these amazing creatures and adds to the beneficial outcome for all of us.

What do honey bees need to thrive?

Basically they need food, water, shelter and space. You do not need to have a beehive in your meadow to participate in helping honey bees and their friends. You can attract and provide a healthy place for many bees just by providing essential habitat for them. Just planting one flowering shrub or tree that provides nectar or pollen for them is a helpful step towards a better environment for them and for us.

If you want to care for a beehive and don't know how, you can ask a local beekeeper to keep one or more hives in your meadow or begin to learn about beekeeping yourself by contacting your local county agricultural office for available courses in beekeeping. Two good online sources for information on honeybees in Florida are ufhoneybee.com and doacs.state.fl.us/pi

The Meadow Site

Knowing your terrain can help you achieve success with less effort. What kind of plant growth does your meadow site support? What types of plants are already growing there?

Is the area uplands or lowlands? What kind of soil is it? What is the average rainfall? Is there a water source available? What climate zone is it in?

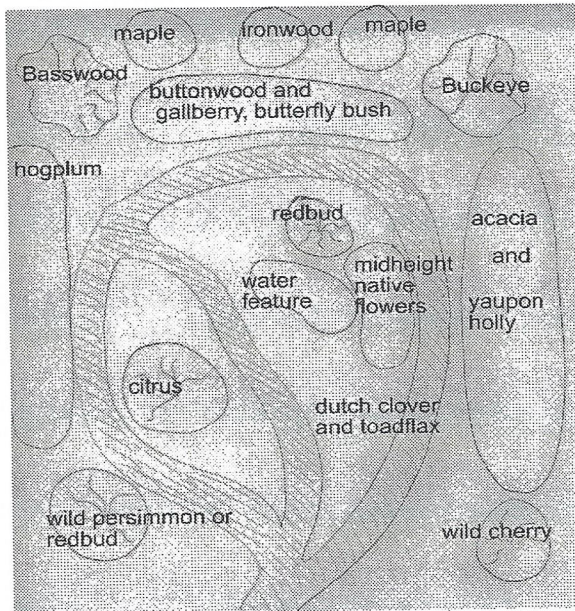
Your local county agriculture center can help you learn about your site. In addition, you can ask your local librarian to help you search for specific information about your area and you can search online too.

Begin by choosing which plants interest you. Make a list and be sure to include the size each species is likely to grow to. You might want to include trees, the bees are especially fond of the nectar from select species of trees. Your list might include low growing flowering plants, those that grow a little higher and shrubs too. You can refer to the included plant list calendar to help you choose a variety of plants. Use the calendar to plan for successive blooming. Many of the sources provided at the end of this booklet will be helpful in identifying plants and additionally provide lots of extra information.

The Site Plan

Before planting, consider how much time you have to maintain the plantings. Using as many species of plants native to the area is helpful in creating a meadow requiring less care.

Your meadow can be mixed plantings of trees, shrubs and low growing flowering plants all of native varieties or you might choose to have a mix of native and non-native plants. Perhaps you would like areas of shrubs and low growing flowering plants only. Whatever plants you choose, the honey bees need at least some plants blooming each month if possible. They also prefer several plants of the same species while foraging instead of many different species.



Preparing to Plant the Site

If you have some existing vegetation you would like to keep, you can plant around it or wait until it goes to seed and till it into the soil, adding in other wildflower seeds at the same time. Two other methods of preparing the area are to till the soil, allow wild vegetation to sprout, then re-till and seed the area with the desired species at the correct time of year, or cover the area to be planted with a mulch or plant cover which will not allow any sunlight in until you can see that the soil no longer has live vegetation, then plant.

Using herbicides is not recommended. Studies have shown deleterious effects upon honey bee larvae.

The following is a sample Meadow plan, suitable for a backyard. It is meant to serve as a point of departure for you to use or redesign.

The Natural Evolution of your Meadow

You plant your meadow and then have the great opportunity to watch it grow and change through the seasons. Every part of the year brings something different and hopefully during most months there will be something blooming, depending on how well you planned and on the weather. If you find some times the plants are not providing the sustenance the honey bees need, check through the plant list provided for additional possibilities which might be added into your meadow. Even in times of scarce bloom, pollen and sap from trees might provide a food source.

You might like to keep a logbook and note which plants bloom and when. Note other interesting observations of honey bee foraging and what time of year and in what weather they occur. Recording and rereading in your notebook, what time of year areas of the meadow tend to become overgrown or plants finish blooming and die back will help in planning routine maintenance activities such as pruning and mowing.

Plant Calendar

JANUARY

Maple, Acer spp.

Blueberry, Vaccinium spp.

Cajeput (Tea tree)

Melaleuca quinquenervia

Citrus, Rutaceae

Brazilian Pepper*
(Schinus terebinthifolius)
in south FL only

FEBRUARY

Maple

Pine, Sand

Willow, Salix spp.

Blueberry

Plum

Dandelion, Taraxacum spp.

Citrus

Elm, Ulmus spp.

Groundsel, Senecio spp.

Hawthorn, Crataegus spp.

Pear*

Peach*

Apple*

Oak

Wild Cherry (Prunus spp.)

Sweet Clover* thru fall

Viburnum

*denotes plants not native to Florida

MARCH

Holly, *Ilex* spp.

Willow

Blueberry

Blackberry, *Rubus* spp.

Persimmon, *Diospyros virginiana*

Citrus

Elm

Groundsel

Hawthorn

Pear

Peach

Apple

Redbud, *Cercis* spp.

Ash, *Fraxinus* spp.

Wild Cherry

Pine

Oak

Black Locust, *Robinia pseudoacacia*

Cottonwood, *Populus* spp.

Dogwood, *Cornus florida*

Tupelo, *Nyssa* spp.

Vervain, *Verbena*

APRIL

Holly	Haw
Gallberry	Wild Cherry
Elderberry, Sambucus spp.	Ash
Coneflower, Rudbeckia spp.	Chinese Tallow (Sapium sebiferum*)
Blueberry	Oak
Huckleberry, Gaylussacia spp.	Honey Locust, Gleditsia triacanthos
Blackberry	Black Locust
Persimmon	Buckeye, Aesculus spp.
Spiderwort	Cottonwood
Elm	Buckthorn
Catclaw, Acacia greggii	Yellow Rocket
Privet, Ligustrum spp.	Dogwood
Hawthorn	Tulip Poplar, Liriodendron tulipifera
Tickseed, Coreopsis lanceolata	Tupelo
Dog hobble	Mexican Clover
Pepper Vine	Vervain
Fedderbush	Alsike Clover, Trifolium hybridum
Butter Mint	White Clover, Trifolium repens
Spiderwort	Vetch, Vicia spp.
Bindweed, Convolvulus spp.	
Horsemint, Monarda spp.	

MAY

Holly	Sumac, Rhus spp.
Gallberry	Bitterweed, Helenium amarum
Elderberry	Carpet Grass, Phyla nodiflora
Saw Palmetto, Serenoa repens	Sorghum, Sorghum bicolor
Coneflower	Sourwood, Oxydendrum arboreum
Sabal Palm, Sabal spp.	Catalpa, Catalpa spp.
Huckleberry	Ash
Blackberry	Oak
American Beautyberry, Callicarpa americana	Honey Locust
Aster, Aster spp.	Black Locust
Spiderwort	Buckeye
Gopher Apple	Cottonwood
Catclaw	Buckthorn
Joint Weed	Yellow Rocket
Privet	Sandhill Prarie Clover
Partridge Pea	Tulip Poplar
Tickseed	Tupelo
toad flax	Virginia Creeper, Parthenocissus quinquefolia
Pepper Vine	Vervain
Fedderbush	Alsike Clover
Spanish needle, Bidens pilosa	White Clover
Prickley Pear, Opuntia spp.	Vetch
Bindweed	
Horsemint	

JUNE

Sunflower*
 Blanketflower, Gaillardia
 pulchella
 Elderberry
 Palmetto
 Coneflower
 Swamp sunflower,
 Helianthus angustifolius
 Huckleberry
 Gum Bumelia
 American Beautyberry
 Aster
 Button Bush,
 Cephalanthus
 occidentalis
 clover
 Catclaw
 Spiderwort
 Privet
 mexican heather
 Tickseed
 toad flax
 Pepper Vine
 Spanish needle

Loquat*
 Prickley Pear
 Bindweed
 Horsemint
 Sumac
 Bitterweed
 Carpet Grass
 Sorghum
 Sourwood
 Catalpa
 Honey Locust
 Black Locust
 Red Bay
 Buckthorn
 Yellow Rocket
 Tulip Poplar
 Virginia Creeper
 Vervain
 Alsike Clover
 White Clover
 Vetch

JULY

Sunflower*
 Blanketflower
 Elderberry
 Palmetto
 Coneflower
 Swamp sunflower
 Aster
 Button Bush
 Privet
 toad flax
 Pepper Vine
 Bindweed
 Horsemint
 Sumac
 Bitterweed
 Carpet Grass
 Sorghum
 Sourwood
 Vervain
 Alsike Clover
 White Clover
 Vetch

AUGUST

Sunflower*
Blanketflower
Coneflower
Swamp sunflower
Aster
Button Bush
Pepper Vine
Spanish Needles
Bindweed
Horsemint
Sumac
Bitterweed
Carpet Grass
Sorghum
Virginia Creeper
Vervain
Alsike Clover
White Clover
Vetch

SEPTEMBER

Swamp sunflower
Coneflower
Goldenrods(Solidago spp.)
Golden Raintree*
Aster
Bermuda Grass, Cynodon
dactylon
Spanish Needles
Bindweed
Horsemint
Sumac
Bitterweed
Carpet Grass
Sorghum
Vervain
Alsike Clover
White Clover
Vetch

OCTOBER	NOVEMBER	DECEMBER
Spanish needles	Aster	Maple
Swamp sunflower	Bermuda Grass*	Loquat*
Goldenrods	Bitterweed	Chinese paper plant*
Golden Raintree*	Carpet Grass	
Aster		
Bermuda Grass		
Horsemint		
Bitterweed		
Carpet Grass		
Sorghum		
Vervain		
White Clover		

Online Sources of Information

<http://edis.ifas.ufl.edu>

ent.agri.umn.edu/aapa/index.html (Am. Asso. Of Prof. Apiculturists)

floridabeekeepers.org

masternaturalist.org

<http://neflhba.com>

(Northeast Florida Honeybeekeepers Association)

fnps.org (Florida Native Plant Society)

Sjcbeekeepers.org

<http://apalacheebee.googlepages.com/beescaping>

ent.uga.edu/bees/

BeeConservationintheSoutheastHoneyBeeProgramCAESEntomologyUGA.html

ufhoneybee.com

<http://honeybeenet.gsfc.nasa.gov/>

easternapiculture.org

<http://solutionsforyourlife.ufl.edu/>

plantatlas.usf.edu

General Sources of Information

Beekeeper Calendar and Nectar Plants. Pp.44-45, Catalog from the University of Florida Bee College, 2010.

Bee Pollinators in Your Garden. The American Association of Professional Apiculturists. Technical Bulletin No. 2, 1999.

Bell, C. Ritchie and Bryan J. Taylor. Florida Wildflowers and Roadside Plants. Laurel Hill Press Chapel Hill, 1982.

Boning, Charles. Florida's Best Herbs and Spices. Pineapple Press, 2010.

Buckley, Katie. Native Pollinators. Lecture at the University of Florida Bee College, 2010. see catalog for outline.

Elpel, Thomas. Botany in a Day. Hops Press, LLC, 5th edition, 2010.

Grissell, Eric. Bees, Wasps, and Ants, the Indispensable Role of Hymenoptera In Gardens. Timber Press, 2010.

Graham, Jason. Building Native Bee Habitats. Lecture at the University of Florida Bee College. 2011. see catalog for outline.

Horn, Tammy. Creating a Honey Corridor. Lecture at the University of Florida Bee College. 2011. see catalog for outline.

Horton, Waldo. Florida Honey and Its Hundred Uses and Beekeeping by J.J. Wilder, for Florida Dept. of Agriculture. Reprinted from the original edition and combined with first title listed. Fredonia Books, 2004.

Lowenfels, Jeff and Wayne Lewis. Teaming with Microbes, the Organic Gardener's Guide to the Soil Food Web. Timber Press, 2010.

Kurz, Herman. Trees of Northern Florida. University of Florida Press. 1993.

Nelson, Gil. The Shrubs and Woody Vines of Florida. Pineapple Press, 1996.

Osorio, Rufino. A Gardener's Guide to Florida's Native Plants. University Press of Florida. 2003.

Pollinator Conservation Handbook, The Xerces Society, 2003.

Roubik, David. Ecology and Natural History of Tropical Bees. Cambridge University Press, 1992.

Sammataro, Diana and Alphonse Avitabile. The Beekeepers Handbook. Cornell Paperbacks, 4th edition, 2011.

Sanford, Malcolm T. Beekeeping: Florida Bee Botany. University of Florida, IFAS cir. 686, revised 2003.

Taylor, Walter Kingsley. Florida Wildflowers in Their Natural Communities. University Press of Florida. 1998.

Walton, Dan and Laurel Schiller. Natural Florida Landscaping. Pineapple Press, 2009.

Weeds of the South. Ed. By Charles T. Bryson and Michael S. DeFelice. University of Georgia Press. 2009.

Veatch, Howard. Pollination for the Home Gardener, A Dadant Publication. No publication date given.

Zerba, Ray. Florida Friendly Landscape (lecture). University of Florida, IFAS Extension at Clay County, Florida, 2011.

Zerba, Ray. Florida Honey Plants, Florida Bee Botany. Lecture given at University of Florida's Bee College, 2010.

This booklet is dedicated to all those who have helped me

Along the way, told me beekeeping stories and encouraged me. Thank you!

This booklet is intended to provide a starting point from which many improvements in the study of this topic might be made. Any errors and/or omissions are entirely my own and I will be happy to add additional information to this booklet in the future in the interest of sharing the knowledge and enthusiasm for providing habitat for the bees. Please contact me at gaylep@moultriecreek.com if you have information you feel the readers would benefit from for possible inclusion in future editions of this booklet. It can be found online at: <http://neflhba.com/images/creatingaMeadowII.pdf> or you can go to the homepage and click on "plants for bees". You may also obtain a copy free of charge at

[www.moultriecreek.com/documents/
CreatingaMeadowforHoneyBees.doc](http://www.moultriecreek.com/documents/CreatingaMeadowforHoneyBees.doc)

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