UNIVERSITY OF MARYLAND EXTENSION | MASTER GARDENER

Application for Certification of Pollinator Friendly Garden

Frederick County Maryland Master Gardeners

For more information about the Frederick County Master Gardeners go to bit.ly/FCMG-Home-Gardening

MASTER GARDENER

Certification of your Frederick County garden by University of Maryland Extension (UME) Master Gardeners is a two-step process.

FIRST, please complete this form describing your property, listing the plants in your garden and identifying the steps you have taken to make your property welcoming to pollinators. You may include photos or a sketch of your property to illustrate the layout of the garden and the location of critical plants, but this is not required.

SECOND, we will arrange a time to visit your garden. UME-trained Master Gardeners will visit your yard free of charge to assess your garden and discuss ways you might improve your pollinator-friendly landscape. **Please note that garden visits will occur only between April and October when plants are growing.**

We will happily answer any questions you may have while completing this form. **If for some reason you feel you cannot meet the requirement to plant four different species of trees and shrubs, we will consider waiving this requirement depending on the circumstances.**

Please indicate that you agree with the following statement by typing your name and the date in the spaces provided:

I certify that all the information provided in this application is true and that I will strive to use pollinator friendly practices in my garden.

Name _____ Date _____

In reference to the statement below, please select one of the following: ☐ *Yes* ☐ *No*

I grant the University of Maryland the right to use, reproduce and publish any photographs or sketches of my property for any purpose without compensation or any other consideration. I understand that if this material is available to the public, it will be anonymous; my name and address will not be included.

There is no cost for Certification. You may purchase an 8"x10" *Pollinator Friendly Garden* sign (shown above) for $20 or a larger 11"x14" sign for $30. Cash/Checks acceptable. Make check payable to: University of MD.

Please e-mail the completed form to:
birdadmirer@gmail.com and
cc: kkrasaus@umd.edu

or mail it/drop it off at:
UME Extension, Master Gardeners
330 Montevue Lane
Frederick, MD 21702

APPLICANT INFORMATION

Name_____

Street_____

City _____**Frederick County, Maryland Zip Code** _____

Phone Number _____ **Email** _____

GARDEN INFORMATION

Is the garden at the same address as above? ☐ Yes ☐ No (if no, provide address below)

Street_____

City _____**Frederick County, Maryland Zip Code** _____

1. Choose the option that best describes the property being certified

☐ Townhouse/Duplex ☐ Single Family Home ☐ School

☐ Business ☐ Farm ☐ Community Garden

☐ Other, please describe: _____

2. Location

☐ Urban ☐ Suburban ☐ Rural

3. How large is your property?

☐ less than 1/4 acre ☐ 1/4 to 1/2 acre ☐ 1/2 to 1 acre ☐ 1+ acres

Please describe your garden habitat by marking the appropriate information. Mark all descriptors that apply.

4. Are neighboring properties primarily

☐ Lawn ☐ Garden ☐ Meadow ☐ Farm ☐ Wooded

5. Light exposure

☐ Full sun ☐ Morning sun, afternoon shade ☐ Morning shade, afternoon sun ☐ Full shade

6. Soil

☐ Sandy ☐ Clay ☐ In-between

7. Topography

☐ Flat ☐ Sloped ☐ Hilly

8. What percentage of your property is covered by native plants? _____ Percent

Pollinator friendly gardens offer food, water, shelter, and a safe habitat

FOOD

In order for your garden to be certified as pollinator-friendly, you should grow both native and non-native plants that support the insect life cycle. Some plants that are recommended for local gardens are listed in **Appendices 1 and 2** at the back of this application. For additional information on critical pollinator plants in our area refer to:

https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants/keystone-plants-by-ecoregion

When adding to your garden, choose plants that provide pollen and nectar from early spring through late fall. You should provide a variety of flower shapes and sizes. It is recommended that you plant at least 3 plants or have 3 square feet of the same plant species together. Insects expend considerable energy if they have to fly long distances to find their preferred plant type.

PLEASE NOTE: The numbers of trees, shrubs, and perennials/annuals requested in this application assumes that you live in a standard single-family house situated on at least a quarter-acre lot.

NATIVE TREES AND SHRUBS: **Please list at least 4 different species of trees and shrubs (any combination) that you grow that support beneficial insects. Please identify those that are host plants for caterpillars and name the butterfly or moth larvae that the plant supports. Refer to Appendix 1, Tables 1 and 2 for recommended trees and shrubs.**

NATIVE TREES AND SHRUBS in my garden			
Botanical Name	**Common Name**	**Number of plants**	**Comment**
Vaccinium corymbosum	HIghbush Blueberry	6	15-year-old plants; Host to Brown Elfin, Henry's Elfin, Spring Azure and Striped Hairstreak caterpillars

A nearby neighbor's tree or shrub may be acceptable, comment as "Neighbor's".

NATIVE PERENNIAL FLOWERS: Please list at least 6 different species of native perennial plants that you grow to support beneficial insects. Ideally you will have at least 2 species that bloom in the spring, 2 that bloom in the summer, and 2 that bloom in the fall to support insects while they are active. Please identify those that are host plants for caterpillars and name the butterfly or moth larvae that the plant supports. Refer to Appendix 1, Tables 3, 4 and 5 for recommended native perennials.

NATIVE PERENNIAL FLOWERS in my garden				
Bloom Season	Botanical Name	Common Name	Number of plants	Comment
May-June	*Asclepias incarnata*	Swamp milkweed	3	Host to Monarch caterpillars

NON-NATIVE PERENNIAL PLANTS, HERBS, or FLOWERS: Please list at least 2 different species of nonnative plants that you grow to support beneficial insects. Please identify those that are host plants for caterpillars and name the butterfly or moth larvae that the plant supports. Refer to Appendix 2, Table 6 for recommended non-native perennials.

NON-NATIVE PERENNIAL FLOWERS in my garden				
Bloom Season	Botanical Name	Common Name	Number of plants	Comment
July-September	*Anethrum graveolens*	Dill	3	Host to Black Swallowtail caterpillars

WATER AND SHELTER

Provide Water

Pollinators need a source of water. Please check all that apply below to your garden:

Yes	Pollinator Water Sources in my garden	Comment
	Birdbath (provide stones for bees to land)	
	Shallow water source (provide stones for bees to land)	
	Butterfly puddling area	
	Water garden/pond	
	Stream	
	Spring	
	Other	

Provide Shelter

Pollinators need places to build their nests and to spend the winter. Please check all that apply to your garden:

Yes	Pollinator Shelter in my garden	Comment
	Areas of bare soil	
	Brush/wood pile	
	Rock pile or wall	
	Dead wood	
	Man-made nesting shelter (like boxes, tubes, flowerpots, holes in wood)	
	Leaf cover (In the fall, leave leaves in place or add more leaves to flower beds until spring)	
	Leave plant stalks standing until spring	
	Other	

SAFETY

Reduce Pesticide and Herbicide Use

Pesticides can harm pollinators both when they visit plants and when they carry the pesticide back to their nest. Use Integrated Pest Management (IPM) practices to control pests in your garden.

For more info on IPM: https://extension.umd.edu/resource/ipm-prevent-identify-and-manage-plant-problems

Yes	Reducing pesticide and herbicide use in my garden (check all that apply below)
	I avoid the broad use of herbicides to control weeds. Instead I use mechanical techniques such as digging and hoeing.

I follow integrated pest management (IPM) to control insects in my garden, and always do the following:

	I clearly identify the insect before taking action to ensure it is actually harmful.
	I try mechanical means like picking a harmful insect off the plant as my first control.
	I use least toxic pesticides, such as horticultural oil and insecticidal soap.
	I always follow label directions.
	I never spray plants in bloom.
	I spray late in the evening when bees are less active and to minimize pesticide drift.
	I target spray only the problem spots.
	I discourage indiscriminate spraying for mosquitoes and ticks. As an alternative mosquito control technique, I use the bucket/dunk method (https://ui.charlotte.edu/story/try-'bucket-doom'-eliminate-mosquitoes-without-harmful-pesticides).

Reduce/Remove Invasive Plants

Invasive plants threaten pollinators by endangering and reducing the availability of native plants. We can help sustain our native plants by not planting invasive plants and removing existing invasive plants on our properties and gardens. **Refer to Appendix 3, Table 7, for common invasive plants.** For more information on invasive plants in the Maryland region: https://www.invasive.org/alien/pubs/midatlantic/midatlantic.pdf

Yes	Reducing invasive plants in my garden	Identify targeted invasive plants
	I avoid acquiring invasive ornamental plants by consulting the above website first.	
	I have removed or am removing invasive plants on my property.	

Reduce Light Pollution

Outdoor lighting has been shown to be detrimental to insect behavior. It disrupts insect and bird navigation and circadian rhythms, leads to increased predation, and interferes with foraging, mating and reproduction.

Yes	Reducing light pollution on my property
	I am reducing outdoor light pollution by putting lights on timers, putting security lights on motion sensors, using safety lights only when absolutely necessary, and turning off lights when not in use.
	I have replaced light bulbs producing white light with LEDs, preferably those producing yellow light.

Appendix 1
Recommended NATIVE Pollinator Plants for Frederick County

H = Host to one or more insect species. **Plants in bold are keystone plants.** They are highly recommended because of the number of different insect species they support.

Table 1 NATIVE TREES

Botanical Name	Common Name
Aesculus pavia	Red Buckeye
Amelanchier species	**Serviceberry (H)**
Asimina triloba	Paw Paw (H)
Betula species	**Birch (H)**
Celtis occidentalis	Hackberry (H)
Cercis canadensis	Redbud (H)
Chionanthus virginicus	White Fringetree (H)
Cornus florida	**Flowering Dogwood (H)**
Diospyros virginiana	Common Persimmon (H)
Ilex opaca	American Holly (H)
Juglans nigra	**Black Walnut (H)**
Liriodendron tulipifera	Tulip Tree/Popular (H)
Magnolia virginiana	Sweetbay Magnolia (H)
Ostrya virginiana	American Hophornbeam (H)
Oxydrendrum arboretum	Sourwood (H)
Prunus virginiana	**Chokecherry (H)**
Quercus species	**White, Red Oak (H), etc.**
Robinia pseudoacacia	Black Locust (H)
Salix nigra, Salix discolor	**Black Willow**
Sassafrass albidum	Sassafrass (H)
Tilia Americana	Basswood (H)

Table 2 NATIVE SHRUBS

Botanical Name	Common Name
Aronia melanocarpa	Black Chokeberry (H)
Aronia arbutifolia	Red Chokeberry (H)
Calycanthus floridus	Carolina Allspice
Ceanothus americanus	New Jersey Tea (H)
Cephalanthus occidentalis	Buttonbush
Clethra alnifolia	Summersweet
Cornus alternifolia	**Pagoda Dogwood**
Cornus amomum	**Silky Dogwood**
Cornus sericea	**Red Twig Dogwood**
Crataegus monogyna	Common Hawthorn (H)
Hamamelis virginiana	Witch Hazel (H)
Hydrangea arborescens	Smooth Hydrangea
Ilex glabra	Inkberry Holly
Itea virginica	Virginia Sweetspire
Kalmia latifolia	Mountain Laurel
Lindera benzoin	Spicebush (H)
Physocarpus opullifolius	Ninebark (H)
Rhus species	**Sumac (H)**
Rosa species	**Carolina, Swamp Rose (H)**
Rubus allegheniensis	**Allegheny Blackberry**
Vaccinium species	**Blueberry (H)**
Viburnum species	Viburnum (H)

Table 3 NATIVE PERENNIAL FLOWERS: Early Season Bloom (April/May)

Botanical Name	Common Name
Antennaria neglecta	Field Pussytoes
Aquilegia canadensis	Wild Columbine (H)
Baptisia australis	False Blue Indigo (H)
Baptisia tinctoria	Yellow Wild Indigo (H)
Chrysogonum virginianum	Green & Gold
Claytonia virginica	Spring Beauty
Coreopsis lanceolata	**Lanceleaf Coreopsis (H)**
Coreopsis verticillata	**Threadleaf Coreopsis**
Dicentra cucullaria	Dutchman's Breeches

Botanical Name	Common Name
Geranium maculatum	Wild Geranium (H)
Huechera villosa	Hairy Alumroot
Packera aurea	Golden Ragwort (H)
Penstemon digitalis	Foxglove Beardtonque (H)
Penstemon laevigatus	Eastern Smooth Beardtonque
Phlox species	Creeping, Wild Blue phlox (H), etc.
Sanguinaria canadensis	Bloodroot
Tiarella cordifolia	Foamflower
Viola species	Violets (H)
Zizia aurea	Golden alexander (H)

Appendix 1
Recommended NATIVE Pollinator Plants for Frederick County

H = Host to one or more insect species. **Plants in bold are keystone plants.** They are highly recommended because of the number of different insect species they support.

Table 4 NATIVE PERENNIEL FLOWERS
Mid-Season Bloom (June/August)

Botanical Name	Common Name
Asclepias incarnata	Swamp Milkweed (H)
Asclepias syriaca	Common Milkweed (H)
Asclepias tuberosa	Butterfly Weed (H)
Asclepias verticillate	Whorled Milkweed (H)
Coreopsis species	**Tickseed**
Echinacea purpurea	**Purple Coneflower**
Eutrochium purpureu	**Joe Pye (H)**
Eupatorium perfoliatum	Boneset (H)
Helenium autumnale	**Common Sneezewood**
Helianthus species	**Perennial Sunflowers (H)**
Heliopsis helianthoides	Oxeye Sunflower
Liatris spicata	Blazing Star
Lobelia cardinalis	Cardinal Flower
Lobelia siphilitica	Great Blue Lobelia
Loniceras sempervirens	Trumpet Honeysuckle (H)
Monarda didyma	Scarlet Bee Balm
Monarda fistulosa	Wild Bergamot
Monarda punctata	Spotted Bee Balm (Horsemint)
Oenothera species	**Common Evening Primrose**
Phlox paniculate	Garden Phox (H)
Physostegia virginiana	Obedient Plant
Pycnanthemum species	Mountain Mint
Rudbeckia fulgida	**Orange Coneflower**
Rudbeckia hirta	**Black-eyed Susan (H)**
Rudbeckia laciniata	**Cutleaf Coneflower**
Tradescantia ohioensis	Spiderwort
Tradescantia virginiana	Spider Lily
Veronicastrum virginicum	Culver's Root

Table 5 NATIVE PERENNIAL FLOWERS
Late-Season / Fall Bloom (September/October)

Botanical Name	Common Name
Chelone glabra	White Turtlehead (H)
Conoclinium coelestinum	Blue Mistflower
Eupatorium hyssopifolium	Thoroughwort
Eurybia divaricata	White Wood Aster (H)
Rudbeckia triloba	**Brown-eyed Susan**
Solidago species	**Goldenrod (H)**
Symphyotrichum species	**Aster species (H)**

Appendix 2
Recommended NON-NATIVE Pollinator Plants for Frederick County

Table 6 NON-NATIVE PERENNIAL PLANTS, HERBS or FLOWERS and SEASON

Botanical Name	Common Name	Blooming Period
Achillea millefolium	Yarrow (H)	August-October
Agastache foeniculum	Anise Hyssop	June-October
Allium schoenoprasum	Chives (H)	July-August
Anethum graveolens	Dill (H)	July-August
Borago officinalis	Borage	June-July
Cornus mas	Cornelian Cherry Tree (H)	March-April
Foeniculum vulgare	Fennel (H)	July-August
Gaillardia x grandiflora	Blanket Flower	July-September
Helianthus annus	Common Sunflower (H)	July-October
Lavandulla anjustifolia	Lavender	June-November
Mirabilis jalaph	Four O'Clocks	July-October
Ocimum basilicum	Basil (H)	July-October
Origanum species	Oregano	June-September
Petroselinum crispum	Parsley (H)	July-August
Salvia elegans	Pineapple Sage	September-October
Sedum species	Sedum	August-October
Thymus citriodorus	Lemon Thyme	June-August
Thymus vulgaris	Common Thyme	June-August
Tithonia rotundifolia	Mexican Sunflower 'Torch'	July-October
Zinnea species	Zinnias	June-August

Appendix 3
Common Invasive Plants in Frederick County

Table 7 COMMON INVASIVE PLANTS TO BE REMOVED/CONTROLLED

#	Common Name
1	Autumn Olive
2	Bamboo
3	Burning Bush
4	Bush Honeysuckles
5	Butterfly Bush
6	Callery Pear (Bradford)
7	Chinese/Oriental Bittersweet
8	Chinese/Japanese Wisteria

#	Common Name
9	Crown Vetch
10	English Ivy
11	Fig Buttercup
12	Garlic Mustard
13	Japanese Barberry
14	Japanese Honeysuckle
15	Japanese Knotweed

#	Common Name
16	Japanese Stiltgrass
17	Kudzu
18	Multiflora Rose
19	Norway Maple
20	Privet
21	Purple Loosestrife
22	Russian Olive
23	Tree of Heaven

Appendix 3: A Few Recommended Resources

UMD Extension Pollinator Gardens
https://extension.umd.edu/resource/pollinator-gardens

UMD Extension Lawn Alternatives
https://extension.umd.edu/resource/lawn-alternatives

Pollinator Partnership
https://www.pollinator.org

Native Plants

Native Plants for Wildlife Habitat and Conservation Landscaping
https://dnr.maryland.gov/criticalarea/Documents/chesapeakenatives.pdf

Maryland Native Plant Society
https://mdflora.org

National Wildlife Federation, Keystone Plants
https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants/keystone-plants-by-ecoregion

https://www.nwf.org/-/media/Documents/PDFs/Garden-for-Wildlife/Keystone-Plants/NWF-GFW-keystone-plant-list-ecoregion-8-eastern-temperate-forests.ashx-?la=en&hash=1E180E2E5F2B06EB9ADF28882353B3BC7B3B247D

Master Gardeners of Northern Virginia
https://mgnv.org/plants/native-plants/

Insects

Xerces Society
https://xerces.org

US Forest Service, Pollinators
https://www.fs.fed.us/wildflowers/pollinators/

Attracting Pollinators to the Garden
https://www.fs.fed.us/wildflowers/pollinators/documents/AttractingPollinatorsEasternUS_V1.pdf

Maryland Department of Natural Resources, All About Pollinators
https://dnr.maryland.gov/wildlife/Pages/habitat/wawhatsthebuzz.aspx

Environmental Gardening

Homegrown National Park (Doug Tallamy)
https://homegrownnationalpark.org

Humane Gardening
https://www.humanegardener.com