

**Central Pennsylvania
Pocket Guides**

**Plants for
Hummingbirds**



Hummingbird Gardens

Class Aves, Order Apodiformes

A SIGN OF spring arrives in Pennsylvania during the first week of May- the Ruby-throated Hummingbird. Despite only weighing 3-4 g, these birds migrate between Central and North America every spring and fall. Some individuals choose to take the safer but longer land route through Mexico and Texas while others opt to travel over the Gulf of Mexico, flying 600 miles non-stop.

Although there are over 300 species of hummingbird in the Americas, the Ruby-throated Hummingbird is the only species found in northeast region of North America. The species is sexually dimorphic, with males sporting a ruby-colored throat. Females are more subdued, with an iridescent green back and pale breast. Hummingbirds have a specialized long, slender beak for reaching into tubular flowers to feed on nectar.

Hummingbirds are in the order Apodiformes which means "footless" in Greek. They do have feet, but they cannot walk or hop like other birds. When not perched on a branch, a hummingbird is in flight even when feeding. Hummingbird flight is more similar to the flight of insects than birds.

THIS IS A wonderful example of convergent evolution. Birds and insects are not closely related. Rather, they have similar diets that require flight behaviors to access flowers, such as hovering, backward flight, and precise turns.







Many of the flowers visited by hummingbirds are red. Despite popular belief, preference for red flowers has less to do with color vision and more to do with resource competition between hummingbirds and insects such as bees. Bees are insensitive to the red end of the visible light spectrum, making it difficult for them to differentiate red flowers from green leaves. Therefore, bees tend to visit other colored flowers resulting in hummingbirds having less competition for nectar at red flowers.

Hummingbirds do not feed on pollen like bees. However, hummingbirds inadvertently collect pollen on their head feathers as they drink nectar from tubular flowers. In this way they are the best bird pollinators of the New World. Although hummingbirds are small birds, they are relatively large when compared to insect pollinators.

BECAUSE OF THIS, they need relatively large amounts of nectar with high concentrations of sugars for energy. Hummingbird-specialized flowers have coevolved to have just the right color and nectar.

To attract Ruby-throated hummingbirds to your garden, choose plants from our recommended list. A hummingbird feeder can be an additional source of nectar. Hummingbirds are omnivores, eating insects as well as nectar. Plants in your garden that support insects such as ants, spiders, and flies will also support hummingbirds. Owners of hummingbird-attracting gardens will enjoy the acrobatic flight of visiting Ruby-throated Hummingbirds. They may also get quite nice views of hovering hummingbirds feeding from flowers or feeders, one of the few times a hummingbird stays relatively still.

Plant Symbols Key

 Full Shade	 Dry
 Part Sun	 Moist
 Full Sun	 Wet

Eastern Columbine

Aquilegia canadensis



Floral Phenology



Type	Herbaceous Perennial
Sun	☀ ☀
Water	💧
Size	2' to 3' Tall 1' to 1.5' Spread
Soil	Neutral Alkaline
Tolerances	Rabbit Deer Drought

American Fly Honeysuckle

Lonicera canadensis



Floral Phenology



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

Trumpet Honeysuckle

Lonicera sempervirens



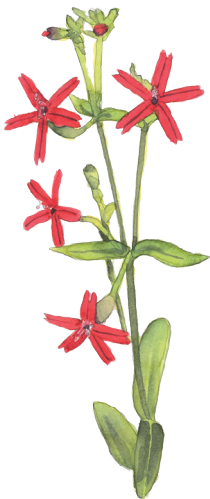
Floral Phenology



Type	Vine
Sun	☀ ☀
Water	💧
Size	8' to 20' Tall 5' to 10' Spread
Soil	Slightly Acidic to Neutral
Tolerances	Flooding

Fire Pink

Silene virginica



Floral Phenology



Type	Herbaceous Perennial
Sun	☀ ☀
Water	💧 💧
Size	1' to 1.5' Tall 1' to 1.5' Spread
Soil	Neutral to Acidic
Tolerances	Drought

Black Locust

Robinia pseudoacacia



Floral Phenology

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

Type	Deciduous Tree
Sun	☀
Water	💧
Size	30' to 40' Tall 25' Spread
Soil	Neutral to Acidic
Tolerances	Deer Drought Clay

Eastern Smooth Beardtongue

Penstemon laevigatus



Floral Phenology

J F M A M J J A S O N D	
Type	Herbaceous Perennial
Sun	☀
Water	💧
Size	1' to 8' Tall 1' to 2' Spread
Soil	Neutral to Acidic
Tolerances	Drought

Kentucky Coffeetree

Gymnocladus dioica



Floral Phenology



Type	Deciduous Tree
Sun	☀
Water	💧
Size	65' to 75' Tall 45' Spread
Soil	Acidic Neutral Alkaline
Tolerances	Flooding Drought

Purple Milkweed

Asclepias purpurascens



Floral Phenology



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

Obedient Plant

Physostegia virginiana
'Pink Manners'



Floral Phenology



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

Swamp Milkweed

Asclepias incarnata



Floral Phenology



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

Wild Bergamont

Monarda fistulosa



Floral Phenology



Type	Herbaceous Perennial
Sun	☀ ☀
Water	💧 💧
Size	2' to 4' Tall 1' to 2' Spread
Soil	Acidic Neutral Alkaline
Tolerances	Drought

Cardinal Flower

Lobelia cardinalis



Floral Phenology

		J F M A M J J A S O N D											
Type		Herbaceous Perennial											
Sun		☀ ☀											
Water		💧 💧											
Size		3' to 4' Tall 1' to 2' Spread											
Soil		Slightly Acidic to Neutral											
Tolerances		Flooding											

NOTES FROM THE GARDEN

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THIS FIELD GUIDE was created by Aubrey Miller, Heather Frantz, Christina Grozinger, and Harland Patch. Illustrations produced by Victoria Millsap. Funding was provided by the Center for Pollinator Research, the Huck Institutes for the Life Sciences, and the Penn State College of Agricultural Sciences.

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



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