

**Central Pennsylvania
Pocket Guides**

Plants For Flies



Fly Gardens

Class Insecta, Order Diptera

FLIES CAN BE distinguished from other insects by their one pair of wings. Other pollinating insects have two pairs. Diptera means “two wings”. Although some flies are near perfect bee mimics, most lack specialized pollen-carrying hairs like bees and are therefore generally thought to be less efficient pollinators by comparison.

However, their importance as pollinators should not be underestimated. In fact, flies are the second most important pollinators after bees. They have been reported to visit flowers of 172 plant families and this is likely to be a conservative figure. Flies are especially important in alpine and subarctic environments where there are far fewer bees.

Flies are a diverse group of insects. As such, they have a wide variety of diets reflected by their distinct mouthparts. Flies can bite, lap, or suck food depending on the species. Flower-feeding flies with long sucking proboscises can forage from deep, tubular flowers while species with short proboscis prefer flatter flowers.

FLIES MOSTLY CONSUME nectar from flowers but some species can eat pollen. They typically prefer radially symmetrical flowers that are small, flat, white or cream, or sometimes greenish yellow in color. The flowers can be sweet or musty and are mostly day blooming. Flies' preference for these flowers is a result of their mouthpart size and structure, their preference for nectar versus pollen, and their ability to detect color. Daytime flies have large compound eyes that see a range of colors, even into the ultra-violet which humans cannot see.

Unlike bees, which collect pollen as a protein source for their young, flies only feed themselves. They carry pollen inadvertently on their body from flower to flower aiding in pollination. Fruit set of crops benefit from visiting flies including mango, cacao, onion, and carrot for seed propagation. Three main families of flies visit flowers in temperate gardens- syrphid, muscid, and bombyliid flies.







Syrphid flies, also known as hover flies, are the best pollinating flies. Some species are near perfect bee mimics, with yellow and black bodies covered in hair. Mimicry reduces flower competition with bees and protects flies from bird predation.

MUSCLID FLIES ARE the second most important group after syrphids in most pollinator communities. Many look like common house flies but are ecologically vital pollinators in arctic and alpine regions.

Bombyliid flies have a unique proboscis that is rigid and straight, allowing them to access flower nectaries. These flies are important pollinators of springtime flowers in North America. Bee flies are parasites of insect eggs and larvae including bees, wasps, beetles, and grasshoppers.

Gardeners will be amazed by the diversity of fly species that can be found in their backyard. Flies are a joy to watch as they feed from flowers. Some, such as the appropriately named hover fly, are able to hover in midair.

Plant Symbols Key

 Full Shade	 Dry
 Part Sun	 Moist
 Full Sun	 Wet

Black Willow

Salix nigra



Floral Phenology



Type	Deciduous Tree
Sun	☀ ☀
Water	💧 💧
Size	30' to 60' Tall 40' Spread
Soil	Acidic Neutral
Tolerances	Erosion

New Jersey Tea

Ceanothus americanus



Floral Phenology



Type	Deciduous Shrub
Sun	☀ ☀
Water	💧 💧
Size	3' to 4' Tall 3' to 5' Spread
Soil	Acidic Neutral
Tolerances	Drought

Black Cherry

Prunus serotina



Floral Phenology



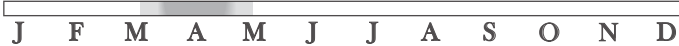
Type	Deciduous Tree
Sun	☀ ☀
Water	💧
Size	50' to 80' Tall 40' Spread
Soil	Acidic Neutral
Tolerances	Shade

Sassafras

Sassafras albidum



Floral Phenology



Type	Deciduous Tree
Sun	☀ ☀
Water	💧
Size	30' to 50' Tall 30' Spread
Soil	Acidic Neutral
Tolerances	Deer Drought

Rattlesnake Master

Eryngium yuccifolium



Floral Phenology



Type	Herbaceous Perennial
Sun	☀
Water	☉ ☂
Size	2' to 5' Tall 2' to 3' Spread
Soil	Acidic Neutral Alkaline
Tolerances	Drought Erosion

Common Cow Parsnip

Heracleum maximum



Floral Phenology



Type	Herbaceous Perennial
Sun	☀
Water	💧
Size	3' to 5' Tall 2' to 3' Spread
Soil	Acidic Neutral Alkaline
Tolerances	Clay

Smooth Sumac

Rhus glabra



Floral Phenology

J F M A M J J A S O N D

Type	Deciduous Shrub
Sun	☀ ☀
Water	☹ ☹
Size	9' to 15' Tall 9' to 15' Spread
Soil	Acidic Neutral Alkaline
Tolerances	Drought Erosion

Clustered Mountainmint

Pycnanthemum muticum



Floral Phenology



Type	Herbaceous Perennial
Sun	☀ ☀
Water	💧 💧
Size	2' to 3' Tall 3' to 4' Spread
Soil	Acidic Neutral
Tolerances	Drought Erosion

Brown Eyed Susan

Rudbeckia triloba



Floral Phenology



Type	Herbaceous Perennial
Sun	☀ ☀
Water	💧 💧
Size	1' to 5' Tall 1' to 2' Spread
Soil	Acidic Neutral
Tolerances	Drought

False Aster

Boltonia asteroides



Floral Phenology



Type	Herbaceous Perennial
Sun	☀ ☀
Water	💧
Size	3' to 6' Tall 2' to 4' Spread
Soil	Acidic Neutral Alkaline
Tolerances	Clay

Virgin's Bower

Clematis virginiana



Floral Phenology



Type	Perennial Woody Vine
Sun	☀ ☀
Water	💧 💧
Size	10' to 20' Tall 3' to 6' Spread
Soil	Acidic Neutral Alkaline
Tolerances	Deer

Frost Aster

Symphyotrichum pilosum



Floral Phenology



Type	Herbaceous Perennial
Sun	☀
Water	💧
Size	3' to 5' Tall 2' to 4' Spread
Soil	Acidic Neutral
Tolerances	Frost Drought Erosion

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Plants in this guide were selected for a high degree of attraction in most temperate North American landscapes.



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